

Beyond Literacy and Numeracy: The Cognitive Foundations of Learning

How the Basic Concepts Programme helps teachers move from instruction to mediation — and children from memorising to thinking.

By Dr Louis Benjamin (Oct 2025)

Introduction

For decades, education systems across the world, and particularly in South Africa, have grappled with the challenge of enabling meaningful learning for all children, regardless of background or ability. Many interventions have aimed to improve outcomes, yet few have addressed the deeper cognitive and conceptual foundations upon which true understanding depends.

The **Basic Concepts Programme (BCP)** was developed precisely to fill this gap. Rooted in the principles of cognitive education and mediated learning, the BCP offers a structured yet flexible framework that helps children learn *how* to learn. It does this by focusing on the essential building blocks of thought — the fundamental concepts, the processes that grow them, and the cognitive tools that make learning transferable across contexts.

At its heart, the BCP is both a pedagogical and therapeutic model. It supports teachers to become mediators of learning, enabling them to respond to each learner's developmental needs and to cultivate the kind of deep, metacognitive engagement that drives academic and personal growth. The programme is not simply a curriculum add-on; it is a comprehensive approach to developing the cognitive, linguistic, and emotional readiness required for lifelong learning.

What makes the BCP distinctive is how its four core components integrate theory and practice into a single, coherent learning system — a living praxis that empowers teachers and transforms learners.

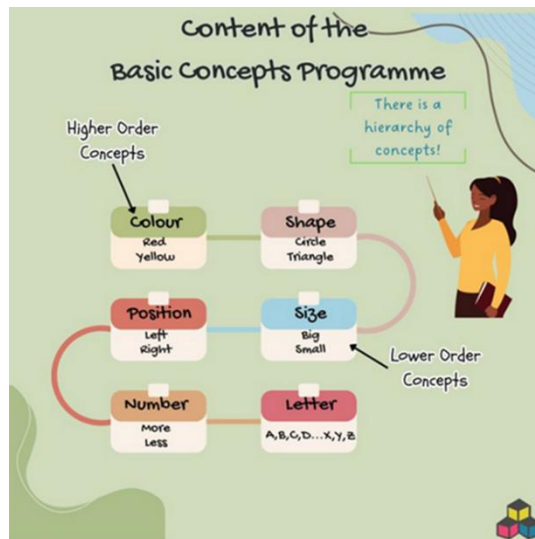
The Four Core Components of the Basic Concepts Programme (BCP)

What makes the BCP approach so unique, and such an effective pedagogical and therapeutic educational model?

The four interwoven components of the BCP form a complete theoretical and practical framework — a true praxis for teachers. This praxis is deeply grounded in an understanding of how children learn and, crucially, how we can better individualize our teaching to meet each child's developmental and learning needs.

Across South Africa, there are numerous educational programmes for children. Many are well-intentioned and evidence-informed, yet few offer a truly comprehensive educational framework. In a context like ours, interventions must consider the child holistically and remain adaptable to the wide range of background factors that shape learning. By positioning teachers at the centre of this process, the BCP emphasizes their responsiveness and readiness to meet diverse learning challenges, transforming teaching into a reflective and adaptive practice rather than a mechanical one.

Component 1: BCP Content



The BCP Content, designed for the young learner, begins with the recognition that essential and foundational concepts that may not have been securely established must be introduced explicitly and intentionally. This is not only about building common knowledge and shared language; it also marks the beginning of concept learning itself, where cognitive and hierarchical schemas are introduced gradually and systematically (see Component 2).

The power of scientific learning, organized around the BCP's six higher-order conceptual domains, lies in understanding that concepts are both the drivers of development and the connectors to domain-specific knowledge. We begin with a concept as the foundation of a domain of understanding. For instance, we start with **COLOUR** as a leading concept, which then unfolds into awareness of different colours, their relationships, and their application in the child's everyday world.

Component 2: The Concept Teaching Model (CTM)



Having the right content is only the first step; equally vital are the *processes* that enable learning and the transfer of that content. The six steps of the Concept Teaching Model (CTM) provide a

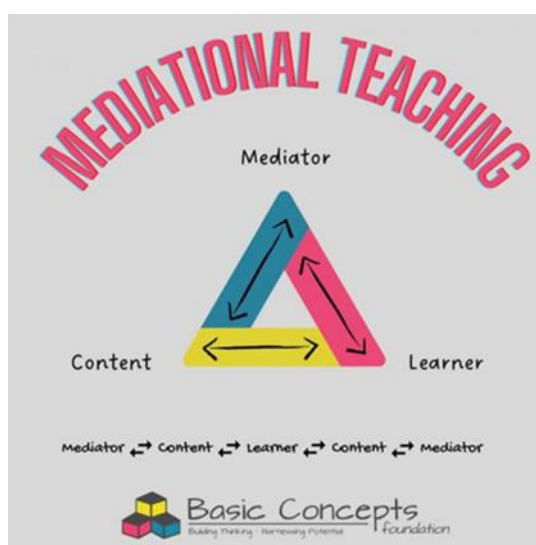
universal, systematic process for building and internalizing each concept, with every step carefully designed to grow conceptual understanding.

Learning unfolds progressively through these six steps:

1. Concrete introduction – presenting the concept through sensory experience.
2. Deconstruction – defining and identifying its essential attributes.
3. Internalization – representing the concept mentally.
4. Application – using the concept to solve higher-order problems.
5. Connection – linking the concept to the learner’s immediate environment.
6. Transfer – extending the concept beyond the classroom into real-world contexts.

The CTM thus acts as a *metacognitive engine* — finely tuned to help learners focus, expand, connect, and deepen their understanding of ideas in a deliberate and developmental way.

Component 3: The Mediational Teaching Approach

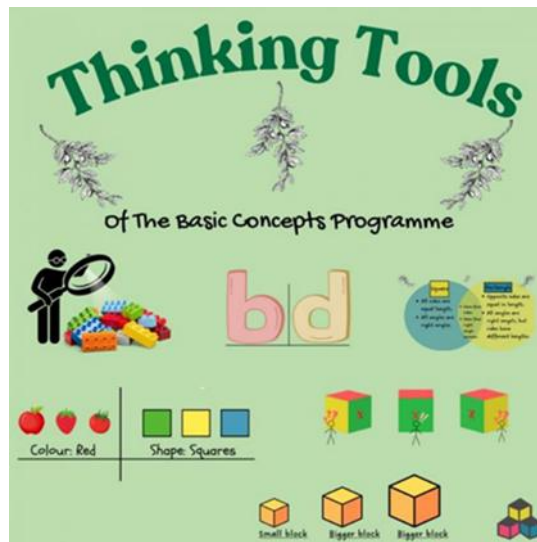


Of course, even the most sophisticated model would remain inert without the teacher to ignite it. The Mediational Teaching Approach gives the teacher this key — through a set of intentional, dynamic teaching actions.

In the interaction between *Mediator* and *Child*, the teacher brings energy, presence, and purpose. Through a series of mediational questions, the teacher opens the learning process and guides the inquiry inherent in each CTM step. The teacher becomes both *guide* and *cognitive coach*, prompting the learner toward deeper conceptual understanding.

A skilled mediator structures and regulates the learning environment, helping children connect their *actions*, *words*, and *thoughts*. This requires the teacher to be deeply familiar with the conceptual content being taught. The mediational encounter can be seen as a rhythmic, reciprocal exchange — a dialogue through which learners construct universal, generalizable principles for understanding the world.

Component 4: The Cognitive Tools



The essence of the BCP teaching process, as described in the previous components, lies not only in deepening content knowledge but also in developing the general cognitive tools needed to engage with any information system. These tools represent the true power of the BCP: they are transferable, foundational, and transformative.

Each of the six cognitive tools is developed within the six conceptual domains, and together they form the bedrock of higher-order thinking. These include **matching**, **comparing**, **categorizing**, **seriation**, **perspective taking**, and **conservation**. These processes enable learners to solve complex problems both within and beyond the BCP.

For example, in learning about letters, children must activate several cognitive tools:

- Recognizing that individual letters belong to a specific category of knowledge.
- Understanding that letters have names and represent sounds.
- Distinguishing between upper- and lower-case forms, some identical and others different, without confusion.

Such cognitive flexibility allows conceptual understanding to grow beyond rote learning and evolve into genuine comprehension.

Conclusion

The first three components of the BCP provide a dynamic, structured pedagogical cycle for educators: mediating across six content domains while using the CTM to develop each concept and its associated cognitive tools. To teach through the BCP is to engage in *educational mediation*, not mechanical instruction.

It would therefore be unthinkable for a BCP teacher to view their role merely as that of an information transmitter or curriculum fulfiller. Unfortunately, this remains the dominant model of teaching in many contexts. The BCP, by contrast, offers educators a *rich, flexible, and developmental* approach that allows for gradual progression toward more complex and abstract thinking.

We are not surprised that teachers describe their experience of the BCP as transformative. As some teacher reflected:

“The BCP has changed the way I teach. It helped me see how children think and how I can help them learn — not just what to teach, but how to teach it.”

“It made me look at my teaching in a different way. I am excited to implement what I have learnt.”

“It is an excellent programme. My understanding of the programme- it is developed to systematically mediate concepts so that learners are guided to develop an understanding and so that learning is meaningful.”

“The BCP helps teachers to connect with the cognitive development of their students.”

“This work could help save the children of South Africa ... and give them hope for a better future.”

“I understand now that teaching is not just standing in front of the class, but a discussion/ dialogue with your children.”

“BCP is foundational to a child's learning. It is the building blocks on which all other concepts are built. A concept needs to be fully understood by a child before a new concept can be taught. We often rush children's learning due to time constraints which is not correct.”

Together, these reflections capture what lies at the heart of the BCP: a shift from teaching content to cultivating thinking — from instruction to transformation.