

FUTURE

Monday,
13th of April, 2026

Leadership for Everyone Conference

Artificial Intelligence in Education
Friend or Foe?

Entrepreneurial Thinking in Education
Fostering Innovation in Schools

Fostering Reflective Practice
The Art of Meaningful Self-Evaluation

Trauma-Informed Teaching
Understanding Behaviour Through a Compassionate Lens

Cognitive Load Theory (CLT)
A Beginners Guide to Understanding its Impact on Learning

Developing Resilience
Problem-Solving and Critical Thinking in Outdoor Settings

2026

Hosted by Ysgol Panteg

FUTURE

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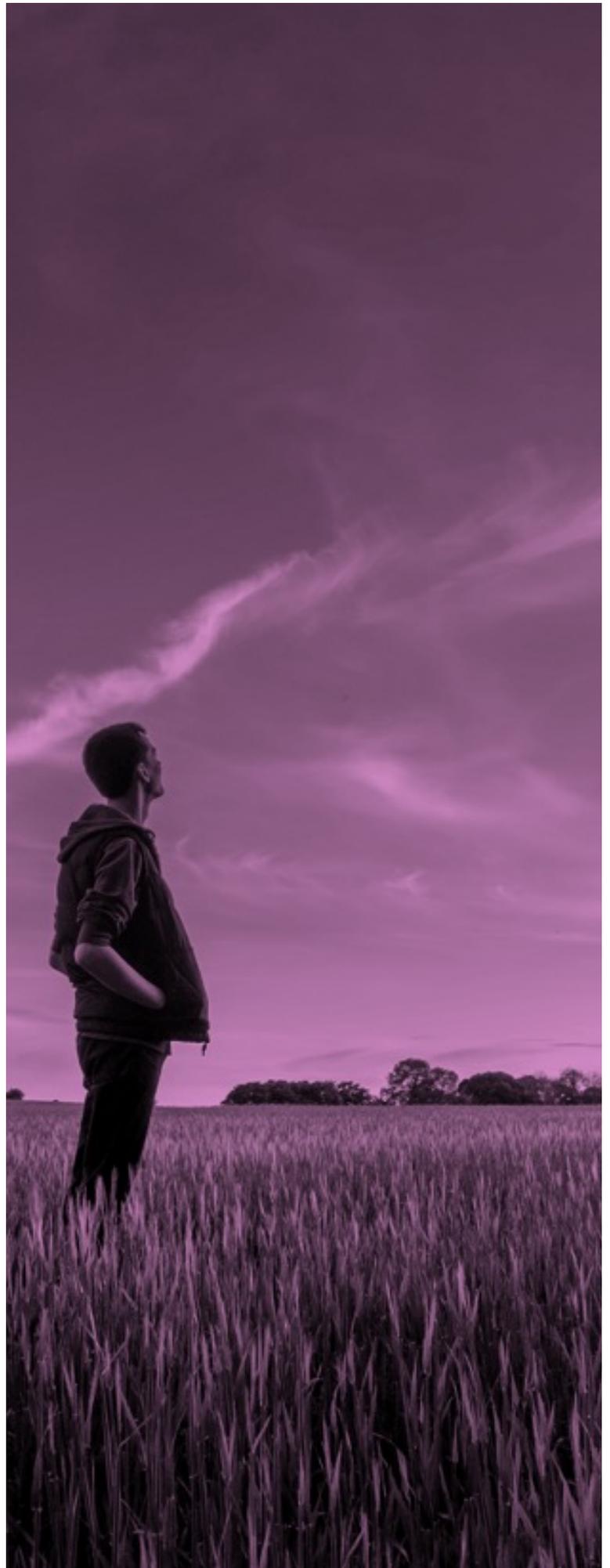
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Welcome

It is with immense anticipation and purpose that we welcome you to the second year of this transformative gathering. What began as an ambitious vision is evolving into a dynamic platform for dialogue, collaboration, and innovation. This conference is not merely an event, it is a movement dedicated to redefining leadership in an ever-changing world.

Over the past year, leadership at all levels in education has faced profound challenges and remarkable opportunities. The need for adaptability, inclusivity, and resilience has never been greater. This conference is an opportunity to explore forward-thinking approaches, challenge conventional paradigms, and shape a leadership culture that is not only effective but deeply rooted in collaboration and equity.

Throughout this event, you will engage with thought leaders, practitioners, and pioneers whose insights will provoke discussion and inspire action. Our speakers and panellists, drawn from diverse backgrounds and disciplines, will explore the evolving nature of leadership, offering practical strategies and profound reflections on navigating an increasingly complex educational landscape.

The curated sessions, workshops, and networking opportunities are designed to empower you whether you are an experienced leader seeking renewal or an emerging voice ready to contribute to the future. This is a space for learning, growth, and meaningful connections that will extend far beyond these walls.

As we embark on this journey together, let us remember that leadership is not defined by hierarchy but by influence, integrity, and shared purpose. The future is shaped by those who dare to question, innovate, and collaborate. We are honoured to have you with us, and we look forward to the invaluable contributions you will bring to this collective endeavour.

Dr. Matthew Williamson-Dicken
MA(Ed), PGCert, BA(Hons), CMgr FCMI, MASPE

Conference Timetable of Events

8:30am-9:00am	Coffee and Networking Time (Main Hall)					
9:00am-9:45am Session 1	Keynote: Everyday Safeguarding: The Quiet Power of School Staff with Dr. Tirion Havard (Main Hall)					
9:45am-11:00am Session 2	Crash Course in Navigating Neurodiversity: How Schools Can Support ALN Learners and their Families with Dr. Meinir Evans (Gwaun Hywel Room) 	Workshop: Entrepreneurial Thinking: Fostering Innovation in Schools with Christine Jones and Andrew Phillips (Pont Rhun Room) 	Interactive Presentation: Trauma-Informed Teaching: Understanding Behaviour Through a Compassionate Lens with Dr. Matthew Williamson-Dicken (Cwm Bwrwch Room) 	Workshop: High-Quality Feedback: Practical Approaches for Impactful Learning with Samantha Parker-Evans (Coed y Canddo Room) 	Interactive Presentation: Teaching Language: Lessons from Tokyo with Carys Soper (Craig y Felin Room) 	Interactive Presentation: Embedding Metacognition: Strategies for Developing Independent Learners with Nerys Phillips (Ystafell Staff) 
11:00am-11:15am		'Grab and Go' Coffee (Main Hall)				
11:15am-12:30pm Session 3		Interactive Presentation: Building Inclusive Leadership: Strengthening Voices Across the School with Keri Smith (Pont Rhun Room) 	Interactive Presentation: Behind Closed Screens: Coercive Control, Domestic Abuse and the Role of Technology with Dr. Tirion Havard (Cwm Bwrwch Room) 	Interactive Presentation: Fostering Reflective Practice: The Art of Meaningful Self-Evaluation with Catherine Evans (Craig y Felin Room) 	Workshop: High-Quality Feedback: Practical Approaches for Impactful Learning with Samantha Parker-Evans (Coed y Canddo Room) 	Interactive Presentation: Play-Based Learning: Its Role in Early Years and Beyond with Melanie Evans & Laura Jones (Main Hall) 
12:30pm-1:15pm		Lunch & Networking Time (Main Hall)				
1:15pm-2:30pm Session 4	Brook's Traffic Light Tool Training: Responding to Sexual Behaviours in Children and Young People with Sally Amos (Gwaun Hywel Room) 	Workshop: Aiming for Deputy Headship: Advice and Planning with Kirsty Davies and Andrew Osmond (Pont Rhun Room) 	Workshop: ALN: A Needs-Led Approach with Hannah Rawle-Jones (Main Hall) 	Interactive Presentation: Assessing Proficiency: Common European Framework of Reference for Language with Dr. Matthew Williamson-Dicken (Pen y Llan Room) 	Interactive Presentation: Flourishing Together: The Research of Lynn E Swaner and Andy Wolfe with Anna Britten (Craig y Felin Room) 	Interactive Presentation: Scaffolding vs. Challenge: Differentiation and Finding the Right Balance with Kaysha Wulder & Caitlin O'Sullivan (Ystafell Staff) 
2:30pm-2:45pm		'Grab and Go' Coffee (Main Hall)				
2:45pm-4:00pm Session 5		Interactive Presentation: Leading Learning: Strategies for Impactful Middle Leadership with Kate Ngwenya and Sue Roche (Pont Rhun Room) 	Discussion Session: Building Strong Foundations: What Does School Readiness Really Mean? with Thea Simons (Cwm Bwrwch Room) 	Workshop: The Place of Oracy: Building Confident Communicators with Nerys Phillips (Cwm Bwrwch) 	Interactive Presentation: Restoring Relationships: Behaviour, Belonging, and the Power of Repair with Rhian Edwards (Main Hall) 	Interactive Presentation: Encouraging Parental Involvement in Welsh Literacy Development with Jonathan Rees (Ystafell Staff) 
4:10pm-4:30pm Session 6		Plenary Session (Main Hall)				

Keynote and Conference Opening

Everyday Safeguarding: The Quiet Power of School Staff

with Dr. Tirion Havard

Child and family wellbeing begins with connection. For many families, that connection starts at the school gate. In this keynote, Dr. Tirion Havard explores the vital role education staff play in safeguarding, signposting, and supporting families through moments of vulnerability. Drawing on her expertise in domestic abuse and coercive control, she will highlight how schools are often the first safe space where concerns surface and help begins. From lunchtime supervisors to headteachers, every adult in a school community holds the potential to notice, to listen, and to act. This session will inspire staff to see themselves as leaders in wellbeing, regardless of role or pay grade, and reaffirm the power of relational practice, professional curiosity, and trauma-informed care in keeping children and families safe.

Crash Courses

Crash Course in Navigating Neurodiversity: How Schools Can Support ALN Learners and Their Families

with Dr. Meinir Evans



Ensuring that Additional Learning Needs (ALN) learners receive the right support is fundamental to inclusive education. Understanding neurodiversity and the pathways to accessing ALN provision in Wales is crucial for educators, school leaders, and families alike. This session provides a practical and informed guide to navigating ALN support systems, ensuring every learner thrives both academically and emotionally. We'll explore neurodiversity in its broadest sense, including autism, ADHD, dyslexia, dyspraxia, and other learning differences, identifying key strategies to foster engagement and reduce barriers. The discussion will also cover personalised learning approaches, sensory-friendly environments, and communication techniques that empower pupils to succeed. Additionally, this session will outline the support frameworks available under the Additional Learning Needs and Education Tribunal (Wales) Act 2018, which governs ALN provision. We'll examine the Individual Development Plan (IDP) process, the role of local authorities, and how schools can collaborate with external agencies such as the Educational Psychology Service, speech and language therapists, and SENCOM teams. Families play a critical role in this journey, so we'll discuss how to strengthen home-school partnerships and equip parents with the knowledge they need to advocate for their children. Participants will leave with actionable insights, a clear understanding of ALN pathways in Wales, and strategies to ensure neurodiverse learners receive the support they need to flourish.

Brook's Traffic Light Tool Training: Responding to Sexual Behaviours in Children and Young People

with Sally Amos



Professionals working with children and young people need clarity and confidence when navigating sexual behaviours. Brook's nationally recognised Traffic Light Tool offers a clear framework for identifying whether behaviours are part of healthy development or a cause for concern. Using a green, amber, and red rating system, the training supports consistent, informed responses across education, health, and safeguarding settings. This session explores how legal guidance, personal values, and contextual factors shape decision-making. Participants will work through real-life scenarios, practise rating behaviours, and learn how to record, refer, and when to take safeguarding action. The training complements existing safeguarding procedures and equips professionals with practical tools to assess risk, respond appropriately, and support healthy sexual development. Attendees will leave with increased confidence, a shared language for discussing sensitive issues, and a robust framework for protecting children and young people.

Interactive Presentations

Teaching Language: Lessons from Tokyo

with Carys Soper



What can Japanese language instruction teach us about effective pedagogy, and engagement? This session draws upon insights from Carreg Lam and Ysgol Panteg's research visit to Japan, exploring key methodologies used in Japanese schools to develop language fluency and literacy. We will examine structured approaches to language acquisition, including early immersion techniques, and the balance between rote memorisation and contextual application. The discussion will highlight how Japanese educators integrate visual, auditory, and kinaesthetic strategies to reinforce linguistic understanding and retention. Participants will also explore how these findings could inform language teaching in Wales, considering parallels between bilingual education models and effective literacy practices. The session will encourage reflection on how Japan's focus on discipline, repetition, and cultural embedding could enhance classroom strategies for fostering confident communicators. Join us for an engaging exploration into global pedagogical perspectives redefining how we approach language learning in our schools.

Behind Closed Screens: Coercive Control, Domestic Abuse and the Role of Technology

with Dr. Tirion Havard



Coercive control is a pervasive form of abuse that strips victims of autonomy, safety, and identity often without leaving visible scars. In today's digital age, technology has become both a tool of empowerment and a weapon of manipulation. This session explores the evolving landscape of domestic abuse, focusing on how perpetrators use digital platforms, smart devices, and surveillance technologies to exert control. Drawing on current research and frontline practice, Dr. Tirion Havard will unpack the psychological mechanisms of coercive control and the subtle ways it manifests in victims' lives. Attendees will leave with a deeper understanding of the intersection between domestic abuse and technology, and how to respond with informed, trauma-sensitive approaches.

Embedding Metacognition: Strategies for Developing Independent Learners

with Nerys Phillips



Developing independent learners isn't simply about giving pupils more freedom it requires intentional strategies that cultivate self-regulation, resilience, and deep cognitive engagement. Over the past three years, Ysgol Panteg has pioneered an Independence Framework, embedding metacognitive approaches across the curriculum to ensure pupils actively take ownership of their learning. This session will explore the principles behind their framework, examining how structured reflection, explicit thinking models, and scaffolded self-regulation techniques empower learners to take control of their educational journey. We'll discuss key strategies, including goal-setting, decision-making, and the role of pupil-led inquiry in fostering independence. Attendees will gain insight into the practical implementation of metacognitive techniques, with real-world examples. The session will also highlight how metacognition supports engagement, confidence, and problem-solving equipping learners with lifelong skills that extend beyond the classroom. Join us for an interactive exploration into how structured independence frameworks can transform pupil learning and promote deeper thinking at every stage of development.

Building Inclusive Leadership: Strengthening Voices Across the School

with Keri Smith



Inclusive leadership is more than representation: it's about creating a culture where every voice is heard, valued, and empowered to shape school-wide decisions. Strong leadership fosters environments where staff and pupils feel a sense of belonging, agency, and purpose, ensuring that inclusivity is embedded at every level of the school community. This session explores how leaders can cultivate inclusivity within their teams, breaking down hierarchical barriers to build collaborative, reflective practices. We will examine strategies for empowering middle leaders, strengthening pupil voice, and ensuring that diverse perspectives inform decision-making. Attendees will engage in discussions on practical approaches, from structured mentoring programmes to staff development initiatives that champion equity. Participants will leave with actionable insights into creating leadership models that reflect the varied needs of their school communities. Whether you're refining your leadership approach or looking to deepen engagement, this session provides a framework for fostering inclusive, dynamic school environments where everyone's voice contributes to meaningful change.

Fostering Reflective Practice: The Art of Meaningful Self-Evaluation

with Catherine Evans



Reflective practice is the backbone of effective leadership, converting judgment into a continuous, evidence-led cycle that strengthens decisions, builds professional trust, and accelerates school improvement. This session equips leaders to make self-evaluation routine and purposeful using structured enquiry frameworks, evidence triangulation, short-cycle action planning, and coaching protocols that reduce defensiveness and increase accountability. Participants will practise rapid review techniques for leadership learning visits, co-design line-management templates, and use scripted prompts to sharpen developmental conversations. The session addresses common barriers, such as limited time, defensive cultures, and weak data use, and shows how routines, role modelling, and clear expectations remove them. This session is ideal for senior and middle leaders seeking practical tools to turn reflection into measurable, sustained improvement.

Leading Learning: Strategies for Impactful Middle Leadership

with Kate Ngwenya and Sue Roche



Middle leadership is the driving force behind school improvement, bridging vision with implementation. As key influencers of teaching and learning, middle leaders must balance strategic thinking with the practical realities of classroom impact. This session provides middle leaders with the tools and strategies needed to lead with confidence, foster collaboration, and drive meaningful change. We will explore effective leadership models, coaching approaches for staff development, and ways to create a culture of continuous improvement in teaching and learning. Through interactive discussions and scenario-based problem-solving, participants will examine the challenges of middle leadership, including managing competing priorities, supporting teams effectively, and influencing school-wide initiatives. Attendees will leave with practical techniques to enhance their leadership, strengthen team dynamics, and build a shared vision for success. Designed specifically for middle leaders, this session ensures that leadership at every level is empowered to create lasting impact.

Play-Based Learning: Its Role in Early Years and Beyond

with Melanie Evans and Laura Jones



Play-based learning is more than just fun: it's a powerful educational tool that fosters creativity, problem-solving, and deep engagement. In the early years, play is fundamental to cognitive, social, and emotional development, allowing children to explore ideas, experiment with concepts, and build foundational skills in a natural and enjoyable way. But how does play-based learning evolve as children grow, and how can schools harness its benefits beyond the early years? This session explores the science behind play-based learning, examining how structured and free play contribute to literacy, numeracy, and critical thinking. We will discuss the role of play in developing executive functioning skills, resilience, and collaborative learning, as well as how it can be adapted for older pupils to maintain engagement and creativity throughout primary education. Through collaborative discussions and practical examples, attendees will explore ways to embed play into everyday teaching making learning more meaningful, accessible, and dynamic. Whether in early years settings or across the curriculum in later stages, this session provides educators with strategies to ensure play remains a central pillar of effective learning.

Scaffolding vs. Challenge: Differentiation and Finding the Right Balance

with Kaysha Wulder and Caitlin O'Sullivan



Effective differentiation requires a careful balance between providing support and encouraging independent thinking. Too much scaffolding can limit pupils' autonomy, while excessive challenge can lead to frustration and disengagement. How can educators ensure every learner is appropriately supported while also being stretched to reach their potential? This session will explore practical strategies for adjusting learning experiences to meet the needs of all pupils. Discussions will focus on recognising when to provide structured guidance and when to gradually remove support to foster resilience and problem-solving skills. Participants will consider approaches to differentiation that maintain engagement while avoiding unnecessary barriers to progress. Through interactive group discussion, educators will share experiences and reflect on how differentiation plays out in different contexts. Whether working with mixed-ability groups, supporting learners with additional needs, or adjusting cognitive load in complex tasks, this session will provide insights into how to make differentiation meaningful and effective. Attendees will leave with a stronger understanding of how to refine their teaching practice, ensuring pupils develop confidence, independence, and deeper learning.

Assessing Proficiency: Common European Framework of Reference for Language

with Dr. Matthew Williamson-Dicken



The Common European Framework of Reference for Languages (CEFR) provides educators with a shared standard for assessing language proficiency across contexts and curricula. In this interactive presentation, participants will explore how the CEFR descriptors can be applied practically to classroom assessment, curriculum design, and pupil progression. Through guided discussion, case studies, and collaborative activities, we will examine how to interpret proficiency levels, align teaching objectives with CEFR benchmarks, and ensure consistency in evaluating learners' skills. Together, we will generate strategies for integrating CEFR into everyday practice, from formative assessment to reporting, while considering challenges such as bilingual contexts and diverse learner needs. By the end of the session, attendees will leave with a clearer understanding of how to use CEFR as a tool for fair, transparent, and meaningful assessment in their own educational settings.

Encouraging Parental Involvement in Welsh Literacy Development

with Jonathan Rees



Parental engagement is a powerful catalyst for literacy success especially Welsh literacy development. When families are actively involved in their children's reading and writing journey, pupils develop stronger language skills, greater confidence, and a lifelong love of learning. But how can schools foster meaningful, sustained parental involvement in literacy development? This session explores practical approaches to engaging families in literacy, from everyday reading habits to structured support for writing and comprehension. We will discuss how schools can create accessible resources, host literacy workshops, and provide guidance on nurturing a literacy-rich home environment. The session will also examine ways to support parents in modelling language use, fostering curiosity, and encouraging critical thinking through shared reading experiences. Through interactive discussion, participants will reflect on the barriers to parental involvement and explore strategies for building positive partnerships. Whether through informal engagement, structured interventions, or whole-school initiatives, this session will provide practical insights into how schools can empower families to take an active role in their child's literacy development.

Flourishing Together: The Research of Lynn E Swaner and Andy Wolfe

with Anna Britten



What comes to mind when you think of a flourishing school? Drawing on the research conducted by Lynn E Swaner and Andy Wolfe, this workshop acts as a taster for the full Flourishing Together online course or can be used as a standalone training session. We will consider what it means to be truly flourishing both as individuals and schools, looking at key themes such as our sense of purpose and school culture. Practitioners will be supported to pause and reflect, challenging thinking. We will consider the importance of men relationships and how these can benefit our schools, enabling all stakeholders to flourish. Practitioners will leave equipped to carry out a temperature check in their own schools and ready to progress their own journeys towards truly flourishing.

Trauma-Informed Teaching: Understanding Behaviour Through a Compassionate Lens

with Dr. Matthew Williamson-Dicken



Trauma-informed teaching requires educators to recognise the impact of adverse childhood experiences (ACEs) and respond with empathy, structure, and emotional security. In this interactive discussion, participants will collaborate to explore what trauma-informed practice looks like in real classrooms. Through group brainstorming, case studies, and shared experiences, we will examine how to create psychologically safe spaces, strengthen trust with pupils, and shift behaviour management from reaction to understanding. Together, we will generate practical strategies for de-escalation, emotional literacy, and supporting pupils in self-regulation. By the end of the session, attendees will leave with a collection of ideas and insights, ready to apply compassionate practices in their own settings.

Restoring Relationships: Behaviour, Belonging, and the Power of Repair

with Rhian Edwards



Behaviour is communication, and every response a school makes either reinforces disconnection or builds the conditions for repair. This session explores restorative practice as a relational, values-driven approach that moves beyond sanctions to cultivate accountability, empathy, and genuine change. We will examine how restorative conversations, predictable routines, and emotionally attuned adult responses create cultures where pupils feel seen, supported, and motivated to make better choices. Through practical examples and discussion, participants will consider how restorative approaches strengthen belonging, reduce conflict, and transform behaviour from a problem to be managed into an opportunity for growth. This session offers leaders and practitioners a clear, compassionate framework for building communities where relationships are prioritised and every pupil is given the chance to repair, reconnect, and thrive.

ALN: A Needs-Led Approach

with Hannah Rawle-Jones



Creating effective provision for Additional Learning Needs (ALN) requires more than implementing robust systems; it demands a reflective and strategic approach that places learners' needs at the heart of decision-making. A successful model begins with a thorough audit of current practices to identify strengths, gaps, and opportunities for improvement. This process ensures clear pathways for identifying pupils' needs and delivering timely, targeted support that enables every learner to succeed. This session will share the journey of a school that has embraced a needs-led approach to ALN, drawing on its recent successful Estyn inspection, which commended inclusive strategies and the meaningful integration of pupil voice. Through practical examples, participants will gain insight into how the school developed systems and processes that prioritise individual needs, aligned funding and resources effectively, and embedded robust self-evaluation to drive continuous improvement. Central to this approach is the recognition that ALN provision cannot be the responsibility of a single department; it requires a whole-school commitment. The session will explore how staff across all roles were equipped to support learners, fostering a culture of collaboration and shared responsibility. By engaging in interactive discussions, delegates will have the opportunity to reflect on their own practices, share experiences, and consider innovative strategies for enhancing provision within their contexts. Ultimately, this session aims to empower educators with practical tools and ideas to strengthen ALN provision, ensuring that schools create inclusive environments where every learner can thrive. Attendees will leave with a deeper understanding of how to implement a needs-led approach that is sustainable, impactful, and rooted in best practice.

Workshops

Entrepreneurial Thinking: Fostering Innovation in Schools

with Christine Jones and Andrew Phillips



Entrepreneurial thinking in schools isn't about preparing pupils for business careers: it's about developing a mindset of creativity, adaptability, and problem-solving. Schools that cultivate an entrepreneurial approach empower learners to take initiative, think critically, and generate innovative solutions to real-world challenges. This workshop explores how educators can embed entrepreneurial thinking into teaching and leadership. Participants will examine how curiosity, resilience, and risk-taking foster deeper engagement in learning, and discuss ways to create school environments that encourage pupils to explore, collaborate, and innovate. Attendees will identify how entrepreneurial principles can shape curriculum delivery, leadership development, and wider school culture. We will explore practical strategies for encouraging pupil-led inquiry, interdisciplinary learning, and creative problem-solving across all subjects. This session aims to provide educators with fresh perspectives on how innovation drives engagement and independence, ensuring pupils leave school ready to navigate the complexities of an evolving world.

High-Quality Feedback: Practical Approaches for Impactful Learning

with Samantha Parker-Evans



Effective feedback is one of the most powerful tools for improving pupil outcomes. When delivered well, it clarifies understanding, builds confidence, and fosters a culture of continuous improvement. But what does high-quality feedback look like in practice, and how can educators ensure it leads to meaningful learning? This workshop explores practical strategies for providing feedback that is timely, specific, and actionable. Participants will examine different feedback models, from verbal and written responses to peer assessment and self-reflection techniques. Discussions will focus on making feedback accessible and manageable, ensuring that pupils can engage with it effectively rather than feeling overwhelmed. Through interactive activities, educators will reflect on their own feedback practices and explore approaches that promote deeper learning and independence. We will also consider how feedback can be adapted to support diverse learners, helping all pupils to make sustained progress. By the end of the workshop, attendees will leave with practical strategies to refine their approach, ensuring feedback is not just delivered but truly understood and acted upon.

The Place of Oracy: Building Confident Communicators

with Nerys Phillips



Oracy, the ability to articulate thoughts effectively through spoken language, is a crucial skill that underpins learning, social interaction, and future success. Confident communicators not only express themselves clearly but also engage in meaningful dialogue, listen actively, and adapt their speech for different audiences and purposes. This workshop explores the importance of oracy across all stages of education, examining how structured talk enhances cognitive development, deepens understanding, and strengthens interpersonal skills. Participants will consider practical strategies for embedding purposeful talk into teaching, from guided discussions and debate to storytelling and presentation skills. Through interactive activities, educators will reflect on how oracy supports literacy, critical thinking, and pupil confidence. We will explore ways to create environments where all learners, including those who may struggle with verbal expression, feel empowered to develop their voice. Attendees will leave with actionable strategies to make oracy a central component of their teaching, ensuring pupils become articulate, thoughtful communicators equipped to express themselves effectively in and beyond the classroom.

Aiming for Deputy Headship: Advice and Planning

with Kirsty Davies and Andrew Osmond



Stepping into deputy headship requires more than leadership ambition; it demands strategic thinking, strong interpersonal skills, and an in-depth understanding of school-wide priorities. This workshop provides practical guidance on preparing for deputy headship, covering essential leadership qualities, career planning, and the expectations of the role. Participants will explore key aspects of leadership development, including navigating school improvement planning, leading teams effectively, and managing operational responsibilities. Discussions will also focus on interview preparation, application strategies, and positioning oneself as a leader ready for the next step. Educators will leave with a clearer roadmap for progression, gaining insights into how to refine their leadership style and prepare for the transition into senior leadership.

Building Strong Foundations: What Does School Readiness Really Mean?

with Thea Simons



School readiness isn't just about recognising letters and numbers, it's about confidence, communication, and emotional resilience. But how can schools, families, and communities work together to support young learners in their transition to formal education? This session is a collaborative space for educators to brainstorm how school readiness can be developed and strengthened. Participants will explore key skills, including independence, self-regulation, and social interaction, while discussing practical ways to ease transitions and engage families effectively. Through peer-led discussions, group activities, and real-world scenarios, this session aims to redefine school readiness beyond a checklist focusing instead on holistic preparation that ensures every child starts school with the tools to thrive.

Biographies of Speakers

Here, we celebrate the distinguished individuals who will be sharing their expertise and insights throughout the event. Each speaker brings a wealth of knowledge and a unique perspective from their respective fields, contributing to the rich tapestry of ideas that will be woven over the course of our conference. Our speakers include leading academics, educational practitioners, and innovative thinkers who have made significant contributions. Their diverse backgrounds and experiences promise to deliver thought-provoking sessions that will inspire and challenge us all. Join us in welcoming these esteemed speakers and prepare to be engaged, enlightened, and inspired by their presentations.



Dr. Tirion Havard is a Professor of Gender Abuse and Policy at London South Bank University. Her research focuses on Domestic Abuse (specifically coercive control), Technological Abuse, Child Criminal Exploitation and the intersections between these. She draws on her practice experience as a probation officer supervising and risk managing violent offenders to inform her research which focusses on the experiences of female survivors of abuse. Tirion's has advised several national and international organisations, including, but not limited to The United Nations, The World Health Organisation and the French Embassy. Tirion was also seconded to English Parliament and has served as a consultant and talking head to the BBC, including BBC Cymru/Wales.



Dr. Meinir Evans is an Educational Psychologist who has worked in Torfaen County Borough Council for over 20 years as well as a period in Caerphilly. Before qualifying as an Educational Psychologist, Meinir worked as an ALN teacher in a Secondary school in North Wales. She has also worked as peripatetic Dyslexia tutor and as a tutor in a children's residential school.



Christine Jones is the Deputy Headteacher at Garnteg Primary and has been teaching for nearly 30 years across all primary phases. Christine was a member of the Maths & Numeracy AoLE, designing Curriculum For Wales. Christine is passionate about teaching and learning and providing all pupils with a range of stimulating learning opportunities which enables them to become creative problem-solvers, critical thinkers, confident innovators and learners for life.



With 27 years experience in teaching, **Andrew Phillips** currently leads LLC and Humanities at Garnteg Primary School. A former deputy head, Andrew has had the opportunity to work with a number of different year groups and lead many different areas of the curriculum over the years. He enjoys leading whole school projects and initiatives and developing authentic learning experiences for the pupils he works with at school including projects such as F1 in Schools. A passionate teacher who loves the challenge of developing innovative ways to teach in the classroom, he also enjoys working with staff on their own teaching journey and professional development in school. Just as busy outside of the classroom, Andrew is currently the Team Manager of Ebbw Vale RFC in Super Rygbi Cymru.



Dr. Matthew Williamson-Dicken is the Headteacher of Ysgol Panteg and Carreg Lam. His PhD specialism lies within personality changes, continuous professional learning and the link between professional development and changes within educational organisations. He is the author of 11 books including: 'Applied Personality Development Framework', 'Concise Illustrations of Personality Change', and his most recent book 'Philosophical Fragments: An Anthology of Ideas'. Matthew is a National Vice-Chair of the Executive Board of the 'Association for the Study of Primary Education' (ASPE) who publish the world-renowned journal 'Education 3-13'. In his spare time, Matthew loves Cordon Bleu cooking, playing the piano and travelling to new places.



With 13 years in the classroom, **Samantha Parker-Evans** leads curriculum at Garnteg Primary School. Having worked across a range of year groups Samantha is a passionate teacher who strives to help her students and community achieve and flourish. Following the completion of a Post Grad certificate in 'Successful futures' Samantha, alongside her team has supported the innovation of the 'Climb to Sparkle' Curriculum at Garnteg, which Estyn stated in 2025 'facilitates highly valuable opportunities for pupils to be creative and independent in authentic and purposeful situations'. Samantha strives to make learning accessible, purposeful and exciting for everyone.



Carys Soper is the leader of the Carreg Lam Immersion Unit in Torfaen. Carys has eight years' experience as a primary teacher, and ten years in the world of education. Carys has taught across all primary ages and is enthusiastic in supporting children to acquire the Welsh language. Carys left education to work in the world of careers for two years in order to support others to overcome challenges and take active steps forward so they can realise their potential. Carys returned to primary education because she has a passion for the Welsh language and a strong desire to provide rich and exciting opportunities for children who are about to start their journey into Welsh medium education. Carys is very fond of sport and enjoys planning exciting experiences for the future.



Nerys Phillips is Deputy Head of Ysgol Panteg. Following a successful career in the media where she worked as Second Assistant Director on S4C and the BBC's most popular programmes she decided to redirect to the world of education in 2012. Since then, she has been an enthusiastic and passionate teacher and Senior Leader specializing in developing literacy across the school. In her spare time, Nerys likes to socialise with friends and walk her dog Ted.



Keri Smith is an experienced Headteacher, approaching a decade of leadership across three local authorities. She has led schools ranging from 150 to 450 pupils, all serving communities with significant social and economic disadvantage. Currently Headteacher of Nant Celyn Primary School, Keri proudly oversees two specialist Learning Resource Bases: one for Deaf learners and one for learners with ASD. With a proven track record for driving radical school improvement and managing change through innovative strategies, she combines her vision with practical, authentic leadership. As a neurodivergent woman, Keri is passionate about inclusion, equity, and access to opportunity. She champions representation of neurodivergence in leadership and actively mentors staff, parents, and children, encouraging leadership at every level. Her commitment ensures schools thrive as inclusive, ambitious communities.



For over twenty-six years, **Catherine Evans** has worked in education across England and Wales. She began her career as a geography teacher in the West Midlands before moving to teach in a Welsh-medium school in south Wales. Joining the school in its second year after opening, she had the opportunity to lead a wide range of aspects of the school's work. In 2009, Catherine joined Estyn as one of Her Majesty's Inspectors, and in 2012 she was appointed lead inspector for the secondary sector. In 2015, she became Assistant Director with responsibility for Estyn's work in secondary schools, all-age schools and initial teacher education. During this period, she jointly led Estyn's work to support Curriculum for Wales, professional learning and leadership. In September 2025, Catherine joined Ysgol Gymraeg Gwynllyw on a two-year secondment as headteacher.



Melanie Evans is the Headteacher of Willowtown Primary school Ebbw Vale. Willowtown is a large primary school in Blaenau Gwent with a FSM average of approx. 35%. Melanie along with her team have developed an innovative and creative curriculum which engages and inspires the pupils. Melanie is passionate about authentic and purposeful learning experiences which is why her school have engaged with detailed Professional learning around 'Learning through Play.' Particularly, the work of Froebel: Froebel play theory highlights that through structured play, children gain a deeper understanding of the world around them, fostering imagination, problem-solving, and independent thinking. These principles have underpinned the curriculum design at Willowtown and has been recognised as exemplary practice by Estyn.



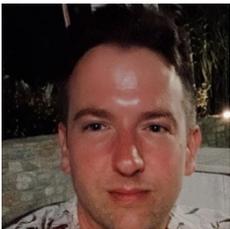
Laura Jones is the Foundation Learning Lead at Willowtown Primary school Ebbw Vale. Laura has vast and extensive knowledge and experience of the Early Years and has previously been on full time secondment to the consortia with her role of supporting and advising non maintained settings. Laura has returned to school as a senior leader but continues to support NMS on a part time basis. Laura is passionate about Early years and has been fundamental in supporting both her own and others professional learning. Laura has visited multiple settings both nationally and internationally. Her school's Early Years provision is especially praised for providing rich, play-based experiences that build foundational skills in communication, problem-solving, and social interaction, supporting children's progression as they move through the primary phase. These playful, experiential approaches help pupils develop confidence, independence and a love of learning, aligned with the Curriculum for Wales ethos of learning through purposeful play and meaningful contexts.



Sally Amos is the Health Promoting Schools Lead for Torfaen. In this role, she works closely with wellbeing leads, school staff, partners, and the wider community to champion the health and wellbeing of learners and colleagues across the authority. She comes from a Primary Education background, having taught for fourteen years before joining the Monmouthshire Health Promoting Schools team in 2021. This experience has shaped her passion for creating supportive, inclusive environments where learners, staff and families can thrive. Sally is particularly looking forward to supporting schools with the launch of the National Standards for Health Promoting Schools in 2026. She will continue to help embed a whole-school approach to emotional and mental wellbeing, while also leading on areas such as Relationships and Sexuality Education, Anti-racism, and Anti-bullying.



Kirsty Davies is a Deputy Headteacher at Crownbridge School, where she is deeply committed to a person-centred approach to the education and wellbeing of every pupil. Her work focuses on identifying future pathways for learners, supporting them and their families to overcome barriers, and ensuring that each step of progression contributes meaningfully to their long-term success. Kirsty places pupils firmly at the heart of all that happens at Crownbridge. She considers it a privilege to witness the confidence, independence and inspiration that pupils demonstrate each day. She is equally passionate about the wellbeing, relationships and professional growth of staff, recognising these as essential foundations for pupil success. She feels humbled to work alongside such dedicated colleagues, whose commitment to learners is unwavering. Since qualifying in 2011, Kirsty has spent the majority of her career at Crownbridge, with the exception of a secondment in 2021 to a local special school where she also served as Deputy Headteacher. She has taught across all departments within Crownbridge, giving her a rich understanding of pupil progress over time. Outside of her professional life, she enjoys reading, walking and spending time with friends and family.



Andrew Osmond is the Deputy Headteacher of Crownbridge School, where he leads on curriculum and assessment across the organisation. His professional background spans thirteen years at Crownbridge, during which he has served as a class teacher, TLR holder and Assistant Headteacher. His work is grounded in a commitment to designing and delivering a curriculum that is genuinely centred on pupils, with learning shaped by purpose, relevance and meaningful experiences. Andrew has contributed extensively to research-informed approaches to curriculum design. His involvement in national projects, including Camau i'r Dyfodol and Curriculum Design Partnerships, has enabled him to share the impact of the process approach on learner progress with schools across Wales. He has also represented Crownbridge internationally through a Taith education exchange, focusing on the global sharing of Curriculum for Wales principles.



Anna Britten is the headteacher of Blaenavon Heritage VC School. She lives and works in the north of Torfaen and is passionate about seeing communities flourish. As the daughter of two teachers, she has long been interested in the wellbeing of school staff, completing her master's dissertation on this theme. Anna has taught in a range of primary schools across Torfaen and Blaenau Gwent, including community, Catholic and Church in Wales settings. She has been married to her husband, David, for twenty-two years, and they have two sons. Outside of school life, she enjoys music, reading and travel.



Kaysha Wulder is an experienced teacher at Ysgol Panteg and has vast experience across different levels in the school. She started in Panteg in 2012 as a 1:1 assistant. She moved to be a classroom assistant the next year and qualified as a teacher in 2015, before joining the Senior Leadership Team as the school's ALNCo after a period of maternity with her son, Ernie. Mrs Wulder has taught across all Progress Stages in the school and has changed roles on the Senior Leadership Team as Progress Stage leader, after returning from maternity leave with her third son, Billy in September 2023. Kaysha is passionate and active and the changes in her career have enabled her to support others who have followed her professional path. Outside of school, Kaysha likes to spend time with her family in Llangrannog, reading and baking.



With 15 years in the classroom, **Kate Ngwenya** leads Digital and Professional Learning at Garnteg Primary School. Kate has worked across a range of year groups and is an enthusiastic teacher who strives to help her students achieve and progress and develop high aspirations. Kate completed a Post Grad certificate in 'Successful futures' and has used her experience to support the development of the 'Climb to Sparkle' Curriculum at Garnteg, which Estyn stated in 2025 'facilitates highly valuable opportunities for pupils to be creative and independent in authentic and purposeful situations'.



Sue Roche is currently the headteacher at Garnteg Primary School in Torfaen. Throughout her career, Sue has worked in leadership positions in several regions in South-East Wales. She is passionate about community aspects of leadership through holding aspirational goals and outcomes for learners. After graduating as a teacher in Cardiff, Sue has completed her Masters MA in Education and Arts and more recently trained in solution focused approaches to leadership psychology in schools. Sue spends her time walking, reading and has a passion for animals. She thoroughly enjoys completing charity events with her family and four legged friends.



Thea Simons is an experienced and dedicated educator whose teaching career began in 2005 as a Drama teacher in St Albans. Over 16 years at the school, she made a significant contribution to raising standards and developing high-quality provision, while also serving as Second in Department for the ALN department. Known for her authentic and holistic approach, she thrives on providing pupils with meaningful, real-life experiences that nurture confidence, creativity, and individuality. In 2019, she chose to broaden her professional journey by moving into primary education, joining Ysgol Bryn Onnen where she taught within Progression Step 2 for four years. During this time, she led outdoor learning initiatives and organised large-scale whole-school events, consistently championing children's talents and strengths. She is currently in her second year at Ysgol Panteg, teaching Nursery. Deeply passionate about early years education, she is particularly driven by outdoor learning and the powerful impact it has on young children's development. Her practice continues to be child-centred, experiential, and rooted in a strong belief in nurturing the whole child. Outside of the classroom, she is a busy mum to two teenagers and enjoys reading and watching musicals in her spare time.



Jonathan Rees has worked in the world of education for many years. He was a teacher on the classroom floor for over half of his career before moving on to the position of Welsh language in education coordinator on behalf of WJEC. He is now employed as a professional learning partner by the Local Authorities School Improvement and Professional Learning Service. His main brief in this position is to support Welsh and literacy across the Partnership's Welsh-medium primary and secondary schools. Having learned three languages, including Welsh, Jonathan is particularly interested in how children acquire language and promoting good practice between Welsh and English medium schools in order to nurture bilingual pupils. Jonathan's professional practice is guided by current research in the field of pedagogy and literacy and he notes that it is a privilege for him to collaborate with inspiring practitioners across the schools of the Partnership, putting research into action.



Caitlin O'Sullivan began her teaching journey at Ysgol Panteg and is now in her fifth year of teaching. She began her leadership career as the deputy Additional Learning Needs Coordinator (ALNCo) and since has been promoted to the school's primary ALNCo. Caitlin holds a degree in psychology, which enhances her ability to support learners' diverse needs. Her background includes working as a one-on-one, running speech and language interventions, and creating an inclusive, engaging classroom environment. Outside of teaching, she loves to spend time with her family, cooking, and going out for coffees.



Hannah Rawle-Jones currently serves as the Assistant Headteacher and Additional Learning Needs Coordinator (ALNCo) at Croesyceiliog School in Cwmbran. With an extensive career spanning over three decades, Mrs Rawle-Jones has dedicated her professional life to the field of education, initially pursuing a pastoral role alongside teaching English. In her current role, Mrs Rawle-Jones champions inclusive education, ensuring that all learners, regardless of their individual needs, receive the support necessary to thrive. She has implemented innovative strategies that promote engagement and achievement, thereby enhancing the educational experience for pupils with additional learning needs. Recent school inspections have highlighted the effectiveness of the ALN provision under her leadership, showcasing the positive impact on pupil outcomes. Mrs Rawle-Jones's ethos is that ALN is best supported in a fully inclusive culture. Her leadership is characterised by a collaborative approach, empowering both staff and pupils to reach their full potential. Hannah Rawle-Jones is the ALN figurehead in a school spotlighted for their innovative work around pupil profiles and the inclusive culture embedded within the school community.



Rhian Edwards is an Assistant Headteacher at Croesyceiliog School with a career spanning 25 years in education. The majority of those years have been dedicated to pastoral leadership, defining a passion for pupil wellbeing and a belief that a supportive environment is the foundation for academic success. In her current role on the Senior Leadership Team, she is the Behaviour and Culture lead for the school. Through development and implementation of a behaviour system centred around restorative practice and relationships, Rhian has powerfully shifted the school ethos, fostering a consistent approach to behaviour that empowers staff to establish a learning environment where all pupils can thrive. Furthermore, Rhian has established processes, provisions and interventions that effectively support those who experience barriers to learning to engage positively in school life. Outside of school, aside from keeping up with the demands of two teenage boys, Rhian enjoys reading, running and relaxing holidays in the sun.

Artificial Intelligence in Education: Friend or Foe

Introduction

Artificial Intelligence has rapidly moved from the realm of science fiction to the reality of classrooms around the world, including here in Wales. Today, AI-powered tools can assist with everything from tutoring learners in mathematics to automating administrative tasks. This swift rise of AI in education has sparked both excitement and concern. Is AI a friendly ally that enriches teaching and learning, or a disruptive foe that threatens the human element of education?

This article asks the question: “Is AI a Friend or a Foe?”. There are high hopes that AI can personalise learning, engage hard-to-reach learners, and ease teachers’ workload. At the same time, many worry about issues such as cheating on pieces work or assignments, data privacy, bias in algorithms, and the possibility of technology diminishing the crucial teacher-learner relationship. The truth likely lies between these extremes. By examining both the potential benefits and the challenges of AI in education – and by considering the ethical responsibilities that come with it – we can better ensure that this new technology becomes more of a friend than a foe.

AI as a Friend: Potential Benefits

- **Personalised and Adaptive Learning:** AI systems can tailor educational content to individual learners’ needs and pace. Adaptive learning platforms analyse a

learner’s performance in real time and adjust the difficulty or provide targeted practice on topics where they struggle. This personalisation helps keep learners engaged and can improve understanding by addressing knowledge gaps promptly.

- **On-Demand Tutoring and Instant Feedback:** Intelligent tutoring systems and AI chatbots are available 24/7 to answer learners’ questions or walk them through problems step-by-step. For example, if a learner is stuck on a maths problem, an AI tool can offer a hint or explanation immediately. This instant feedback helps reinforce learning in the moment and can increase a learner’s confidence.
- **Inclusion and Accessibility:** AI offers new ways to support learners with diverse needs. Speech-to-text and text-to-speech technologies can help those with hearing or visual impairments participate more fully in class. Generative AI can also translate materials into different languages or simplify reading passages, helping second-language learners or those with learning difficulties (like dyslexia) to better understand content.
- **Teacher Support and Reduced Workload:** AI can assist educators by taking over time-consuming tasks, allowing teachers to focus on teaching itself. Administrative chores such as marking quizzes or

compiling performance data can be partially automated, providing quick summaries of learner progress. Teachers are also using AI tools to generate draft lesson plans, worksheets, or example problems – sparking ideas and saving preparation time. By handling routine tasks, AI frees teachers to spend more one-on-one time with learners or concentrate on creative lesson delivery.

- **Engaging and Innovative Learning Methods:** AI can open up new ways to engage learners. In some classrooms, AI-driven simulations or virtual reality experiences allow learners to explore concepts hands-on – for instance, conducting a virtual science experiment in a safe, simulated lab. Other AI applications enable interactive learning, such as role-playing conversations with historical or literary figures to deepen understanding of a topic. These innovative approaches can make learning more fun and memorable, catering to different learning styles beyond the traditional textbook-and-lecture format.

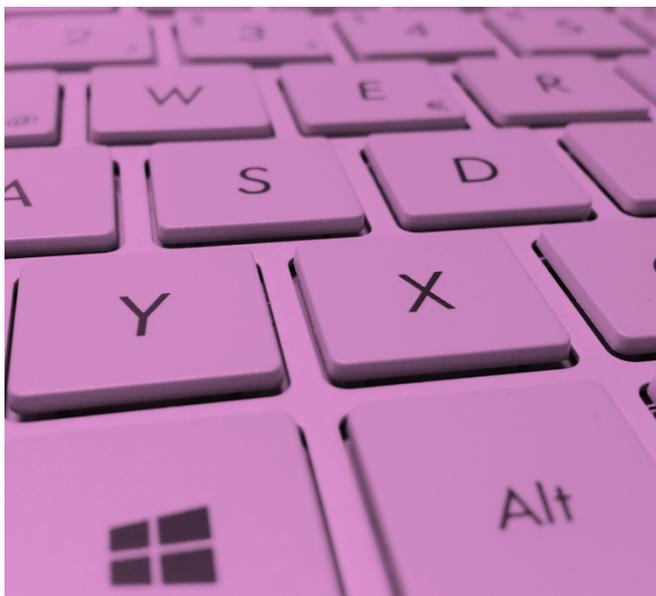
AI as a Foe: Challenges and Concerns

- **Academic Integrity and Cheating:** Perhaps the most immediate concern is that learners can use AI to cheat on assignments. With generative AI tools able to write essays, solve maths problems, or even generate entire projects, it has become easier for learners to present AI-created work as their own. This undermines honest learning and makes it harder for teachers to gauge who truly understands the material.
- **Misinformation and Accuracy Issues:** AI is not infallible. The information an AI tutor provides might be incorrect, outdated, or misleading, yet it often sounds confident and authoritative. Learners who rely on an AI's answer could be led astray if they cannot tell when the AI is wrong. For example, an AI might produce a very plausible-sounding explanation to a science question that is actually false. Over-reliance on AI without verification can thus spread misinformation and hinder the learning of correct information. In a worst-case scenario, if safeguards are lacking, an AI tool might even produce inappropriate or harmful content (for example, offensive language or misguided advice), which poses obvious risks in a classroom setting.
- **Bias and Discrimination:** AI systems can inadvertently introduce or amplify biases. If an AI's underlying data or algorithms contain biased patterns – for instance, under-representing certain groups or reflecting stereotypes – the AI's outputs may be unfair or prejudiced.
- **Privacy and Data Protection:** The use of AI in schools often involves collecting and analysing data on learners – from academic progress to personal details – which creates concerns about how that data is stored and used. Schools must ensure that sensitive information about learners is kept secure and not misused. There is also the issue of consent: for example, if an AI platform is using a learner's writing or exam answers to improve its algorithm, is this happening with the learner's (or parents') knowledge and permission? Any breach of privacy could

undermine trust and put learners at risk, so strong data protection measures are essential wherever AI tools are employed.

- **Reduced Human Interaction and Social Skills:** Education is not only about academics, but also about social development and human mentorship. If learners spend too much time interacting with AI tutors and software, they may have fewer opportunities to collaborate with peers or engage face-to-face with teachers. Over-reliance on digital tools for support can lead to a sense of isolation. This lack of human interaction might stunt the development of communication skills and teamwork abilities. Moreover, the emotional support and inspiration that human teachers provide cannot be replicated by a machine – an AI might be able to answer questions, but it cannot truly mentor or emotionally encourage a learner in the same way a dedicated teacher or classmate can.
- **Overreliance and Skill Loss:** Both learners and teachers face the risk of becoming too dependent on AI assistance. If learners come to rely on AI for every answer or solution, they might not develop their own critical thinking and problem-solving skills fully. For instance, a learner who habitually uses an AI to write pieces of work might not practise organising their own thoughts or could struggle to write effectively without that assistance. Similarly, if teachers lean heavily on AI for generating lesson content or marking, they could lose some of their professional skills or creativity over time. In outsourcing too many tasks to machines, we may inadvertently de-skill ourselves in areas that matter.
- **Digital Divide and Inequity:** Not all learners have equal access to AI technology. Advanced AI-driven educational tools might be available in well-resourced schools, while schools in poorer communities or developing regions struggle with outdated computers or limited internet access. This disparity could widen achievement gaps rather than close them – learners with access to AI tutors and personalised software could surge ahead, while others are left behind. Moreover, even within a classroom, if some learners are more tech-savvy and able to utilise AI effectively while others are not, those differences create an uneven playing field. Ensuring equitable access to the benefits of AI is a significant challenge that must be addressed to avoid worsening educational inequalities.





- **Guidance and AI Literacy:** Both educators and learners require new skills and guidelines to navigate an AI-rich learning environment responsibly. Teachers should receive training on how to integrate AI tools into their teaching effectively, as well as on understanding the limitations of these tools. Learners, likewise, should be taught “AI literacy” – how to use AI as a helpful resource critically and ethically, rather than as a shortcut to avoid learning. One idea is that schools create an academic honesty policy to clarify when AI usage is appropriate and how any AI assistance should be acknowledged. By cultivating informed users and setting clear boundaries, the education system can harness AI’s advantages while upholding integrity and trust.

Ethical Considerations

For AI to truly be a friend and not a foe in education, addressing the above issues through ethical practices and policies is crucial. Some key ethical considerations include:

- **Data Privacy and Consent:** Schools and companies deploying AI must uphold strict privacy standards. This means being transparent about what learner data is collected and how it is used. Consent should be obtained from learners (or their parents/guardians) before any personal data is fed into AI systems, and learner data should never be used to train external AI models without permission. Robust data security measures are needed to prevent breaches. In essence, individuals should retain control over their own information, and confidentiality should be protected by design.
- **Transparency and Accountability:** There should be clarity when AI is being used in educational activities. There must be accountability for AI-driven decisions – meaning a human authority (such as a teacher or administrator) should be able to review and override AI outputs if needed. No important decision about a learner’s education should be left entirely to a “black-box” algorithm without human oversight. By keeping AI use transparent and under supervision, we ensure it remains a tool that serves educational goals rather than dictating them.
- **Access and Inclusion:** Ethically, the benefits of AI in education should be accessible to all, not just a privileged few. Schools need to strive for equitable access to technology. Additionally, AI tools should be designed with inclusivity in mind – for example, interfaces available in multiple languages and features that accommodate users with disabilities. Ensuring no learner is left behind in the AI revolution is crucial if we want AI to be a positive force rather than one that exacerbates divides.

Conclusion

As with most technologies, artificial intelligence is neither inherently good nor evil – its impact on education will depend on how we choose to use it. The potential gains in personalising learning, boosting inclusion, and assisting teachers are tremendous. Conversely, the risks of misusing AI – from eroding trust to worsening inequalities – are very real. This means that the education sector must proceed with cautious optimism.

Encouragingly, many educators, policymakers, and experts are already working to find the right balance. In Wales, for example, schools have started a national conversation on using AI responsibly, and clear guidance is emerging to ensure human teachers remain at the heart of learning. Internationally, frameworks are being discussed to establish common principles for ethical AI in education, emphasising transparency, fairness, and safety. By staying proactive – setting sensible ground rules, training teachers, and continuously evaluating outcomes – we can mitigate the threats and amplify the benefits of AI.

Ultimately, whether AI becomes a trusted friend or a formidable foe in our classrooms is up to us. If we integrate AI thoughtfully, guided by ethical considerations and a commitment to equity, it can undoubtedly enrich education. If we ignore the pitfalls or rush in unprepared, we risk harm. The way forward is to neither blindly embrace nor reflexively reject AI, but to shape it consciously as a tool that serves the true goals of education. With wise guidance and human-centred thinking, AI can be a powerful ally to learners and educators alike – helping to unlock potential while preserving the core values of teaching and learning.





Entrepreneurial Thinking in Education

Fostering Innovation in Schools

Introduction

In a rapidly changing world defined by technological advances and complex global challenges, education systems are rethinking what it means to prepare young people for the future. Economic shifts, the rise of digital industries, and global issues like climate change all demand a generation of creative problem-solvers and innovators. Schools are increasingly expected to nurture not just academic knowledge, but also the adaptability and initiative that will help learners thrive in uncertain environments. One key approach gaining momentum is to infuse education with entrepreneurial thinking, turning classrooms into incubators of innovation. This approach equips learners with a mindset to seek opportunities, adapt to new challenges, and persist through setbacks – capabilities essential for success in modern life.

Wales provides a timely example of this educational evolution. The Curriculum for Wales, for instance, highlights the goal of developing “enterprising, creative contributors” who are ready to play a full part in life and work. This reflects a wider global trend: educators and policymakers recognise that entrepreneurial thinking can empower learners to shape their own futures and contribute positively to their communities. By fostering an entrepreneurial mindset in schools, we can inspire young people to become innovators, ethical leaders, and proactive citizens in all walks of life.

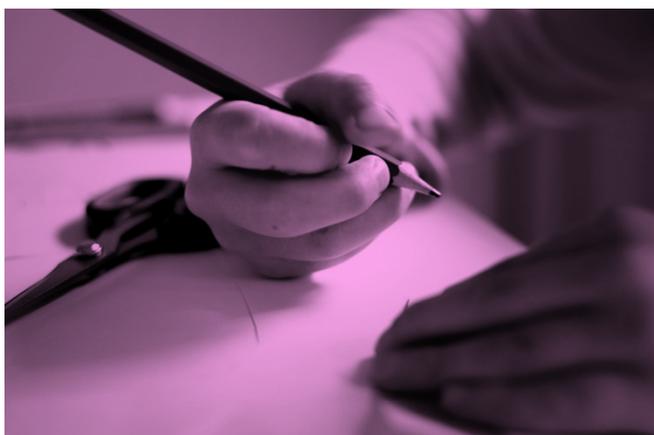
The Importance of Entrepreneurial Thinking in Education

Why focus on entrepreneurial thinking in schools? The benefits extend from the individual learner to society at large. Below are several key reasons why cultivating this mindset has become a priority in education today:

- **Preparing for the Future of Work:** Traditional job pathways are evolving, with many future careers yet to be invented. An entrepreneurial mindset prepares learners to navigate this shifting landscape by teaching them how to adapt, learn continuously, and even create their own opportunities. Whether a young person eventually launches a start-up, works within an organisation, or pursues any profession, the ability to think entrepreneurially – to spot needs and innovatively meet them – is invaluable for career resilience.
- **Fostering Innovation and Creativity:** Entrepreneurial thinking places a premium on creativity, curiosity, and problem-solving. By encouraging learners to ask questions and think outside the box, schools can ignite a passion for innovation. This creative outlook doesn’t just lead to new business ideas; it can spark solutions to social and environmental challenges or improvements in everyday processes. In the

classroom, this means learners find education more engaging and relevant, as they see how their ideas can have real-world impact.

- **Building Life Skills and Confidence:** Working on entrepreneurial projects helps young people develop critical life skills. These include leadership and teamwork (by collaborating on projects), communication skills (by pitching ideas and persuading others), and financial literacy (by planning budgets and understanding value). Perhaps most importantly, learners gain resilience. Entrepreneurship in education often involves trial and error; learners learn to handle setbacks and view mistakes as learning opportunities rather than failures. This resilience and growth mindset builds confidence that extends to all areas of life.
- **Enhancing Engagement and Motivation:** When learners are given the chance to pursue their own ideas and interests through projects, their intrinsic motivation can soar. Entrepreneurial learning tends to be hands-on and learner-centred, which can increase school engagement. Subjects come alive when abstract concepts are applied to concrete ventures – a science theory might be used in designing a product prototype, or writing skills might improve when crafting a marketing blurb for a project. This practical application of knowledge can make learning more meaningful and enjoyable, reducing disengagement.
- **Promoting Equity and Inclusion:** Entrepreneurial education can also be an equaliser. It provides diverse learners – including those who might not excel in traditional academic settings – alternative pathways to succeed and showcase their talents. Practical problem-solving, creativity, and initiative are qualities that every learner can develop, not just those with top exam scores. In fact, entrepreneurship programmes have been shown to particularly empower young people from disadvantaged backgrounds by giving them tools and confidence to overcome barriers. By ensuring all learners (regardless of their background or abilities) have opportunities to develop entrepreneurial skills, schools can inspire hope and ambition in those who might feel left out of conventional success routes. Inclusivity in this context also means adapting activities so that learners with disabilities or different learning needs can participate fully in innovative projects, ensuring everyone can contribute ideas and take on roles in a team.



In short, entrepreneurial thinking enriches education by making learning more attuned to real life and by developing versatile skills. It helps transform learners from passive knowledge receivers into active creators and problem-solvers. This transformation is at the heart of why innovation in schools matters – not only to future economies, but to the personal fulfilment and agency of young people.

What is an Entrepreneurial Mindset?

At the core of entrepreneurial thinking in education is the entrepreneurial mindset. But what does this term really mean in a school context? It does not necessarily mean every child will grow up to launch a business. Rather, it refers to a set of attitudes, skills, and behaviours that enable a person to turn ideas into action and innovation. An entrepreneurial mindset in a learner includes traits such as:

- **Spotting Opportunities:** Entrepreneurs are adept at noticing problems or gaps and seeing them as opportunities. In school, this might mean a learner identifying an issue in their community or an unmet need in the school and brainstorming solutions for it. Cultivating this trait involves encouraging observation, curiosity about how things work, and critical thinking to question the status quo.
- **Creativity and Vision:** This mindset is fundamentally creative. It involves generating original ideas or novel approaches. Equally important is having a vision to pursue those ideas. Learners with an entrepreneurial mindset learn to imagine a better way of doing things – whether it's a new gadget, a better process, or a community initiative – and to articulate that vision. Creativity is nurtured by giving learners open-ended tasks and the freedom to experiment with different approaches without fear of being “wrong.”
- **Initiative and Self-Direction:** Someone with an entrepreneurial mindset doesn't wait to be told what to do. They take initiative and are willing to start projects or take on challenges proactively. In the classroom, a self-directed learner might independently research a topic of interest or launch a small venture (like a fundraiser or a mini society) with minimal prompting. Educators can foster this by adopting a facilitator role, allowing learners to make choices in their learning and encouraging them to pursue their passions in project work.
- **Risk-Taking and Resilience:** Entrepreneurs understand that failure is often a step on the road to success. In an educational setting, this translates to learners who are not afraid to try something difficult or unconventional, even if they might fail at first. They learn to weigh risks, make decisions with incomplete information, and most importantly, bounce back from setbacks. Developing this trait means creating a safe environment in school where failure is seen as a learning opportunity. For example, a team of learners might pilot a project that doesn't work out; instead of this resulting in punishment or embarrassment, the experience is discussed constructively to extract lessons and encourage a revised attempt. Over time, learners become more comfortable with uncertainty and more persistent in the face of challenges.

- **Adaptability:** The entrepreneurial mindset is a flexible one. Conditions and information can change rapidly, and being able to pivot – adjust one’s approach based on new findings – is crucial. A classic example is a learner team altering their project idea after discovering a different need or after an initial trial didn’t succeed. Embracing change in plans and learning to solve problems in real time teaches adaptability. This quality can be strengthened in the classroom by introducing varied scenarios or constraints that force learners to rethink their strategies (for instance, a sudden change in project requirements to mirror real-world unpredictability).
- **Collaboration and Networking:** Successful innovation often involves working with others, drawing on collective strengths. An entrepreneurial learner learns to collaborate in teams, negotiate roles, and tap into the expertise of peers, teachers, or mentors. They also become comfortable reaching out to people outside their usual circle – for example, emailing a local scientist for advice on a science project or interviewing a community member about a local problem. By working on group projects and engaging with real-world partners, young people practice the art of building relationships and pooling knowledge toward a common goal.
- **Empathy and Value Creation:** Perhaps a less obvious but increasingly recognised aspect of the entrepreneurial mindset is empathy – the ability to understand others’ needs and perspectives. After all, at the heart of any successful innovation or enterprise is something of value for other people. In schools, this means teaching learners to put themselves in someone else’s shoes: What does my community truly need? What would make my peers’ lives easier at school? By framing projects around creating value for others (be it a service, product, or social initiative), education instils in learners the habit of looking outward and designing solutions that matter.

In summary, an entrepreneurial mindset is about being a proactive, resourceful, and innovative thinker. It’s as much about character and attitude as it is about knowledge. A learner with this mindset is equipped to face complex problems with confidence, works well with others, and remains resilient and flexible amidst challenges. These qualities serve learners in entrepreneurial ventures and in any career or life situation where they need to navigate change and contribute ideas. By clearly understanding and articulating what the entrepreneurial mindset entails, educators and schools can better target these attributes in their teaching and activities.

Cultivating a Culture

Fostering entrepreneurial thinking in education starts with the overall culture and environment of a school. School culture encompasses the values, norms, and attitudes that shape daily life in classrooms and hallways. To encourage innovation, schools must consciously create a culture where creativity, experimentation, and initiative are valued and supported. Here are some ways schools can cultivate an innovation-friendly culture:

- **Encourage Curiosity and Questioning:** Innovative school cultures treat curiosity as a virtue. Teachers and school leaders can signal that questions are

welcome – even the challenging, “why do we do it this way?” questions. One practical approach is for educators to model curiosity themselves, perhaps by exploring new ideas alongside learners or admitting when they don’t know an answer and showing how to find out. When learners see that their natural curiosity leads to interesting discussions or project ideas (instead of being brushed aside), they feel empowered to keep asking questions and seeking novel solutions.

- **Safe Space for Experimentation (and Failures):** A cornerstone of an entrepreneurial culture is the freedom to experiment without fear. Schools can adopt the mindset that failure is not a dead-end but part of the learning process. This could mean implementing policies that allow learners to redo assignments or projects after incorporating feedback. In classroom practice, teachers might share stories of famous inventions that arose from multiple failures, or even let learners see the teachers themselves try something that doesn’t work on the first attempt. When learners know that their school values trying and learning over mere perfection, they become more willing to take on challenges and innovate.
- **Growth Mindset and “Yet” Language:** Closely related is promoting a growth mindset – the belief that abilities can be developed through effort and learning. Schools can train both staff and learners to use “yet” language: “I haven’t solved this problem yet” implies that with time and work, success is attainable. Praising effort, strategy, and progress rather than just innate ability encourages learners to embrace difficult tasks. A child who hears “I see you tried a new method even though the result wasn’t what you hoped – that’s exactly how scientists and entrepreneurs learn” will understand that persistence and adaptability are valued. This mindset is contagious; when integrated into school ethos, it underpins all innovative initiatives.
- **Learner Autonomy and Leadership:** An innovative school culture gives learners a degree of autonomy and leadership in their learning. This could manifest in learner-led clubs, committees, or the freedom to choose topics for projects. Schools might establish platforms such as “innovation days” or “genius hour” where learners direct their own mini-projects on subjects of interest. When young people have ownership, they are more likely to invest creativity and energy, and the school benefits from their fresh perspectives. Additionally, involving learners in some decision-making processes (e.g., giving input on school policies or contributing ideas to improve the school environment) can reinforce that their ideas are valued and can lead to real change.
- **Teacher as Facilitator and Role Model:** In an entrepreneurial culture, the role of the teacher often shifts from a directive instructor to a facilitator or coach. This doesn’t mean teachers step back entirely; rather, they guide learners in exploring ideas and developing their projects, providing encouragement and feedback instead of delivering all the answers. Educators who adopt this style implicitly teach innovation: they demonstrate flexibility, a willingness to learn alongside learners, and an openness to unexpected outcomes. Educators can also serve as role models by sharing their own creative pursuits or

problem-solving experiences, thus humanising the process of innovation.

- **Celebrating Creativity and Initiative:** Finally, what a school chooses to celebrate sends strong signals about its culture. To nurture innovation, schools should recognise and celebrate creative efforts and initiative taken by learners (and staff). This could be as simple as a classroom “innovation wall” highlighting learner project ideas or prototypes. Schools might host fairs or assemblies where learners present their entrepreneurial projects, innovations, or community initiatives to the whole school or parents. Awards and recognition can be given not just for high grades or athletic achievement, but for traits like “most creative solution,” “best teamwork project,” or “community impact.” By publicly appreciating these efforts, the school motivates others to engage in creative, entrepreneurial activities. Importantly, celebration should include reflecting on the journey: praising not just the final product but also the process: the brainstorming, the perseverance through difficulties, and the learning that occurred.

Cultivating a culture of innovation is an ongoing process that involves everyone in the school community. It lays the groundwork upon which specific entrepreneurial programs or lessons can thrive. If the ethos of the school encourages new ideas and tolerates failure as part of learning, then entrepreneurial thinking will flourish naturally across classrooms. Over time, such a culture produces not only innovative projects but also confident learners who feel supported to take intellectual risks and bring their ideas to life.



Integrating Entrepreneurship into the Curriculum

Embedding entrepreneurial thinking in education works best when it’s woven into the curriculum rather than treated as an isolated topic. This integration ensures that developing innovation skills isn’t a one-off event or confined to a single business studies course. Instead, it becomes a thread running through various subjects and year groups. Here are several approaches to infuse entrepreneurship into the school curriculum effectively:

- **Cross-Curricular Projects:** One powerful method is designing interdisciplinary projects that require learners to apply knowledge from different subjects to solve a real-world problem or create something new. For example, a project on sustainable living could involve science classes (investigating renewable

energy or recycling processes), geography and health and wellbeing sessions (looking at community impact and environmental issues), mathematics (data analysis or budgeting for a solution), and literacy (writing persuasively to campaign for a change). In the course of such a project, learners inherently practise entrepreneurial skills: they identify an opportunity for improvement (e.g., reducing waste at school), formulate a plan, work in teams, and perhaps even implement a solution in a prototype form. By crossing subject boundaries, learners see that innovation doesn’t belong to any one domain – it emerges at the intersection of many types of knowledge.

- **“Learning by Doing” in Any Subject:** Teachers of all subjects can incorporate elements of learning by doing that mirror entrepreneurial action. In practical terms, this might look like introducing small-scale ventures or problem-solving tasks related to the subject matter. A language teacher might have learners design and produce a simple magazine or podcast for an audience (developing a product and considering their audience’s interests). A science teacher could ask the class to treat a lab investigation like a start-up experiment – forming a hypothesis “product idea,” testing it, gathering user (or peer) feedback on their findings, and iterating. Even in subjects like art or music, teachers can encourage learners to think entrepreneurially by guiding them to plan an exhibition or concert (covering aspects of event planning, promotion, and engaging the community). The key is that learners undertake projects that require planning, execution, and presentation – much like launching a mini venture – thereby building their confidence and skills in a practical context.
- **Progression from Early Years to Secondary:** Integrating entrepreneurship should be age-appropriate and progressive. In early years and primary school, this might mean focusing on play-based and creative activities that build imagination, teamwork, and simple problem-solving. Children might run a pretend shop in the classroom or brainstorm inventions with blocks and crafts. The emphasis here is on sparking creativity, communication, and confidence. As learners move into upper primary and secondary school, projects can become more sophisticated – perhaps designing solutions to community issues or participating in charity fundraisers (learning to plan, budget, and make decisions). By the time learners are in secondary, they can handle more complex enterprise projects, such as developing a prototype product, coding a simple app to address a need, or working with local businesses on internships or joint initiatives. The Curriculum for Wales recognises this progression, mapping out how enterprising skills can be developed from ages 3 to 16 in a continuous journey. By aligning entrepreneurial activities with cognitive and social development stages, schools ensure learners are building on prior experiences and are challenged appropriately at each level.
- **Real-World Alignment:** Integrating entrepreneurship also means making connections to the real economic and social world. This could involve using case studies of young entrepreneurs or innovators as part of

lessons – for example, discussing how a teenager invented a useful device or started a social campaign. It also means aligning some projects with actual market or community needs. A class project might aim to solve a problem that a local community or a school is genuinely facing (such as improving the school’s recycling system or creating an app for the school library). If learners know their work might actually be implemented or make a difference beyond the classroom, their sense of purpose and engagement increases. Moreover, experiencing the impact of their ideas in real life is a powerful reinforcement of entrepreneurial learning. Some schools invite local business or community leaders to come with real “challenges” for learner teams to solve, which further blurs the line between school assignments and real-world innovation, giving learners authentic enterprise experiences while still in school.

In essence, integrating entrepreneurship into the curriculum transforms how subjects are taught and learned. It moves education away from rote learning towards a model where knowledge and skills are applied in dynamic, meaningful contexts. Learners begin to see connections between what they learn in school and the world outside school. They also accumulate practical experiences of creating, doing, and collaborating that serve as a foundation for future entrepreneurial activities. When done thoughtfully, this integration enriches curriculum content and makes learning more engaging, without sacrificing key academic goals.

Practical Strategies for Educators to Foster Innovation

While school-wide culture and curriculum design set the stage, the day-to-day interaction in the classroom is where entrepreneurial thinking truly takes root. Teachers can employ a variety of concrete strategies and activities to encourage an innovative, entrepreneurial mindset among their learners. Here are several effective strategies educators can use:

- **Project-Based Learning with Real Challenges:** Transform some units or lessons into open-ended projects. Instead of giving a defined task with a single correct answer, pose a real-world problem and let learners drive the process of solving it. For example, rather than a typical assignment on electricity, challenge a class to “find a way to reduce our school’s energy use” or “design a device that could charge a phone without plugging it in.” Provide guidance, but allow learners to chart their own course – researching, brainstorming solutions, and creating a prototype or proposal. This approach mirrors entrepreneurial project development and teaches learners to handle ambiguity. Some initial discomfort is normal (learners might be used to step-by-step instructions), but gradually they learn to trust their own initiative. The teacher’s role is to facilitate: check in with teams, ask probing questions, and ensure they have the resources needed. In doing so, you help them learn how to learn, which is at the heart of entrepreneurship.
- **Encourage Problem-Finding and Creativity:** Often in education, we present learners with problems to solve. To foster entrepreneurial thinking, flip this dynamic and have learners practice finding problems as well. Encourage them to look at their surroundings

– the school, their community, daily life – and identify issues or inconveniences that people face. This could be a tiny everyday hassle or a big social issue. Then, use creative techniques (like brainstorming sessions, mind mapping, or design thinking exercises) to generate ideas addressing those problems. An activity could be as simple as: “List three things that could be improved at our school. Now pick one and think of as many inventive solutions as possible, no matter how outlandish.” By doing this, learners strengthen their creative muscles and learn that defining the right problem is a significant part of innovation. As an educator, you can foster a playful atmosphere during these sessions – perhaps introducing unusual constraints (“imagine you have no money, how else might you solve it?”) or creative prompts – to help learners break free from conventional thinking. This practice of “unlearning” the fear of breaking rules or looking silly is important. It signals that exploring wild ideas is welcomed – often those wild ideas lead to truly original solutions.

- **Use Experiential “Mini-Ventures”:** Nothing teaches entrepreneurship like doing it. Within the safety of the school environment, allow learners to undertake mini-ventures or experiments where they must actively implement an idea. This could be a one-week business simulation where teams each start a mock company selling a simple product to their peers (even something like homemade crafts or a service like tutoring lower grades during lunch). Alternatively, it could be a social venture – organising a charity bake sale or a small event. By compressing the timeline (“You have one month to start and run this project”), learners jump into action (“ready-fire-aim” approach). They will have to make quick decisions, divide tasks, attempt to market their idea, handle money responsibly, and deal with customer feedback or unexpected hurdles. Such experiences immerse learners in entrepreneurial activity. They will encounter obstacles – maybe their product doesn’t attract buyers or their team disagrees on strategy – but facing these is exactly where the rich learning occurs. After the exercise, debrief with the class: What went well? What failures happened and what did you learn from them? How would you do it differently next time? This reflection cements the lessons of resilience and adaptability. Importantly, even if a team’s project “fails” in terms of outcome, frame it as a success in learning. Learners will remember these hands-on ventures far more than a lecture on entrepreneurship.
- **Set High Expectations and Provide Guidance:** Learners often rise to the challenge when given high goals, as long as they know support is available. In practice, a teacher might set an ambitious target like, “Each team will create a prototype and get feedback from at least 20 people outside our class,” or “We will present our proposals to the town council.” These stretch goals push learners beyond their comfort zone and lend significance to the task. To keep this feasible and positive, teachers should coach and mentor along the way. Checkpoints where you review progress with each group, offer advice, and help them refine their plans are essential. By combining a high bar with strong support, educators boost learners’ confidence. Learners start to realise they can accomplish more than they initially assumed. This strategy of “high expectations + mentorship” mirrors entrepreneurial

incubators in the real world, where budding entrepreneurs are challenged but also guided by mentors and experts.

- **Teach the Art of Pivoting (Learning from Mistakes):** A vital entrepreneurial skill is knowing when and how to change course based on feedback or setbacks. In the classroom, intentionally incorporate moments where learners must evaluate and possibly redesign their solution. For instance, after an initial project trial or prototype test, have a session dedicated to analysing results. Encourage learners to identify what didn't work as expected. Then ask, "How could you pivot? What could you change in your approach or idea?" By normalising mid-course corrections, learners internalise that iteration is normal. One way to do this is through staged projects: Phase 1 is to develop an idea, Phase 2 is to test it on a small scale (maybe with another class or a focus group of teachers/parents), Phase 3 is to refine the idea for final presentation. This way, the project design itself mandates reflection and change. When teachers highlight stories or examples of famous pivots (like how a certain product started as one thing but became another due to user feedback), it further reinforces that adapting is not a sign of failure, but a sign of resourcefulness. Learners who experience a pivot in their school project – and see it lead to a better outcome – will carry that lesson to future endeavours.
- **Leverage Technology and Modern Tools:** Today's entrepreneurs make heavy use of technology, and educators can mirror that in the classroom. Introduce learners to digital tools that entrepreneurs use, which can also make projects more engaging. Online survey tools can let them do quick market research or gather feedback on their idea from peers. Simulation games can mimic aspects of running a business or managing resources. Even something as simple as using a spreadsheet for budget planning on a class project teaches valuable skills. Additionally, discuss how technology enables innovation – for example, learners could explore how emerging tech (like 3D printing, coding, or social media) can be applied in their projects.

Every teacher can adapt these strategies to fit their subject, learner age group, and available resources. The common thread is that learners are active participants and often drivers of their learning, rather than passive recipients. The teacher guides and structures experiences that push learners to think critically and creatively. Over time, such practices create habits of innovation. Even small changes – a single open-ended project or a weekly brainstorming exercise – can make a significant difference in how learners approach challenges. Consistently applied, these classroom strategies produce graduates who are not only knowledgeable in academic content, but who also instinctively look for ways to improve the world around them and have the skills to act on their ideas.

Challenges and Solutions in Fostering Entrepreneurship in Schools

Implementing entrepreneurial thinking in education is immensely rewarding, but it's not without challenges. Schools and teachers may encounter several obstacles on the path to fostering innovation. Being aware of these challenges – and

strategies to address them – can ensure that efforts are sustainable and effective. Below are some common challenges and ways schools can overcome them:

1. **Rigid Curriculum:** One of the biggest hurdles is the pressure to cover extensive academic content which can make teachers hesitant to allocate time for open-ended projects. Educators might worry that if they spend too much time on entrepreneurship activities, they won't complete the required curriculum. **Solution:** Rather than seeing innovation projects as extra, schools can map entrepreneurial activities to curriculum objectives. For instance, a project-based learning task can be designed to hit multiple learning outcomes across subjects (thus actually being an efficient way to cover content). If a science curriculum requires teaching about electricity and a maths curriculum about data handling, a project designing a simple electrical device and surveying users can cover both. Many skills developed in entrepreneurial learning – critical thinking, effective communication, applied maths, scientific inquiry – align with existing educational standards. It's also helpful to start small: teachers can begin with a single project or a one-day event that complements a unit, thereby enriching rather than derailing the planned curriculum.
2. **Lack of Time and Resources for Teachers:** Crafting and supervising entrepreneurial projects can demand significant teacher time and effort. Some teachers might feel they lack the expertise or materials to run, say, a mini-business project. **Solution:** Provide professional development and resource support for teachers. Workshops or training sessions on project-based learning, design thinking, or enterprise education can boost teachers' confidence and provide them with ready-to-use strategies. Sharing success stories and lesson plans among staff can also lighten the planning load – teachers who have run a successful project can mentor others or contribute to a repository of project ideas. Schools could also adjust timetables to allow for co-teaching or teacher collaboration on entrepreneurship projects, so the workload is shared. Using external resources is another relief: many free curricular resources exist (toolkits, lesson plans, online platforms) for entrepreneurship education. Teachers should be encouraged to use and adapt these rather than reinvent the wheel for every activity. Additionally, engaging community volunteers or parents as we discussed can provide extra hands and knowledge. If materials or funds are a problem, schools might seek small grants (from local businesses or educational charities) to support innovation labs or project materials. Even modest funding can provide things like maker space supplies or initial capital for a learner enterprise, and often local organisations are willing to support youth innovation initiatives.
3. **Fear of Commercialism or Ethical Concerns:** Some educators and parents worry that "entrepreneurship in schools" means pushing a profit-driven mindset on children or overemphasising business at the expense of altruism. There can be a fear that talking about money or startups is inappropriate or that it might encourage materialism. **Solution:** Clearly frame entrepreneurial thinking in terms of value creation, creativity, and problem-solving, not just profit. Emphasise that the programme's aim is to develop

skills like initiative, teamwork, and innovation which are broadly applicable in life and socially beneficial. Schools can ensure that a balance of projects includes social entrepreneurship or community service projects, not only business ventures. By highlighting examples of social enterprises and ethical businesses, teachers show that entrepreneurship can go hand-in-hand with making a positive impact. It's also useful to engage in open dialogue with parents and the community about what entrepreneurial education entails. Once parents understand that their children are learning to be resourceful and enterprising in ways that could help them become surgeons, artists, or community leaders – and not being groomed to be ruthless business tycoons – they usually become supportive. Embedding discussions about ethics, sustainability, and community needs into entrepreneurship projects will further alleviate concerns, demonstrating that learners are being taught to consider the wider consequences of their ideas.

4. **Learner Reluctance and Varied Abilities:** Not every learner will jump at the idea of unstructured projects or taking on leadership roles. Some may be shy, others accustomed to excelling in traditional tasks and fearful of risk, and some might struggle with teamwork or open-ended tasks. **Solution:** Differentiate and scaffold entrepreneurial learning just as you would academic learning. Start with activities that ensure early successes for everyone. For example, initial tasks could be in very small groups or pairs, or with clearly defined roles so that shy or unsure learners can ease in (one learner might do research, another makes a poster – later they can swap roles as confidence builds). Teach teamwork skills explicitly; don't assume learners know how to collaborate effectively. Set norms for respectful listening and idea-sharing and intervene as needed to guide group dynamics. For those who fear failure or are perfectionists, deliberately include low-stakes failures in classroom discussions (like quick challenges where the goal is actually to find what doesn't work) to lighten the mood around messing up. It may help to highlight that in innovation, everyone has a niche: one learner might be great at coming up with ideas, another at organising plans, another at building or drawing. By valuing different contributions (creative, analytical, technical, interpersonal), varied learners can see a place for themselves in a project. Celebrate progress and effort frequently, especially for learners who have stepped out of their comfort zone. Over time, as learners experience the fun and satisfaction of creating something of their own, their reluctance usually fades and is replaced by pride in their accomplishments.

5. **Sustainability of Programs:** Many schools start an entrepreneurship initiative with enthusiasm but keeping it going year after year can be challenging, especially if a champion teacher leaves or initial funding dries up. **Solution:** Institutionalise the program and build it into the school's structures. Rather than relying on one passionate teacher, create committees or working groups that include multiple staff (and even learners) to plan and review entrepreneurship activities each year. Embed key projects into the calendar (for example, make the innovation fair an annual event) so they become part of the school's tradition. Seek ongoing partnerships – a

long-term relationship with a local business association or university can provide continuity even if staff changes. Be adaptable: review what worked and what didn't, and be willing to evolve the approach. A sustainable entrepreneurial education program is one that remains flexible and responsive to both learner interests and external circumstances.

By anticipating these challenges and proactively addressing them, schools can embed entrepreneurial thinking into education in a lasting way. The presence of obstacles doesn't indicate that the idea is flawed – rather, it reflects that any educational innovation requires adjustment and commitment. With creative problem-solving (fittingly, the very skill we want to teach learners), educators can overcome these hurdles. In fact, involving learners in solving some of these challenges (like figuring out how to run a project on a tight budget, or how to include a classmate who is usually disengaged) can itself become a lesson in entrepreneurship. Ultimately, the effort to surmount these challenges is rewarded by the sight of learners buzzing with ideas, tackling problems with enthusiasm, and growing into capable innovators.

Conclusion

Entrepreneurial thinking in education is more than a buzzword – it is a transformative approach that prepares learners for the demands of the twenty-first century. By fostering innovation, creativity, and initiative in schools, we do more than teach learners how to start businesses; we empower young people to take charge of their learning and their futures. They learn to view challenges as opportunities, to collaborate and communicate their ideas, and to rebound from setbacks with newfound wisdom. These are qualities that will serve them no matter what path they choose in life.

Importantly, nurturing an entrepreneurial mindset aligns with the broader mission of education: to develop well-rounded individuals who can contribute meaningfully to society. A learner who has experienced designing a solution to help others, who has had the chance to lead a project and persuade others of their vision, or who has learned from a prototype that didn't work, is a learner who has truly internalised their lessons. They carry forward not just facts and figures, but an attitude of proactive problem-solving and a belief in their ability to make a difference. And that is perhaps the greatest outcome any education system could hope to achieve: empowered, innovative learners ready to build a better tomorrow.





Fostering Reflective Practice The Art of Meaningful Self-Evaluation

Introduction

Reflective practice is more than a buzzword: it is the cornerstone of professional growth and educational excellence. In today's dynamic classrooms, where every learner's background, including those with trauma or complex needs, demands a compassionate approach, the capacity to evaluate one's practice critically becomes indispensable. This article unpacks the art of meaningful self-evaluation, offering school leaders, teachers, and teaching assistants nuanced strategies to cultivate a reflective culture that fosters both personal growth and a supportive, resilient learning environment.

Modern educational settings are increasingly diverse and rapidly evolving. Amid swift shifts in pedagogy, technology, and learner needs, reflective practice offers a structured means of continuous improvement. For school leaders, reflective self-evaluation is not just about personal growth it sets the tone for an entire institution. For classroom practitioners and support staff, it provides the framework to adapt, respond, and refine teaching methods to meet each learner's unique requirements. By critically examining both successful and challenging experiences, educators transform everyday interactions into significant opportunities for improvement and innovation.

Reframing Reflective Practice: A Closer Look

Defining Reflective Practice

Reflective practice is the systematic process of deep, critical thinking about one's teaching experiences. Inspired by thinkers like John Dewey and Donald Schön, it involves moving beyond mere recollection to a comprehensive analysis of experiences, decisions, and outcomes. Educators who engage in this practice not only recount what transpired in their classrooms but also interrogate why events unfolded as they did integrating both cognitive and emotional insights.

Rather than being a single event, reflection is a cyclical process; each cycle refines thought, informs practice, and guides future action. In this way, every lesson, learner interaction, and policy decision becomes an invitation for growth, encouraging educators to turn challenges into opportunities for learning.

Reflective Practice in Action: Beyond Surface-Level Analysis

It is one thing to conduct a cursory review at the end of a lesson; it is another to embrace deeper layers of reflection. True reflective practice requires examining the underlying assumptions, unspoken interactions, and hidden biases that influence behaviour in the classroom. This process often involves recognising emotional vulnerabilities and

understanding trauma-informed perspectives. For teachers, understanding why certain approaches resonate (or fall flat) with learners who have experienced trauma can lead to more empathetic, responsive teaching practices that reinforce inclusivity.

The Multifaceted Benefits of Being Reflective

Deepening Self-Awareness and Professional Competence

At its core, reflective practice enhances self-awareness. By regularly scrutinising teaching methods, classroom management, and interpersonal interactions, educators develop clearer insight into their personal strengths and the areas that require further refinement. This heightened self-awareness translates into targeted professional development. When you know precisely which skills need honing (whether in engagement, delivery, or empathy) you can seek specialised training that yields measurable improvement.

Enhancing Learner Outcomes Through Responsive Teaching

Transforming personal insights into practice directly benefits learners. Reflective educators adapt teaching strategies to align with individual learner needs, ensuring that lessons are engaging and accessible. By evaluating the effectiveness of different instructional approaches (perhaps incorporating more interactive or trauma-sensitive techniques) teachers can make informed decisions that improve engagement and lead to better learning outcomes. This responsive approach is vital in environments where each learner's experience is unique and multifaceted.

Cultivating a Supportive, Collaborative Environment

When educators share their reflective insights, a culture of openness and mutual respect takes root. This transparency nurtures individual growth while building a collective ethos of ongoing learning among staff. Peer observations and team discussions stimulate fresh perspectives and innovative strategies, turning self-reflection into a communal asset that drives school-wide success.

Strategies to Embed Reflective Practice

For reflective practice to achieve its full potential, it must be consciously integrated into daily routines. Here are several strategies to deepen (not merely tick a box) the reflective process while keeping the overall discussion concise.

1. Maintaining a Reflective Journal

A reflective journal is more than a diary; it is a tool for analytical thinking. Educators can record details of each lesson, noting objective outcomes alongside subjective feelings. Consider these pointers:

- **Consistency:** Establish a routine (daily or weekly) when you document events and insights.
- **Honest Evaluation:** Acknowledge both triumphs and setbacks. Authenticity paves the way for genuine growth.
- **Linking Theory to Practice:** Relate your experiences to established educational theories or trauma-

informed approaches, thereby deepening your understanding.

- **Action-Oriented Entries:** Conclude with specific, actionable goals that stem directly from your reflections.

2. Adopting Structured Frameworks

Structured frameworks such as Gibbs' Reflective Cycle can guide deeper analysis. This model's six stages prompt educators to dissect experiences comprehensively:

Stage	Deeper Focus
Description	Focus on the factual narrative, ensuring that external influences and the classroom context are fully documented.
Feelings	Analyse internal reactions; examine not only what you felt but why those emotions emerged in response to particular classroom dynamics or external pressures.
Evaluation	Weigh what worked well against what did not, assessing both immediate feedback and longer-term outcomes in the learning process.
Analysis	Unearth underlying patterns, considering how personal beliefs, cultural factors, and learner diversity might have influenced the experience.
Conclusion	Reflect on alternative strategies and identify lessons that challenge your preconceptions, thereby broadening your pedagogical toolkit.
Action Plan	Craft a detailed plan that includes both short-term adjustments and long-term developmental goals, drawing on peer feedback and further professional development.

3. Leveraging Peer Observation and Constructive Feedback

Engaging in peer observation transforms isolated reflection into collaborative learning. Arrange reciprocal classroom observations where feedback is structured and anchored in best practice. This method:

- **Reinforces Trust:** Establishes a supportive environment where feedback is received as a shared pursuit of excellence.
- **Builds a Reflective Community:** Facilitates regular, constructive dialogue among educators with varying levels of experience, enriching perspectives and fostering robust educational communities.
- **Incorporates Mentorship:** Pairs experienced educators with newer colleagues, ensuring that reflective practice is scaffolded by wisdom and guidance.

4. Integrating Technology Thoughtfully

Digital tools can enhance a deeper reflective process while keeping documentation organised and accessible:

- **Digital Portfolios:** Collect lesson plans, reflective journal entries, and video recordings in a central digital repository that is easy to revisit.
- **Video Analysis:** Use recordings to observe not only non-verbal communication but also how theoretical approaches are practically implemented in dynamic classroom situations.
- **Online Communities:** Engage with virtual platforms dedicated to reflective practice, providing spaces to exchange experiences with educators from diverse contexts.

5. Designating Focused Time for Reflection

Rather than expecting insights to emerge spontaneously, deliberately carve out time for reflection:

- **Scheduled Reflection Rounds:** Embed brief, focused reflection sessions into the weekly timetable to build consistency.
- **Professional Workshops:** Participate in (or organise) workshops that concentrate solely on reflective practice, ensuring that this time is shielded from day-to-day distractions.
- **Holistic Reflection Retreats:** Occasionally step away from routine with structured retreats that allow for in-depth exploration and discussion, bridging theory with practical implementation.

Building a Culture of Reflection in Schools

A school's culture can either foster or inhibit reflective practice. When leadership openly values self-evaluation, it sends a clear message that continuous improvement is both expected and celebrated.

1. Leading Through Authentic Self-Reflection

Leaders should model reflective practice by openly discussing their own challenges and growth areas. This approach not only demystifies self-criticism but also encourages staff to view reflection as an integral part of professional excellence rather than just a sign of weakness.

2. Embedding Reflection into Professional Development

Regular, structured sessions centred on reflective techniques ensure that reflection is more than an occasional activity. Professional development workshops can incorporate peer feedback, scenario analysis, and the integration of trauma-informed strategies enriching the reflective process and enhancing teaching quality.

3. Creating Collaborative Platforms

Establishing Professional Learning Communities (PLCs) or dedicated reflective networks provides fertile ground for idea exchange and deep analysis. These platforms should be designed to support candid discussions, celebrate successes, and collaboratively address challenges so that reflection becomes a shared, ongoing enterprise.

4. Rewarding Reflective Initiatives

Recognise and reward those who commit to reflective practices. Whether through awards, professional accolades, or increased responsibility, recognising reflective achievements reinforces its value and motivates continued engagement across the staff body.

Navigating the Challenges of Reflective Practice

Deep reflection, while immensely valuable, is not without its challenges. Recognising and addressing these barriers is essential for sustained, meaningful growth.

1. Managing Time Effectively

Time is often the scarcest resource for educators. To address this challenge, integrate brief reflective moments into everyday routines. Even a few focused minutes after a class can yield valuable insights.

2. Embracing Vulnerability

Self-evaluation naturally invites vulnerability. However, understanding that discomfort is part of personal and professional growth can transform hesitation into empowerment. By fostering a culture where vulnerability meets empathy and support, educators turn potentially challenging moments into opportunities for genuine improvement.

3. Overcoming Resistance to Change

Not every educator immediately recognises the value of reflective practice. Demonstrating tangible benefits (through data, success stories, and peer testimonials) can help shift perceptions. Tailoring reflective methods to suit varied teaching styles ensures that reflection remains accessible, personally meaningful, and non-intimidating.

Sustaining Continuous Professional Growth

The journey of reflective practice is an ongoing cycle of insight, adaptation, and continual learning. The benefits extend far beyond individual growth, influencing the broader educational community and ultimately enhancing outcomes for all learners.

Translating Reflection into Action

For reflection to make a lasting impact, insights must be transformed into concrete actions:

- **Set Measurable Goals:** Identify precise areas for improvement whether in classroom management, differentiated instruction, or trauma-informed approaches.
- **Monitor Progress:** Regularly revisit and adjust your action plan in response to evolving classroom dynamics.
- **Celebrate Learning Moments:** Acknowledge both minor and major achievements, reinforcing the habit of reflection as integral to growth.

Conclusion

Meaningful self-evaluation is not an optional extra in educational practice it is the engine that drives professional excellence and deeper learner engagement. By turning every classroom challenge into an opportunity for deeper understanding, educators foster environments where both teaching and learning can flourish. Every well-considered reflection contributes to a wider culture of growth and resilience that benefits schools and communities alike. Embracing reflective practice is a promise of lifelong learning; a commitment to continually respond to internal insights and external changes. Whether you are a school leader inspiring a paradigm shift, a teacher tailoring your approach to meet individual learner needs, or a teaching assistant supporting daily operations, let reflection be your guide. As you refine your practice through candid self-evaluation and collaborative dialogue, you not only perfect your craft but also set the stage for a future where education remains dynamic, inclusive, and profoundly effective.



Trauma-Informed Teaching

Understanding Behaviour Through a Compassionate Lens

Introduction

In classrooms today, many children carry invisible scars from adverse experiences. Trauma (defined as any event or series of events that overwhelm a person's ability to cope) is far more common among learners than one might expect. Research indicates that a majority of learners (over 60%) have experienced adverse childhood experiences (ACEs) or chronic stress that impact their performance at school. On any given day, half of a class may show symptoms of trauma. Yet educators often feel unprepared to recognise or address these issues. This gap between learner needs and staff readiness highlights the urgency of adopting a trauma-informed approach in education.

Trauma-informed teaching is a framework that shifts how we understand and respond to learner behaviour. Instead of viewing misbehaviour purely as rule-breaking, this approach recognises that challenging behaviours may stem from a learner's past trauma or unmet needs. As the National Education Union describes, trauma-informed practice asks "What has happened to you?" rather than "What have you done?" when addressing behaviour. In other words, it calls on educators to interpret actions with compassion and context. By understanding trauma's impact on children and fostering a safe, supportive environment, school staff can better help learners heal and learn. This report examines the core principles of trauma-informed teaching, how trauma influences learner

behaviour, and strategies for schools and teachers to respond through a compassionate lens.

The Impact of Trauma on Learner Behaviour

Traumatic experiences (such as abuse, neglect, loss, violence, or other adversities) can have profound and long-lasting effects on a child's development and behaviour. Neuroscience and developmental psychology research show that childhood trauma can literally alter brain development. Children who experience significant adversity often live in a state of high stress and fear, which can disrupt the maturation of key brain systems. Trauma in children can lead to persistent fear, hyperarousal (constant "fight or flight" alertness), diminished executive functioning, and difficulty with emotional regulation and social interactions. In essence, a traumatised child's brain may become wired for survival rather than calm reflection. For example, the parts of the brain like the amygdala (which detects threats) can become oversensitive, while the prefrontal areas that govern impulse control and reasoning may be underdeveloped. Developmental trauma can negatively affect a child's problem-solving abilities, stress hormone regulation, and capacity to form attachments. These neurological and emotional changes often manifest in the classroom in ways that can be mistaken for intentional misbehaviour or learning problems.

Understanding how trauma might surface in day-to-day behaviour is crucial for educators. Learners who have been through trauma may exhibit a wide range of coping behaviours. Common manifestations include aggression or angry outbursts, withdrawal and disengagement from others, extreme clinginess or need for attention, difficulty concentrating, impulsivity, or unusual reactions to ordinary stressors. Crucially, these behaviours are often adaptive responses the child developed to cope with chaotic or threatening environments, rather than wilful defiance. In many cases, young people showing persistent “challenging behaviour” have indeed been exposed to trauma at higher rates than their peers. The behaviour may be a form of communication, signalling emotional pain or dysregulation that the learner cannot articulate in words. For instance, what looks like a tantrum over a minor setback could actually be a fight-or-flight response triggered by a reminder (conscious or unconscious) of past harm. Similarly, a learner who seems disinterested or refuses to participate might be emotionally shut down due to trauma-related depression or distrust. It is critical to recognise that these behavioural differences are not a choice or simple “bad attitude”, but the result of altered development and coping mechanisms. In short, behaviour is often a message: by looking beyond the surface, teachers can ask why a learner is acting out or withdrawn, rather than immediately resorting to punishment.

A trauma-informed perspective holds that “behaviour is communication”, and our task is to decipher what a distressed learner is trying to express or what need isn’t being met. This compassionate lens invites educators to respond to misbehaviour not with anger or exclusion, but with curiosity, caring, and appropriate support. If a learner is raging or shutting down, the trauma-informed teacher considers what fear or hurt might be driving that behaviour. By first empathising and seeking to understand the root causes, we lay the groundwork for effective interventions. This doesn’t mean excusing harmful behaviour; rather, it means addressing it in ways that acknowledge the child’s trauma history and avoid re-traumatization. A punitive response like yelling at, isolating, or suspending a traumatised learner may inadvertently reinforce their sense of danger or shame. By contrast, a trauma-informed response aims to make the learner feel safe, heard, and supported to learn better ways of coping. In summary, trauma dramatically influences behaviour and learning, but when educators understand this impact, they can transform their approach to discipline and support from one of control to one of compassionate guidance.

Core Principles of Trauma-Informed Teaching

Trauma-informed teaching is guided by a set of core principles that help create a supportive learning environment for all learners. These principles have been articulated in research and practice frameworks (for example, by the Substance Abuse and Mental Health Services Administration and education experts) and provide a foundation for how school staff should think and act. In essence, a trauma-informed approach rests on building safety, trust, choice, collaboration, empowerment, and cultural sensitivity in the classroom. Key principles include:

- **Safety:** Physical and emotional safety is the bedrock of trauma-informed practice. Learners who have experienced trauma need to feel genuinely secure in their environment before they can focus on learning. This involves creating a calm, predictable classroom routine and space where learners are protected from

harm and bullying. Clear rules against violence or teasing, a welcoming atmosphere, and adults who remain composed and caring even when learners are disruptive all contribute to an underlying sense of safety. When children feel safe, their brains can begin to relax out of survival mode, making them more ready to engage and take positive risks in learning.

- **Trust and Transparency:** Trauma often impairs a child’s ability to trust adults, especially if authority figures have been inconsistent or hurtful in the past. Therefore, trauma-informed educators prioritise trust-building through transparency and consistency. Teachers can cultivate trust by keeping their word, clearly explaining changes or expectations, and being honest and fair in all dealings with learners. Predictability and follow-through are key; when learners know what to expect from adults and see them as reliable, it reassures those who have learned to expect betrayal or chaos.
- **Peer Support and Connection:** A supportive peer community can buffer the effects of trauma. Learners feeling connected to classmates experience a sense of belonging that counteracts isolation, anxiety, or low self-worth. Positive peer interactions and friendships should be nurtured in the classroom. Educators can encourage peer support by facilitating group activities, cooperative learning, and mentorship among learners. Research shows that when learners have higher peer acceptance and feel a sense of belonging, they exhibit better self-esteem and lower levels of loneliness and depression.
- **Collaboration and Mutuality:** Traditional top-down, authoritarian models of teaching can inadvertently recreate power imbalances that traumatised learners find threatening. In contrast, trauma-informed teaching stresses collaboration between teacher and learners in creating a positive classroom culture. This might mean involving learners in setting classroom norms, jointly developing behaviour agreements, or giving them roles that contribute to the class. When learners have a voice and work with educators rather than feeling things are just done to them, it empowers them and builds mutual respect. Collaboration helps shift the dynamic from one of control to one of partnership, making learners feel respected and invested in their own learning and behaviour.
- **Empowerment, Choice, and Voice:** Traumatic experiences often involve a loss of control and agency for children. Thus, an important principle is empowering learners by offering them choices and a voice in their learning. Whenever feasible, teachers can let learners make decisions – such as choosing between two assignment formats, voicing their opinions on a topic, or having leadership opportunities. Providing choices (even small ones like where to sit during independent work or which book to read) gives learners a sense of control that can counteract feelings of helplessness. It also encourages them to take ownership of their behaviour and learning. Empowerment means focusing on learners’ strengths and capacities, and helping them build confidence by recognising their successes and giving meaningful responsibilities.

These core principles serve as a compass for educators in shaping policies and day-to-day interactions. In practice, they overlap and reinforce one another. For instance, offering choices (empowerment) also builds trust, and establishing safety through routines also requires transparency. Together, the principles foster a classroom climate of safety, trust, support, and empowerment, which research shows is conducive not only for trauma-affected learners but for all learners. When these values are woven into the fabric of a school, learners are more likely to thrive academically, socially, and emotionally. With this foundation in mind, we next examine how a compassionate, trauma-informed lens can reframe the way educators interpret difficult behaviour.

Reframing Misbehaviour Through a Trauma Lens

Adopting a trauma-informed mindset means changing how we label and respond to “bad” behaviour. Instead of defaulting to frustration or punishment, educators learn to reframe challenging behaviours as signs of underlying needs or distress. This compassionate lens asks not “How do I make this child stop misbehaving?” but “What is this behaviour telling me about what the child has been through or what they need?”. Often, the very behaviours that test educators’ patience are survival adaptations from the child’s past. By understanding this, teachers and support staff can respond more patiently and effectively. Below are some common behaviour scenarios, contrasted with how they might be viewed traditionally versus through a trauma-informed perspective:

Traditional Label	Trauma-Informed Reframe
<p>“Attention Seeking” The learner is intentionally disrupting class just to get attention.</p>	<p>Connection-Seeking The child may have been starved of consistent positive attention in early life, and has learned to act out to avoid feeling invisible. Their behaviour is an attempt to maintain connection when they fear being forgotten or left out. Reframe the need for attention as a need for reassurance. Rather than scold or ignore them, the teacher can proactively provide positive attention (e.g. regular check-ins, designated roles) so the child feels seen in positive ways.</p>
<p>“No Respect for Authority” The learner is rude and defiant, rejecting rules and adults.</p>	<p>Distrust of Authority If a child’s past relationships with adults were marked by abuse, neglect, or betrayal, they may expect not to be respected or safe with authority figures. What appears as disrespect might actually be a protective mechanism or test of whether the teacher truly cares. A trauma-aware response is to build trust gradually through consistency, fairness, and caring interactions (e.g. showing interest in their life, acknowledging their feelings). Over time, as the learner learns that this authority figure will not hurt or abandon them, their defiance often diminishes.</p>
<p>“Manipulative” The learner is scheming to get their way and push the teacher’s buttons.</p>	<p>Survival Strategy (Control-Seeking) Seemingly deliberate and provocative behaviours could be learned tactics for control that helped the child survive chaotic or unresponsive environments. By provoking strong reactions in adults, the child may have ensured their needs were noticed in the past. In school, this translates to testing limits or creating drama because that’s what they know. Instead of viewing the child as “calculating,” educators can offer controlled choices and roles that satisfy the child’s need for influence in a positive manner. Giving the learner legitimate ways to feel in control (e.g. letting them choose a task order, or be in charge of a routine) can reduce the urge to manipulate situations.</p>
<p>“Constant Disruptions” / Daily “Meltdowns” The learner frequently loses control, yelling, throwing things, or storming out.</p>	<p>Emotionally Overwhelmed The child likely has an under-developed ability to self-regulate emotions due to trauma. Their intense reactions indicate they are overwhelmed by stress and haven’t learned how to cope like a typical child of their age. Instead of treating them as simply ill-behaved, a compassionate lens recognises these outbursts as panic responses. The child may need explicit help with regulation: a predictable routine to provide stability, advance warnings of transitions or changes (to prevent surprise triggers), and a pre-arranged safe space or calming strategy for when they start to lose control. Reducing classroom triggers and coaching the learner in calming techniques can gradually decrease the frequency of outbursts.</p>
<p>“Rewards and Praise don’t Work” The learner isn’t motivated by the incentive system; they continue misbehaving even when rewards are offered.</p>	<p>Shame or Developmental Gaps Trauma can freeze a child’s emotional development at an earlier stage. A learner might be functioning like a younger child emotionally and thus find typical reward/praise systems either too abstract or even threatening. They might not trust rewards (“I won’t really get what I’m promised”) due to past disappointments, or they might feel unworthy and experience shame when praised. Therefore, they sabotage rewards or shrug off praise. In such cases, emphasising gentle, non-verbal encouragement (smiles, nods, specific feedback in private) can be more effective than public praise. Any reward schemes must be very immediate, concrete, and fair, or alternatively, focus on building intrinsic motivation through support rather than bribes.</p>
<p>“Lazy – Wants Everything Done for Them” The learner refuses to try, expecting adults to do tasks for them or always help.</p>	<p>Lack of Learned Independence A child who seems overly dependent or unmotivated might have missed out on the healthy early experiences of being able to rely on caring adults. Children who experience neglect or trauma often do not develop age-appropriate independence because their basic needs were not reliably met. They may literally not know how to start tasks on their own or fear failure. Instead of labelling them lazy, a trauma-informed approach provides a consistent key adult to guide and encourage the child. The teacher or assistant might actively model organisational skills, break tasks into smaller steps, and celebrate small successes to build the child’s confidence. With patience and support, the learner can gradually learn to trust their own abilities and take initiative.</p>

These examples illustrate how every negative behaviour can be reinterpreted as a clue to a learner's past and their unmet needs. By "flipping the script" in this way, educators shift from feeling anger or personal offense toward the learner, to feeling empathy and determination to help. Importantly, this reframing does not mean there are no consequences or boundaries; it means consequences are tempered with understanding. For instance, rather than immediately removing a child from class for a tantrum, a trauma-informed teacher might first help them calm down in a safe space and later discuss better coping strategies while still reinforcing that throwing objects is not acceptable. The key is that the response is rooted in compassion and teaching, not shaming. When we view behaviours as attempts to communicate or cope, we become more flexible in how we respond and can find ways to meet the underlying need. Over time, this approach helps break the negative cycle: the learner feels understood and supported (not just punished), which can reduce the frequency of challenging behaviours. In essence, reframing behaviour through a trauma lens allows educators to replace the question "What's wrong with this child?" with "How can I help this child feel safe, learn, and succeed?" This is a vital mindset shift for a compassionate school culture.

Strategies for a Trauma-Informed Classroom

Translating trauma-informed principles into daily teaching practice involves concrete strategies that teachers and support staff can use to create a nurturing, structured environment. These strategies benefit not only trauma-affected learners but also contribute to a positive classroom climate for everyone. Addressing behaviour through a trauma-informed lens means implementing approaches that promote safety and support, build positive relationships, teach self-regulation, and use compassionate discipline. Educators can consider the following key strategies and techniques:

- **Establish Safety and Predictability:** Consistency and routine are therapeutic for learners who have experienced chaos. Begin by creating a safe, structured environment: set clear, simple class rules and be consistent in enforcing them calmly. Maintain predictable routines for daily activities – knowing what comes next in the day reduces anxiety for vulnerable children. Prepare learners for any changes in schedule or routine in advance to avoid triggering panic. Even the physical space can be made soothing: for example, have a quiet corner or "calm-down area" where a learner can go to regain composure when upset. A calm, warm tone from the teacher and a non-threatening demeanour are essential – children watch adult reactions closely to gauge safety. By ensuring the classroom is a stable and secure place (both physically and emotionally), teachers help trauma-affected pupils relax their vigilance and focus on learning.
- **Build Trusting Relationships:** Relationship-building is often cited as the single most important factor in a trauma-informed classroom. A strong, positive learner-teacher relationship can provide the corrective experience a traumatised child needs – an adult who is consistently caring, fair, and reliable. In fact, educational research finds that the quality of the teacher-pupil relationship is one of the biggest predictors of a learner's success in school. Teachers

and teaching assistants should dedicate time to genuinely connect with learners: greet them individually, learn about their interests, listen actively to their concerns, and show empathy. Small gestures like remembering a learner's hobby or checking in with them after a difficult day go a long way. Building trust may take patience – a traumatised child might test the adult repeatedly – but steadfast warmth and reliability will eventually overcome much of their distrust. Having at least one trusted adult at school (a mentor, coach, or tutor – not just classroom teachers) has been shown to significantly improve outcomes for at-risk learners. Schools that assign "named adults" to check in regularly with vulnerable learners often see those pupils become more engaged and less likely to act out. In short, relationships are the foundation: when a learner feels valued by and connected to an adult, they are more willing to comply with rules, try harder academically, and communicate their problems.

- **Teach Emotional Regulation and Coping Skills:** Trauma-affected children often lack the tools to handle strong emotions or stress. Schools can fill this gap by explicitly teaching social and emotional skills. Incorporate social-emotional learning activities into the routine – for example, start the day with a feelings check-in or a short mindfulness exercise to help learners centre themselves. Techniques like deep breathing, counting to ten, or using a stress ball can be practiced in calm moments so that learners can deploy them when upset. Teachers can model and coach learners through recognising their emotions ("I notice you seem frustrated – shall we try a two-minute break?"). Lessons in naming feelings, problem-solving conflicts, and calming the body empower learners to manage their reactions over time. Also, build in "brain breaks" and movement during the day – physical activity or stretching can help release tension for those with trauma. When a child does have a meltdown, treat it as a teaching moment: after the child is calm and receptive, gently discuss what coping strategy might help next time. Consistently integrating these practices will improve learners' self-regulation skills and resilience, which in turn leads to fewer behavioural eruptions and more readiness to learn.
- **Offer Choices and Collaborate on Solutions:** To avoid power struggles and help traumatised learners feel a sense of control, give appropriate choices whenever possible. For example, if a learner is resisting work, offer a choice: "Would you like to do the odd-numbered questions first, or the even-numbered ones?" or "You can sit on the carpet or at your desk while we read – you decide." This technique, often part of de-escalation strategies, allows the child a measure of control and can quickly defuse confrontations. It's equally important to involve learners in decision-making beyond momentary choices. Collaborate with them on setting class norms or resolving issues: if a particular rule isn't being followed, discuss as a class why and what might help. For an individual behaviour plan, include the learner's input on what supports they find calming or what goals they want to achieve. Such collaboration and shared problem-solving not only reduce opposition but also teach the learner accountability and self-determination in a positive way. The underlying message is "We're a team, and I respect your voice," which can be powerful for a child

who feels powerless elsewhere in life. Empowering learners with voice and choice contributes to their healing by restoring a sense of agency that trauma may have taken away.

- **Respond instead of React: Positive Behaviour Support and De-escalation:** When challenging behaviour does occur, a trauma-informed teacher focuses on de-escalation and support, not punishment. This means staying calm and keeping one's own emotions in check in the heat of the moment. If a learner is aggressive or non-compliant, the teacher avoids yelling or harsh reprimands, which could exacerbate the learner's fear or shame. Instead, use a low, calm voice and non-confrontational language. For example, say "I see you're upset. Let's take a breather – you can have two minutes or I can help you when you're ready" rather than "Stop that right now!". Providing a distressed learner with a brief cooling-off period (without judgment) can prevent a minor incident from escalating. Natural or logical consequences are still applied for misbehaviour, but they are delivered in a restorative manner. For instance, if a learner damaged something in an outburst, a logical consequence might be helping to fix or clean up, rather than an unrelated punitive detention. The emphasis is on repairing harm and learning, not on retribution. Importantly, any consequences should be consistent and fair – not arbitrary – so the learner understands the link between actions and outcomes without feeling targeted. By responding to misbehaviour with gentle correction, understanding, and an invitation to do better, teachers reinforce that the behaviour is unacceptable, but the child is still cared for. This approach has been linked to better long-term behaviour outcomes; indeed, schools that moved from zero-tolerance policies to trauma-informed discipline have seen suspensions and expulsions drop markedly. Such results underscore that maintaining high expectations for behaviour with compassion and support is far more effective than punitive approaches in managing classroom conduct.
- **Support Staff Well-Being and Training:** Implementing trauma-informed teaching can be challenging, and it requires that educators also take care of themselves. Teachers and support staff should be aware of their own triggers and stress responses when dealing with difficult behaviour. It's normal for an adult to feel frustration or hurt when a learner lashes out, but responding impulsively (e.g. shouting back) can harm the learner and the teacher alike. Schools should encourage a culture where teachers can reflect on their reactions and seek support. This might include professional development on trauma and behaviour, regular debriefing meetings for staff to discuss challenging incidents, and access to counselling or peer support for teachers who are feeling burnt out. School leaders have a role to play in preventing "compassion fatigue" by ensuring staff have training in trauma-informed strategies and reasonable workloads. When teachers understand the why and how of trauma-informed practices, they are more likely to stay calm and empathetic in tough moments. Also, practising self-care is vital: educators need to set

boundaries and find ways to recharge (such as taking a brief walk at lunch or using breathing techniques themselves) in order to sustain a compassionate approach. A trauma-informed school recognises that supporting the helpers is part of supporting the learners. By investing in staff well-being and skills, schools create an environment where compassion and consistency can flourish in every classroom.

Conclusion

Trauma-informed teaching reframes how we understand and respond to learner behaviour, viewing it through a compassionate lens rather than a punitive one. By recognising that past trauma and adversity often drive challenging behaviours, educators can respond with empathy, structure, and support to address the real issues at hand. This approach is not about excusing misbehaviour; it's about understanding why it's happening and helping learners learn healthier ways to cope and engage. Classrooms and schools that embrace trauma-informed practices prioritise safety, trust, and positive relationships. In such environments, learners who once felt threatened or misunderstood can begin to calm their hypervigilant brains, build trust in adults and peers, and focus on learning and personal growth.

The benefits of trauma-informed teaching extend to the entire school community. Learners are less likely to escalate when they feel respected and supported, leading to a more positive classroom atmosphere with fewer disruptions. Academic engagement rises as emotional needs are addressed – a child who feels safe is more able to concentrate and take in new information. Outside of academics, trauma-informed schools help children develop resilience, confidence, and better social skills, which serve them for life. Teachers and support staff, too, often find greater professional satisfaction when they have effective tools to manage behaviour and can see the progress of learners who might otherwise have been excluded or written off. Adopting a compassionate lens can reduce teacher stress and burnout by replacing constant disciplinary showdowns with more meaningful connections and proactive interventions.

In summary, "understanding behaviour through a compassionate lens" means seeing each learner as more than their misbehaviour – it means seeing their humanity, their struggles, and their potential. A trauma-informed approach equips educators to respond not with anger or indifference, but with thoughtful strategies that help learners feel seen, safe, and capable of success. For school leaders, teachers, and assistants, it calls for patience, reflection, and collaboration, but the reward is a school where all children, regardless of their trauma histories, can learn and thrive. By making our classrooms trauma-informed, we take critical steps toward breaking the cycle of trauma and unlocking the promise in every learner. As the evidence shows, when schools replace punishment with compassion and support, the outcomes are better behaviour, better learning, and better lives for our learners. Embracing trauma-informed teaching is thus a powerful investment in a kinder, more effective educational environment – one where understanding and healing go hand in hand with education.



Cognitive Load Theory (CLT)

A Beginners Guide to Understanding its Impact on Learning

Introduction

In today's dynamic educational environment, grasping how learners process information is crucial. Cognitive Load Theory (CLT) offers a research-based framework that explains the finite capacity of working memory and the way information is transferred into long-term memory. Originally developed by John Sweller in the late 1980s, CLT has evolved with insights from cognitive psychology and neuroscience, supporting the design of instruction that minimises unnecessary mental strain. For educators (from school leaders orchestrating curriculum change to classroom teachers and teaching assistants interacting directly with learners) CLT provides a lens through which teaching can become more efficient, engaging and adaptive.

Rather than merely simplifying content delivery, CLT invites educators to scrutinise every element of their instructional design. The aim is to foster an environment where essential information is accentuated, distractions are reduced to a minimum, and the mental effort is channelled into genuine learning. This guide unpacks the theory's core tenets, provides deeper context about its evolution, and outlines practical strategies drawn from empirical research. It is a resource for anyone aiming to bridge cognitive science with day-to-day teaching practice.

What is Cognitive Load Theory?

At its heart, Cognitive Load Theory rests on the understanding that working memory has limited capacity. The human mind can only handle a finite amount of new information at any given time. CLT categorises the mental effort involved in learning into three types:

- **Intrinsic Load:** This is tied to the inherent complexity of the material and varies with both the nature of the content and the learner's prior knowledge. For example, a beginner grasping fundamental arithmetic experiences a low intrinsic load compared to a learner tackling abstract algebra.
- **Extraneous Load:** Arising from the manner in which information is presented, extraneous load is often an unintended by-product of poor instructional design. Overly complex slide layouts, irrelevant details and excessive technical language can all divert valuable cognitive resources away from understanding the core curriculum.
- **Germane Load:** Representing the productive effort devoted to synthesising new information, germane load involves the mental work behind forming new schemas and connecting concepts. It reflects the

engagement with the material that leads to deeper understanding and long-term retention.

By recognising and managing these facets, educators can fine-tune their teaching methods, ensuring that mental resources are allocated appropriately: reducing clutter while fostering cognitive engagement.

Dissecting the Three Types of Cognitive Load

Intrinsic Load

Intrinsic load refers to the difficulty embedded in the material itself. Its intensity depends on the number of interacting components within a task. For instance, assembling a simple sentence in a learner's first language has lower intrinsic demands than writing a persuasive essay in a second language. This load is directly linked to the learner's background knowledge; novices naturally face higher intrinsic challenges in new subjects.

Effective strategies include:

- **Task Sequencing:** Break complex topics into incremental steps.
- **Scaffolding:** Provide supportive frameworks that gradually wean learners towards independent problem-solving.
- **Chunking Information:** Group related ideas together to lessen the strain on working memory.

Such adaptations tailor the inherent complexity to match learners' developmental stages, enabling smoother progress through challenging material.

Extraneous Load

Extraneous load is the cognitive effort wasted on navigating poorly structured or misleading instructional formats. According to multimedia learning research, when verbal and visual cues are misaligned or overloaded, learners struggle to focus on the essential content. Cluttered handouts, indiscriminate use of animations in digital presentations, or convoluted language can inflate extraneous load.

Instructional strategies to minimise this include:

- **Streamlined Presentation:** Optimise visuals and text to ensure coherence and simplicity.
- **Dual Coding:** Use complementary visual and verbal channels in a synchronised manner.
- **Signposting Key Points:** Clearly outline objectives and main ideas so learners can effortlessly follow the learning sequence.

By cutting out unnecessary distractions, teachers enable learners to devote more cognitive energy to understanding and applying key concepts.

Germane Load

Germane load is the beneficial effort invested in processing and integrating new knowledge. Instead of merely absorbing facts, learners actively construct mental models that connect fresh information with existing frameworks. Activities that enhance germane load include engaging learners in problem-solving, reflective questioning and authentic tasks.

Effective techniques include:

- **Worked Examples:** Display step-by-step illustrations of problem-solving to clarify complex concepts.
- **Self-Explanation:** Encourage learners to articulate their reasoning, deepening their personal understanding.
- **Interactive Dialogue:** Foster group discussions and peer feedback which challenge learners to refine their schemas.

The goal is to channel cognitive capacity into tasks that yield meaningful and lasting learning, rather than expending energy on extraneous details.

Implications for Educational Practice

Integrating the principles of CLT into educational practice has far-reaching implications. For teachers and school leaders alike, the theory provides a roadmap to more effective lesson planning and instruction. A few key areas of impact include:

1. Enhanced Lesson Design: Structuring lessons in a way that acknowledges cognitive limits can transform how material is delivered. By decomposing lessons into segmented, coherent parts and building on prior knowledge, educators can ease the transition from familiar ideas to entirely new concepts. This measured progression not only cultivates confidence in learners but also tailors instruction to meet diverse cognitive needs.

2. Optimised Use of Multimedia: In our digital age, where lessons often include slides, videos and interactive modules, CLT highlights the importance of integrating multimedia judiciously. Effective use of clear, labelled diagrams and synchronised narration can prevent cognitive overload, ensuring that every element serves to reinforce the core message.

3. Differentiated Instruction: Recognising the diverse cognitive capacities among learners enables educators to design tasks that adjust intrinsic and extraneous load appropriately. Differentiation does not simply mean simplifying material for some; it involves customising resources so that all learners can engage deeply with the content at a pace suited to their abilities.

These strategies lead to enhanced engagement, improved retention and a learning community that feels both challenged and supported.



Practical Strategies for Teachers and Teaching Assistants

Implementing CLT in daily teaching involves several pragmatic steps, each aimed at balancing challenge with accessibility:

- **Use Worked Examples:** Before asking learners to tackle problems independently, provide comprehensive examples that walk them through the solution process. This reduces uncertainty and clarifies expectations.
- **Segment Instruction:** Divide lessons into distinct, manageable units, and integrate short pauses for review and reflection. These segments allow learners to process information fully before moving on.
- **Optimise Multimedia Resources:** Contrast rich, supportive diagrams with brief textual explanations rather than overcrowded slides. For instance, synchronise a visual representation of a scientific concept with a concise oral description to maximise both verbal and visual memory channels.
- **Activate Prior Knowledge:** Begin lessons by linking new concepts to what learners already know. Using brief quizzes or reflective discussions to uncover pre-existing knowledge primes learners for deeper engagement and eases the intrinsic load.
- **Encourage Self-Explanation:** Implement activities that require learners to paraphrase or summarise the lesson in their own words. This practice not only reinforces learning but also fosters critical thinking.
- **Promote Collaborative Learning:** Facilitate group discussions or pair work where learners articulate the material to each other. Peer instruction can redistribute cognitive demands, making challenging content more approachable.

Implementation Considerations for School Leaders

School leaders play a crucial role in systemic change. By embedding CLT principles into school policy and professional development, they can cultivate an educational culture that continually evolves based on cognitive research.

Key initiatives might include:

- **Focused Professional Development:** Offer training that not only introduces CLT but also demonstrates its practical application through interactive workshops and case studies.
- **Collaborative Curriculum Design:** Establish platforms where teachers can share effective strategies, review lesson plans, and collectively adjust teaching practices to align with cognitive principles.
- **Investment in Resources:** Allocate budgets for high-quality visual aids, interactive software and other instructional technologies that support clear, well-structured learning.

- **Ongoing Monitoring and Feedback:** Implement systems that gather feedback from both teachers and learners to continually refine lesson design and instructional methods. This cyclical process of assessment and adaptation ensures that teaching remains responsive to the cognitive needs of all learners.

Challenges and Limitations

Despite its robust framework, Cognitive Load Theory must be applied with careful consideration of its limitations:

- **Finding the Equilibrium:** While reducing extraneous and intrinsic loads is vital, educators must resist oversimplifying content. Striking the right balance is key: overly simplified material may fail to stimulate critical thinking, whereas excessive complexity can overwhelm even the most capable learner.
- **Individual Variability:** Cognitive capacities vary widely among learners. Even with optimised instruction, some learners may still struggle due to factors such as prior knowledge discrepancies or differing learning styles. Tailored and flexible pedagogical approaches are essential to cater to these individual differences.
- **Assessment of Cognitive Load:** Measuring cognitive load directly remains challenging. Educators typically rely on indirect methods such as learner feedback and observational assessments, which may not always capture the full spectrum of cognitive engagement. Continuous evaluation and professional development are vital to address these nuances effectively.

By recognising these challenges, educators can apply CLT not as a rigid rulebook but as a dynamic framework that adapts to the varied cognitive landscapes of their classrooms.

Conclusion

Cognitive Load Theory offers more than an academic lens: it is a practical guide to transforming how learners engage with new information. By respecting the limits of working memory and strategically designing instruction to manage intrinsic, extraneous and germane loads, educators can create learning environments that are both supportive and challenging.

For teachers, teaching assistants and school leaders, CLT provides actionable insights that can lead to improved engagement, smoother transitions between concepts and a more robust retention of material. As educational practices continue to evolve, integrating cognitive principles into day-to-day instruction remains imperative. Pilot programmes and regular collaborative reflections can unveil further customisations that benefit every learner, ensuring teaching practices remain both innovative and evidence-based.

Embracing Cognitive Load Theory serves not only to optimise learning outcomes but to empower every learner to reach their fullest potential.



Developing Resilience

Problem-Solving and Critical Thinking in Outdoor Settings

Introduction

In today's fast-paced educational landscape, resilience has emerged as a critical skill for learners to navigate academic, social, and personal challenges. Equally important are problem-solving and critical thinking skills: foundational tools that enable learners to assess situations, make informed decisions, and learn from setbacks. When these skills are nurtured in outdoor settings, the benefits extend far beyond the classroom, fostering personal growth and adaptive learning. This article provides insight into harnessing the natural environment to develop these essential skills, alongside a practical list of 40 teaching and learning ideas designed to inspire innovative outdoor programmes.

Understanding Resilience

Resilience is far more than the ability to bounce back: it is a dynamic process through which learners confront challenges, learn from setbacks, and build the inner strength necessary for future adversities. In educational contexts, resilient learners are better equipped to manage stress, navigate setbacks and adapt to new circumstances. Outdoor experiences, with their inherent unpredictability, push learners beyond their comfort zones, providing real-world scenarios in which they can practise and refine their adaptive strategies. Educators who recognise the developmental roots of resilience can design programmes that

not only enhance academic performance but also contribute to lifelong emotional and cognitive growth.

The Outdoor Environment as a Learning Space

Outdoor settings offer a unique, immersive context that enriches learning experiences far beyond the confines of a traditional classroom. The natural environment introduces variables such as weather changes, varied terrain, and unexpected obstacles, making each activity a real-life test of problem-solving under dynamic conditions. The benefits of learning outdoors include:

- **Authentic Engagement:** Outdoor challenges mirror real-life situations, demanding genuine application of skills.
- **Interdisciplinary Integration:** Activities can cross traditional subject boundaries, linking elements of physical education, science, geography, and the humanities.
- **Enhanced Motivation:** Novel and unpredictable settings spark intrinsic motivation and curiosity.
- **Risk and Reward:** Calculated exposure to risk teaches learners how to assess hazards and adapt behaviours responsibly.

By translating curricular content into experiential learning, educators can foster a holistic educational experience that builds both cognitive and social-emotional skills.

Strategies for Embedding Resilience in Outdoor Learning

Creating a transformative outdoor learning programme requires educators to incorporate structured strategies that intertwine planning, execution, and reflective practice. Consider the following approaches:

Designing Engaging Challenges

- **Purposeful Activities:** Develop tasks that challenge learners to apply critical thinking and problem-solving skills under realistic conditions.
- **Tiered Complexity:** Introduce progressively challenging tasks to meet varying skill levels, ensuring that every learner experiences both manageable and stretch assignments.
- **Real-World Scenarios:** Simulate real-life issues, such as navigating a simulated wilderness or planning a sustainable camp setup, to encourage application of theoretical knowledge.

Ensuring Safety and Risk Management

- **Comprehensive Risk Assessments:** Conduct thorough evaluations of potential hazards, devise emergency protocols, and familiarise all participants with safety procedures.
- **Staff Training:** Equip teachers and assistants with specialised training in outdoor leadership and first aid, ensuring confidence and competence in managing unforeseen circumstances.
- **Learner Preparedness:** Involve learners in safety briefings and risk assessment exercises to empower them with the knowledge to make informed decisions.

Facilitating Reflection and Debrief

- **Guided Discussions:** Organise debrief sessions where learners jointly reflect on their experiences, discussing what strategies were effective and where they can improve.
- **Reflective Journals:** Encourage learners to document their observations and feelings throughout multi-day sessions, solidifying lessons learned.
- **Peer Feedback:** Promote constructive peer discussion, where learners share insights, offer feedback, and celebrate their collective accomplishments.

Integrating Outdoor Experiences with the Curriculum

- **Cross-Curricular Connections:** Link activities to classroom content (such as an environmental science project that extends outdoors) to reinforce academic concepts with practical application.
- **Assessment Alignment:** Develop assessment criteria that value resilience, critical thinking, and collaborative work as much as academic achievement.
- **Flexible Curriculum Design:** Embrace adaptability; modify lesson plans on the fly to account for changing conditions or emerging learning needs.

Promoting Collaborative Problem-Solving

- **Team-Based Challenges:** Structure activities that require cooperation and collective problem-solving, allowing every learner to contribute their unique perspective.
- **Role Assignments:** Rotate roles within groups (e.g. leader, navigator, recorder) so each participant experiences diverse facets of challenge and decision-making.
- **Conflict Resolution:** Use disputes or differences as learning opportunities, guiding the group towards consensus with structured critical reflection.



Forty Outdoor Teaching and Learning Ideas

Below is a list of 40 innovative ideas designed to promote resilience, problem-solving, and critical thinking through engaging, hands-on outdoor experiences:

1. **Obstacle Course Challenges:** Set up a natural obstacle course that requires teamwork and strategy.
2. **Treasure Hunt:** Create a hunt with puzzles and clues that necessitate logical reasoning and collaboration.
3. **Natural Materials Construction:** Task learners with building bridges or shelters using found natural materials.
4. **Orienteering Exercises:** Empower learners to use maps and compasses, reinforcing navigational skills.
5. **Scavenger Hunts:** List natural items for learners to find, encouraging observation and systematic search techniques.
6. **Environmental Surveys:** Have learners identify and record local flora and fauna, fostering careful analysis.
7. **Reflection Circles in Nature:** Organise group discussions outdoors where learners share insights from challenges.
8. **Historical Role-Plays:** Re-enact historical events or scenarios in an outdoor setting to develop empathy and contextual understanding.
9. **Risk Assessment:** Engage learners in identifying potential hazards in a chosen area and planning mitigation strategies.
10. **Creative Storytelling:** Encourage learners to craft stories inspired by the natural surroundings and unexpected events.
11. **Nature Art Projects:** Use natural objects to create art, blending creativity with sensory exploration.
12. **Collaborative Problem-Solving Puzzles:** Place puzzle elements outdoors that require group interaction to solve.
13. **Bird Watching and Data Logging:** Teach observation skills through bird watching and record-keeping.

14. **Outdoor STEM Projects:** Design experiments or projects that address ecological challenges in the local area.
15. **Water Quality Testing:** Engage learners in testing local streams or ponds for environmental education.
16. **Local History Walks:** Organise walks that explore the local history tied to the natural landscape.
17. **Geocaching Adventures:** Utilise GPS technology to find hidden caches, combining modern tech with outdoor exploration.
18. **Wildlife Tracking:** Identify and track animal footprints, stimulating investigative and analytical skills.
19. **Outdoor Photography:** Encourage learners to capture natural patterns or phenomena, then analyse their findings.
20. **Team-Based Conservation Projects:** Tackle community projects like tree planting or habitat restoration.
21. **Emergency Shelter Building:** Simulate survival situations where groups are challenged to construct an impromptu shelter.
22. **Outdoor Debates:** Host debate sessions using environmental topics or scenarios as discussion points.
23. **Bushcraft Workshops:** Introduce essential outdoor skills like knot tying, fire building, and basic survival techniques.
24. **Crisis Simulation Role-Plays:** Design scenarios that simulate emergencies, prompting learners to assign roles and devise solutions.
25. **Sustainable Gardening Projects:** Develop gardens that highlight sustainability, soil science, and biodiversity.
26. **Community Clean-Up Drives:** Organise clean-up projects that teach responsibility and community service.
27. **Seasonal Change Monitoring:** Have learners document and analyse how an area changes with the seasons.
28. **Navigation Challenges:** Use natural landmarks to create challenges in wayfinding and spatial reasoning.
29. **Outdoor Maths Tasks:** Integrate measurements, estimations, and calculations using nature-inspired examples.
30. **Weather Observation Exercises:** Teach learners to interpret weather signs and develop simple forecasting methods.
31. **Interactive Environmental Science:** Focus on experiments such as tracking insect behaviour or plant growth patterns.
32. **Ecosystem Evaluation:** Task learners with critically assessing the health of a local ecosystem.
33. **Collaborative Outdoor Murals:** Use natural pigments or materials to create group art projects that symbolise key learning themes.
34. **Cultural Storytelling Walks:** Connect local traditions and histories to the natural environment through guided narratives.
35. **Flora Identification Challenges:** Provide field guides and have learners identify plants, fostering detailed observation.
36. **Sensory Exploration Trails:** Design walks that focus on engaging all senses, enhancing mindfulness and creative thought.
37. **Trust-Building Activities:** Conduct exercises like trust falls or partnered obstacle navigation to build interdependence.
38. **Outdoor Journalling:** Encourage reflective writing sessions where learners document their experiences and personal growth in nature.
39. **Soil Sample Investigations:** Encourage learners to collect soil samples from different areas, test their properties (pH, texture, moisture) and compare results, linking scientific inquiry with outdoor exploration.
40. **Garden Metaphors for Growth:** Guide students in planning and starting a small garden or planter, using the process as a metaphor for personal growth, resilience, and the cyclical nature of learning.

Each of these ideas is designed not only to engage learners with the outdoors but also to develop critical life skills. By integrating these activities into your curriculum, you enable learners to confront challenges, think critically, and solve problems in dynamic, real-world contexts.

Addressing Challenges and Practical Considerations

While outdoor learning offers myriad benefits, successful implementation requires addressing practical and logistical challenges. Consider the following when planning an outdoor programme:

- **Budget Constraints:** Outdoor activities may involve additional costs for specialised equipment, transportation, and staff training. Explore community partnerships, grants, or sponsorships to support your initiatives.
- **Timetabling and Curriculum Integration:** Ensure that outdoor sessions are integrated seamlessly into the academic calendar. This might entail dedicated activity days or flexible modular lesson plans.
- **Accessibility and Inclusivity:** Select locations and activities that are accessible to every learner, including those with additional needs. Thoughtful planning ensures that each learner benefits fully from outdoor experiences.
- **Teacher Training:** Investing in professional development is crucial. Workshops on outdoor leadership, first aid, and risk management can boost teacher confidence and preparedness.
- **Environmental and Weather Considerations:** Always have alternative indoor plans and contingency measures. This ensures that learning objectives are met regardless of weather or unexpected environmental variables.

Conclusion

Outdoor learning is far more than a novel educational trend; it is a transformative approach that builds resilience, enhances problem-solving, and refines critical thinking. School leaders, teachers, and teaching assistants have a unique opportunity to transform traditional pedagogies by incorporating dynamic, hands-on experiences in nature. With thoughtful planning, robust safety protocols, and reflective practices, each outdoor activity becomes a stepping stone toward cultivating self-reliant, innovative, and adaptive learners.



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