



White Paper

Why Live, Interactive, Teacher-Led Online Learning in Small Groups Outperforms the Flipped Classroom Model for School-Aged Children

Executive Summary

As online and hybrid education models continue to expand, many families are faced with a critical choice: should their children follow a "flipped learning" approach, or attend structured, live, interactive classes with subject specialist teachers? While the flipped classroom has gained popularity in certain educational circles, evidence suggests that for most school-aged children, especially those in Key Stages 2 to 4, **regular timetabled, teacher-led online lessons in small groups are more effective, engaging, and beneficial to their social and academic development.**

What Is Flipped Learning?

Flipped learning reverses the traditional model of instruction. Students are expected to watch pre-recorded lessons or read materials at home, and then use classroom time (or online live sessions) to complete exercises, projects, or discussions. While this model promotes independent learning, it relies heavily on a student's self-discipline, motivation, and home environment.

The concept of flipped learning can be traced back to the early 2000s, when high school chemistry teachers **Jonathan Bergmann and Aaron Sams** began recording their lectures to help students who missed class. As they saw students engaging more deeply with material during in-person time, they formalised what became known as the "flipped classroom". The term and method gained traction with the publication of their book *Flip Your Classroom: Reach Every Student in Every Class Every Day* (2012). The method draws upon earlier pedagogical approaches like **Eric Mazur's** "Peer Instruction" (Harvard, 1991), which emphasised concept-based engagement during class.

The Risks of Flipped Learning for School-Aged Children

1. **Overreliance on Self-Discipline:** Flipped learning assumes children will independently absorb complex concepts outside the classroom. Many learners, especially younger ones, struggle with motivation and comprehension without a teacher present. According to **Strayer (2012)**, students in flipped classrooms reported more confusion and less structure compared to traditional classes.
2. **Limited Real-Time Feedback:** Pre-recorded content offers no immediate clarification. Misunderstandings can go uncorrected and deepen over time. **Clark (1983)** argued that media alone does not influence learning—it's the instructional method that matters.
3. **Reduced Human Connection:** Recorded videos cannot replicate the warmth, encouragement, or relational dynamics of a real teacher. Children thrive when they feel seen and heard. **Vygotsky's** theory of the Zone of Proximal Development highlights the importance of social interaction in learning.
4. **Widening Inequalities:** Students without quiet study spaces, strong internet access, or parental support are at a disadvantage in a flipped system. A study by **OECD (2020)** found that students from disadvantaged backgrounds faced significantly greater challenges in self-directed learning.
5. **Potential for Superficial Learning:** Without structured discussion and expert-led exploration, learning can become shallow and disconnected from real-world applications. A meta-analysis by **Lo and Hew (2017)** found that while flipped classrooms can enhance learning outcomes, they depend heavily on the quality of in-class activities and teacher support.

The Strength of Live, Interactive, Teacher-Led Online Classes

By contrast, regular live lessons taught in small groups by subject specialists offer a superior pedagogical experience:

1. **Immediate Support and Feedback:** Teachers can address misunderstandings in real-time, guide students step-by-step, and adapt their teaching on the fly. **Hattie (2009)** identifies feedback as one of the most powerful influences on achievement (effect size 0.73).
2. **Structured Routine:** Timetabled lessons help children develop discipline, time management, and a healthy academic rhythm.
3. **Social Interaction:** Small group learning allows for peer interaction, discussion, and collaboration, which are essential for social development. As **Bandura's** social learning theory suggests, students learn by observing and interacting with others.
4. **Personalised Attention:** In small groups, teachers can identify individual needs, support varied learning styles, and build stronger student-teacher relationships. **EEF (2021)** found that small group tuition provides an average of four months' additional progress.

5. **Expert Instruction:** Subject specialists bring depth of knowledge, passion, and teaching skill that inspire curiosity and confidence.
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Research-Backed Evidence

- The UK Education Endowment Foundation (EEF) reports that **small group tuition leads to an average of four months' additional progress per year**.
 - John Hattie's *Visible Learning* meta-analysis confirms that **interactive teaching with feedback is one of the most powerful influences on achievement**.
 - **Lo & Hew (2017)** found that flipped classrooms are only effective when supported by high-quality in-class teaching.
 - **Kirschner, Sweller, and Clark (2006)** argue that **minimally guided instruction (like flipped learning) is ineffective for novices**, who need structured guidance.
 - **Strayer (2012)** reported that students in flipped classrooms often felt less prepared and more confused than those in traditional models.
 - **Mazur (1991)** found success with peer instruction at the university level, but warned it required a strong culture of student accountability and maturity.
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Conclusion

While flipped learning may be effective for highly motivated older learners or in specialist post-16 contexts, it is **not a suitable core model for most children**. Instead, a well-designed, live online school with **small class sizes, structured routines, and expert teachers** offers a far richer, more supportive, and more academically sound experience.

Families should prioritise educational environments where their children can thrive—not just academically, but socially and emotionally. In this regard, the traditional model of **interactive, teacher-led classes adapted for the online world** remains the gold standard.

About Us

At Queens Online School, we believe that every child deserves a high-quality education delivered with care, structure, and connection. Our live online lessons are designed to maximise learning, build relationships, and support every learner's unique journey.

To learn more about our approach, visit www.queensonline.school.com or contact us directly.

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About the Author:



Dr Troy Page is the founder and Director of the Cambridge Online Education Group. This long-established family of schools includes Queens Online School, Cambridge Home School Online, Access Courses Online and The Online College of Art & Design. More recently, Dr Page has launched the innovative Bridge and World Free Schools, further expanding to meet growing individual educational needs across the globe.

With a Doctorate in Education and a strong academic background including Master's degrees, Dr Page brings extensive leadership and teaching experience from both traditional and virtual school environments.

Passionate about reforming outdated education systems, Dr Page established Cambridge Online Education group to combine academic excellence with modern technology. His innovative approach has resulted in outstanding academic outcomes, with many students progressing to top universities such as Oxford, Cambridge, and Stanford.

He is also the author of *Future-proofing Education: How Technology Can Transform Schools and Prevent an Education Apocalypse*, which explores how education systems can adapt to global challenges through innovation. Dr Page regularly appears in the media to discuss issues such as online learning, teacher recruitment, and AI in education.