

FOR PARENTS AND FAMILIES OF GIFTED CHILDREN

# NAGC MAGAZINE

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## The Future in G&T

**CARING FOR THE FUTURE**

Who supports gifted children in care?

**MOVING FORWARD IN G&T**

  
**NAGC**

For gifted children & their families



*"Being ready for school now doesn't necessarily mean being able to read, write and count, but being ready to learn how to read, write and count." Leonid Venger*

#### Where Does Key To Learning Come From?

**K**ey to Learning is based on the work of Lev Vygotsky (1896-1934), "the Russian Mozart of Psychology". The ideas he developed in the course of an astonishingly brief career have not lost their relevance over time. His work did not reach a wider global audience until the 1960s. When it did, his insight into the social and communicative roots of cognition and development transformed the way we think about teaching and learning. Key to Learning is the culmination of 70 years of research in Russia and more recently, internationally. This has involved reflecting on and refining the practical application of Vygotsky's ideas. Working together in real classrooms, researchers and teachers have been able to help children develop learning abilities that they will be able to use for the rest of their lives. Ongoing research projects confirm that the Key to Learning curriculum has a profound and positive impact on young children's achievements.

## The Vygotskian Developmental Cognitive Curriculum for Early Years "Key to Learning"

### Developing Learning Abilities, Unlocking Possibilities

Galina Doyle



#### Understanding Abilities

What are learning abilities? Where do they come from? The answer to these questions may appear obvious. Learning abilities are whatever it is that determines the speed and flexibility with which we acquire and are able to apply new knowledge and skills. We all know how abilities reveal themselves. Some children are more able than others. They are quick to learn new things, surprise us with their verbal fluency, their precocious achievements in reading and mathematics, in art or in music. If they surprise us enough, we may call them gifted or talented. If they do not, by the time they are seven, we may have decided that they are 'just average' (the majority), or even 'less able' and already marked down for educational failure.

All of us find ourselves thinking about and judging young children's different abilities in this way from time to time. We also tend to believe that while children's educational and life experiences may affect for better or for worse the way they put their abilities to use, the abilities themselves are a given. We behave as though they are a part of our genetic inheritance, like the colour of our eyes, or the number of fingers on our hands. However, Vygotsky considered that we must view human psychological development as a social achievement rather than an individual one. Young children's abilities

are not innate, or simply determined by biology. Children acquire their abilities with and from the others around them - from the social, cultural and educational context of their lives.

The core of what young children learn is not a particular body of knowledge or a specific set of skills. After all, the skills and knowledge children need for survival depend on where they happen to be born, and varies from place to place. At the heart of what all young children learn, are the universal higher mental functions required to analyse reality. How deeply and securely children are able to acquire them ultimately determines differences in their abilities.

**DEVELOPMENT OF HIGHER MENTAL FUNCTIONS**

LOWER FUNCTIONS Inborn, shared with higher animals	HIGHER FUNCTIONS Unique to humans, passed on by teaching
Reactive attention	Focussed attention
Associative memory	Deliberate memory
Sensorimotor thought	Symbolic thought

Leonid Venger, Olga Diachenko, Nikolai Veraksa and other Russian psychologists and educationalists extended and adapted Vygotsky's ideas about learning and development in young children. Their work has led to the development of principles, curriculum content and methods aimed at developing the cognitive abilities of young children (age three to seven). The approach makes it possible to substantially increase the developmental effect of education and its influence on the development of cognitive abilities.

**The Mechanism Of Abilities**

*"The child looks at the world through the glasses of Human Culture."* Alexander Zaporozhets

Children learn to 'read' reality through the glasses of human culture. These glasses are cultural tools, for example, concepts, visual signs, symbols, models, plans, texts, maps, formulae, and above all language. It is these that provide us with the universal 'mental habits' and human qualities required for success in any skilled cultural activity. It is through these tools that new psychological qualities that we call abilities emerge.

**PSYCHOLOGICAL TOOLS**

This is not a passive process but an active

Maps	Charts
Plans	Graphs
Schemas	Formulae
Diagrams	Signs
Tables	Symbols
Numbers	Letters
Music Notation	Models

appropriation. Where the process is at its best, cultural tools are not merely learned in isolation as skills, but offered to and grasped by children as purposeful practical activity. When children are able to take over cultural tools so that they own them, they

develop the ability not simply to solve conventional problems in old ways, but to innovate and sometimes to change or create the tools themselves. Creativity and independent thought are not where we start. They are the results of our learning.

**A Developmental Curriculum**

According to the Russian psychologist Alexander Zaporozhets, there are two parallel cultural universes - the adult's and the child's. Consequently, there are two possible approaches for child educators. We can attempt to take children by the scruff of the neck and drag them into the adult culture, attempting to move them prematurely to the next stage of development. Alternatively, we can allow children to live through their childhood as fully as possible, but work to help them deepen and enrich their child's eye view. Here we have the essence of a concept known as 'developmental education.'

A developmental curriculum must help children to move forward. To do this it must provide challenging experiences that are enjoyable and achievable given



the right support. This is what we mean by teaching within the child's learning zone (the 'Zone of Proximal Development'). For young children it is imaginative play that creates the learning zone. As Vygotsky points out, children's greatest achievements are possible in play. It is in play that children become 'a head taller' than their current selves; they leap ahead of their everyday capability. For example, impulsive children who cannot sit still during circle time may be able to stand still for quite a long time if they are pretending to be guards at the palace gates.

The Key to Learning Curriculum builds on features of young children's spontaneous activity to promote active learning. Prominent Russian psychologists and educationalists, led by Leonid Venger, Olga Diachenko and Nikolai Veraksa have developed principles, curriculum content and methods that amplify the world children naturally inhabit to make sure that they explore every corner of it in as much depth as possible. Although the aim of the Key to Learning curriculum is to help children develop communicative, self-regulative and cognitive abilities, it does this indirectly, through sequences of planned activities that are emotionally vibrant, playful and enjoyable. Only the teacher knows that teaching is going on.

**Twelve Programmes, One Practice**

In terms of content the Developmental Cognitive Curriculum Key to Learning offers breadth and diversity for children between the ages of 3 and 7. There are twelve programmes in the complete curriculum:

- **Sensory Mathematics**  
develops the ability to analyse the external, visual qualities of objects using sensory standards such as colour, shape and size. It builds the foundation for the development of mental abilities
- **Logic**  
develops the ability to analyse objects and events, see their invisible sides, identify their most essential characteristics, think sequentially, draw conclusions, classify and systematise information
- **Mathematics**  
using visual models children discover the language of Mathematics and concept of measurement, compare different quantities and qualities of objects and explore the relationships more, less, equal
- **Story Grammar**  
develops a love of story, ownership of story language and a profound understanding of story structure by following a specific set of procedures known as visual modelling
- **Developmental games**  
playing in small and large groups children develop productive imagination, symbolic literacy, language and communication skills, flexible thinking, creative problem solving, self-regulation and self-esteem
- **Artographics**  
cultivates the essential skills required both for writing and creative artistic expression. Develops 'art vision' and introduces different symbolic tools - composition, rhythm and colour



- **Visual-spatial**  
develops spatial awareness and the ability to 'read' maps. Children look at objects in space, use symbols to represent what they and others see through visual models - maps, schemes and plans
- **Creative Modelling**  
through shared activity children discover symmetry and pattern by manipulating geometric shapes to create artistic compositions of the world around them. Develops co-operative and social skills
- **Construction**  
develops mathematical language and goal directed behaviour. Children analyse the structure of objects, plan, articulate their plans and execute them using wooden modular building blocks
- **Exploration**  
through games, stories and simple yet powerful experiments children discover important scientific concepts - states of matter, different qualities of substances and transformations
- **Expressive Movement**  
develops emotional intelligence, non-verbal communication skills, creativity and productive imagination through body movement, gestures, facial expressions and music
- **You - Me - World**  
using symbols and visual models children learn about themselves as physical, emotional and social beings; about the natural and material world, about living things and inanimate objects

**About the author**  
**Galina Dolya**



Galina Dolya is the Curriculum Director of Key to Learning, which has developed an innovative Vygotskian approach to Early Years Education. She is an acknowledged world leading expert on the practical application of Vygotsky's Theory of Learning and Development. She has worked at every level from Early Years to University and trained hundreds of teachers and trainers world-wide. Currently she is a Researcher in the

Department of Psychology and Pedagogy of Abilities at the Research Institute of Development of Preschool Education, Russian Academy for Education, Moscow. She is currently based in the UK.

Each programme consists of 60 sessions: 30 for younger children (Caterpillars), 30 for older children (Butterflies). It provides opportunities for child-initiated and teacher-structured activities. There are, in addition, suggestions for follow up activities that can be shared with parents. It creates right conditions for minds to open, for learning to become a pleasure and for creativity to flourish.

If you wish to know more about Key to Learning you can visit the web site [www.keytolearning.com](http://www.keytolearning.com) or read Galina Dolya's books, Vygotsky in Action in the Early Years and Ideas for Parents both of which may be ordered from the website or by contacting Galina on 01582 8313160. Support for parents and teachers' professional development is available through conferences and training. 📖