

Thinking out of the box: Educational Applications

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Abstract:

Thinking is the process that every human being uses to solve problems, make decisions, generate new ideas, and be creative. “Thinking out of the box” or thinking beyond the box and is more than just a business cliché. It is a metaphor that means to think differently, unconventionally or from a new perspective. Thinking outside the box is *not* synonymous with lateral thinking. It is a form of expressing oneself in a unique way. Thinking out of the box acknowledges and rejects the accepted paradigm to come up with new ideas. This paper discusses the definition of thinking out of the box, the benefits of out of the box thinking, how to think out of the box, teaching children to think out of the box and the reflections on the teacher’s box.

Keys words: Thinking out of The Box, Creativity, Groundbreaker

التفكير خارج الصندوق : تطبيقات تربوية

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أستاذ بقسم المناهج وطرق التدريس بكلية التربية - عميد كلية التربية وكلية التربية للطفولة المبكرة المنيا

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مستخلص:

التفكير هو العملية التي يستخدمها كل إنسان لحل المشكلات واتخاذ القرارات وتوليد أفكار جديدة ومن ثم الإبداع. التفكير خارج الصندوق وهو أكثر من مجرد علامات تجارية. إنها استعارة تعني التفكير بشكل مختلف أو بشكل غير تقليدي أو من منظور جديد. التفكير خارج الصندوق ليس مرادفًا للتفكير الجانبي. إنه شكل من أشكال التعبير عن الذات بطريقة فريدة. التفكير خارج الصندوق يعترف بالنموذج المقبول ويرفضه للتوصل إلى أفكار جديدة. وحيث تناقش هذه الورقة البحثية تعريف التفكير خارج الصندوق، وفوائد التفكير خارج الصندوق، وكيفية التفكير خارج الصندوق، وتعليم الأطفال كيفية التفكير خارج الصندوق والتأملات في صندوق المعلم.

الكلمات المفتاحية: التفكير خارج الصندوق ، الإبداع ، المبتكر

Introduction

Thinking is the process that every human being uses to solve problems, make decisions, generate new ideas, and be creative. The goal of think out of the box is to answer the question "How exactly do we get better at problem solving, decision making, and creativity?" Thinking outside the box is a phrase that has been used for nearly forty years now. For many in the corporate world, it has become a cliché—so much so, you've probably heard it in any number of commercials. That doesn't mean the idea behind it isn't a powerfully useful instrument for your daily life, because it is. Despite its overuse as a term, it's without a doubt one of the most potent methods you can improve the quality of your life (Walker, 2019). This phrase often refers to creativity and creative thinking. A simplified analogy is "the box", in the commonly used phrase "thinking outside the box", where the word "inside the box" is analogous with the current, conventional methods. Creative thinking acknowledges and rejects the accepted paradigm to come up with new ideas (Hakak, Boloria, Dabbagh, & Venhari, 2016)

Thinking outside the box is *not* synonymous with lateral thinking, the De Bono school of alternative explanation, or any of the currently fashionable models of management decision making, which are frameworks for analysis, planning and projection rather than alternative problem-solving psychologies. However, professionals who adopt or experiment with thought and logic processes are at least aware that they are inside the box and need to get out. Very often, out-of-the box thinking is the enforced product of leadership strategies, which make life in the old box so uncomfortable that,

getting out is the only option. Progress therefore lies in the hands of those willing and able to do so (Darn,2006).

For many, the problem with outside-the-box thinking is that it involves the recognition and management of emotions as well as the more obvious attributes of creativity, mental agility and even courage. Thinking outside the box is not easy since it involves leaving the psychological comfort zone, becoming open to new ways of seeing the world, and being willing to explore. Outside-the-box thinking thus involves a number of different intelligences including emotional intelligence. Action is as important as thought in that the out-of-the-box thinkers, of necessity, put into practice some or all of the following emotionally discomforting strategies:

- Questioning the status quo
- Breaking free of routine
- Stepping out of their shoes
- Challenging assumptions
- Solving problems creatively
- Reframing questions
- Managing creativity
- Turning failure into opportunity

On an individual level, implementing these strategies requires personal attributes that include:

- Willingness to take new perspectives on day-to-day work.
- Openness to doing different things and to doing things differently.
- Focusing on the value of finding new ideas and acting on them.

- Striving to create value in new ways.
- Listening to others.
- Encouraging, supporting and respecting others when they come up with new ideas(Darn, 2006).

What is Thinking Outside The Box?

Thinking outside the box (also thinking out of the box or thinking beyond the box and, especially in Australia, thinking outside the square) is a metaphor that means to think differently, unconventionally, or from a new perspective. This phrase often refers to novel or creative thinking .It also means to explore ideas that are creative and unusual and that are not limited or controlled by rules or tradition

In a nutshell, the phrase means to tackle a problem with creative or novel thinking, attacking the situation from an unusual or unexpected perspective. (Walker,2019).Furthermore, Abraham(2015)stated that it is a form of expressing oneself in a unique way .

The benefits of out of the box thinking

Creativity

Ideas come naturally to you. Problems you encounter are looked at from fresh perspectives, unburdened by rules and expectations

Groundbreaker

You're disruptive, in a good way. Indifferent traits are correlated with pushing the frontiers of what's expected and what's possible.

Inspiring

An indifferent style can provoke admiration, envy and respect from those that live their lives more cautiously..

The blind spots of out of the box thinking

Rule breaker

Rules are there to be broken, but they're created for a reason: things sometimes go very wrong when boundaries are pushed

Incivility

Being unbound by unspoken social rules means you can be more likely to step on people's toes or cause offence, usually without intending to

How to think outside the box

Ignore what others think.

This can be easier said than done, but consciously reminding yourself that you're the one in control will boost your ability for independent thought.

Seeking feedback from others is always a good idea, and you don't want to undermine anyone's authority or unfairly exclude them from a process they're normally a part of. But mental energy is wasted on worrying about what others thinking out of the box.

Simplify it.

If you think your problem is too complex for a child to understand, take some time to figure out how to explain it simply. Richard Feynman, the late Nobel Laureate in physics, is attributed with saying, "If you can't explain it to a six-year-old, you don't really understand it." Sometimes the very act of figuring out how to explain a complex problem in simple terms results in an innovative solution.

Ask "What would I do differently if I were starting from scratch"?

Routine is the enemy of innovative thinking, but so is precedent. Sometimes, we struggle to shift away from the way we've always done things. Imagining a clean slate can help you change perspective and think outside the box.

Ask why

Most of the pushback we get—whether from management, colleagues, or our own brains—comes with a simple phrase: “That’s how we’ve always done it.” We’re hardwired to resist change, especially when what we’ve been doing has been working okay, if not spectacularly. When the routine is the roadblock, “why” is the battering ram. Asking “But why have we always done it that way?” can reveal flaws and make way for creative thinking.

Flex your brain muscles.

Psychology today suggests a few surprising exercises that can get your brain unstuck when you’re trying to think outside the box. Alphabetize letters in words. Take any word (one you’re reading, or just thinking) and alphabetize the letters. So, the word B–R–A–I–N would become A–B–I–N–R. What makes this mental gymnastics so terrifically boosting to your brain is that you’re forced to use all the information—all the letters—and totally rearrange it in your mind. Try this for five minutes a day, three days a week. Increase the amount of letters in the words you are alphabetizing as you get more proficient.

Free write.

Free writing is the act of picking a topic, setting a timer for a short amount of time, and writing as fast as you can without stopping to edit. It flows best if you do it with a pen and paper rather than on a computer. The timer adds some pressure to keep writing, forcing your brain to think creatively instead of conventionally.

Mind map.

A study by Al-Jarf (2009) showed that the mind map was a powerful technique for improving students' abilities to generate, visualize, and organize ideas. The students involved in the study stated that the mind map encouraged their creative thinking, and they could generate and organize ideas for writing faster.

Where Do Creative Ideas Come From?

As mentioned earlier, a necessary condition of creativity is novelty, but how can we get new ideas? In his book "The AHA! Moment" David Jones takes a bold stance by claiming that we cannot have a truly new idea, the best we can do is to make combinations of different ideas already known to us (Jones, 2012). Therefore one needs a vast subconscious mass of remembered data in order to increase the likelihood of combination of ideas. Jones' theory of creativity is based on a three-tiered model of human mental structure.

The top level is the Observer-Reasoner, the conscious part of our mind that is involved with planning, execution and action. It is also involved with reasoning, argument and conscious deliberation. The mid-level is the Censor, the subconscious part that houses our implicit knowledge (e.g., procedural skills, linguistic skills). It allows

rapid access of stored knowledge or information, and also protects the Observer–Reasoner from constant perturbations.

The lowermost level is the unconscious mind; the creative part of it is termed as the Random–Idea–Generator(RIG) that combines randomly, without any rule/supervision, ideas or information stored in the unconscious and preconscious mind. wrong or not functionally useful and therefore blocked by the Censor before it could reach the uppermost conscious level, the Reason–Observer. If a creative RIG idea manages to pass the Censor and finally reaches the conscious level, it is likely to be perceived as a flash of sudden insight, known as Aha! So far importance of creativity and how to reach to creative ideas have been explored. Now we try to explain methods to expand the unconscious mass of data and feed it differently

Teach children to think out of the box

Learners' creative thinking skills which are different from one another require a learning condition involving a learning experience, so that the potential of creative thinking can develop (Yusnaeni, Corebima, Susilo, & Zubaidah, 2017)

With all of the future changes and automation in our society, it is our job as parents to teach children to think outside of the box. We need to raise children that are independent and creative thinkers. Unfortunately, many times these skills can go by the wayside at school. Teachers have to cram in so much content knowledge in order to get satisfactory state test scores, that creativity and ingenuity are not always a priority. Parents and teachers can take the time to add in supplemental lessons or use project–

based and discovery learning to encourage children to think outside of the box (Hakak, Bioria, Dabbagh, & Venhari,2016).

Start early

When it comes to your children you want to give them the best possible start in life. Raising creative thinkers who look beyond the obvious solution is an important skill. Due to the increase in artificial intelligence, many tasks will be automated in the near future. Research indicates that 60 percent of occupations have at least 30 percent of work activities that could be automated. By teaching your children to be creative and to think outside of the box, it will serve them well throughout school, university, and especially in their adult lives. The sooner you get them started in the right direction, the faster they will pick up these thinking skills. That in turn means they will reach their professional and personal goals quicker and more easily. Take the time to teach them right from the beginning and encourage out of the box thinking.

Make it part of your daily life

When we make a new skill a part of our everyday lives it becomes a habit. Provide your children with challenges and call them out when they try to take the easy way out when solving a puzzle or a problem. They'll thank you in the long run. Not only will thinking outside the box help your children, but it will also help you. Children are amazing problem solvers. You would be amazed at how much they can help see things in a different light compared to adults. You just need to ask.

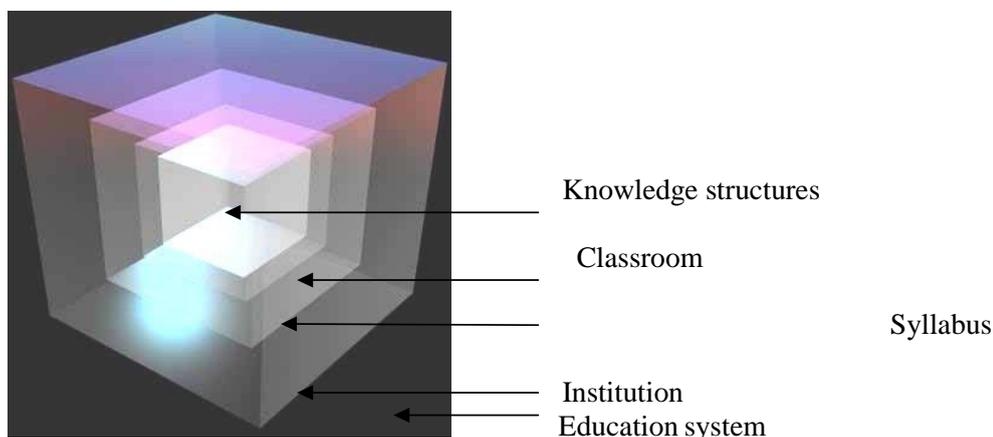
According to Hakak, Bioria, Dabbagh, & Venhari,(2016)Here are several suggestions to teach children how to think outside of the box:

- Provide ample opportunity for creative play time. Whether it just be general free play or you set the stage for a playtime activity, children need the gift of time to just play and problem solve. When children problem solve during playtime it gives them a safe space to practice skills to repeat in the real world.
- Ask lots of questions without prompting what the answer could be. This is also called “asking open-ended questions”. Questions such as: what would you do next? how can you fix this? what can you do differently?
- Be a creative person. Children learn from role models. If you are creative and think outside the box, your children will be more likely to follow your lead.
- Reduce screen time. Most screen time is passive (watching television) or does not require creativity (most video games). When screen time is reduced, children will have to get creative to determine what to do during free playtime.
- Embrace boredom. It is perfectly fine for children to be bored. This is when thinking outside the box to entertain themselves gets turned on full force!
- Offer positive reinforcement. When you children think outside of the box and come up with a creative solution praise them for a job well done.

Teaching your children creative thinking from an early age helps shape their minds and it may even result in more neural connections being created. That in turn will help them grasp concepts in school better. Out of the box and creative thinking skills are some of the

best advantages you can give them. It's well worth spending the time and effort on.

Reflections on the teacher's box



The teacher's box is multi-layered, offering many constraints and frustrations. Many ELT practitioners prefer to discard the outer, institutional layers in order to confront the issues posed by their teaching or training environment and their existing knowledge structures. These practitioners are often found working freelance or having loose attachments to institutions, thus gaining the freedom to explore personal and professional development and the opportunity to indulge in teaching, training, writing and consultancy in order to add

variety to their experience. The opportunity cost to these professionals lies in the loss of the protection that some good institutions offer, the lack of an imposed routine and the consequent need for constant self-motivation.

The majority of teachers are constrained by their own existing knowledge structures, working within the boundaries of limited, imposed methodologies and safe within those boundaries providing that their colleagues are working in the same way and that the

institution is satisfied with their results. Nevertheless, the resulting lack of direction and progress often leads to dissatisfaction and boredom, and to an institution which is typified by competition, criticism and complaint, the complete antithesis, in fact, of ‘the learning institution.’ Whilst teachers thus impose their own restrictions, there are external factors to which they are required to respond.

The system

‘The system’ is, of course, both the ultimate excuse and the universal panacea. When blame is to be apportioned, often the standard response is ‘it’s nobody’s fault; it’s the system.’ However, the education system is largely made up of people who are, or who have been, teachers themselves. As a whole or as a collection of individuals, the system is bound by social, political and economic constraints together with elements of tradition. Responses to external pressure range from inertia to radical reformism, both of which pose problems for the teacher. Inertia within a system or an institution challenges the individual teacher to look elsewhere for self and professional development, though this in itself may stimulate inter-regional and international exchange via new technological vehicles. Reforms, both singly or in combination, present complex challenges to teachers as individuals and as members of a wider professional community. The test of a teacher’s willingness to develop depends on their capacity to engage in the kinds of study, investigation, and experimentation required to understand and undertake multiple challenges and to grasp the relationships among them.

The institution

Teachers are confronted by a formidable range of institutional level factors that limit their scope for responding to their own and their learners' wants and needs. Immediate constraints include:

- Competing school priorities and initiatives. Limited preparation time as a consequence of new demands on their time.
- Internal and external examination and coursework requirements.
- Teachers' other responsibilities such as administrative duties.
- Sharing responsibility for classes with another teacher.

Despite teachers' perceived educational values, institutional and subject constraints, constraints inherent in the current classroom teaching system, together with increasing demands being made on teachers in their classrooms, not least in the form of external prescriptions for the curriculum or for examination and testing requirements, make it unlikely that teachers will depart from their current classroom practice. Demands on teachers are implemented by administrators and managers who are prone to respond to pressures from higher authorities rather than the wants and needs of teachers, while in many cultures, teachers suffer from top-down management structures and managers who are by nature, experience and training, inappropriate to their positions. In the private sector, where money and education meet only at the point of quality, there remains a limited realisation that investment includes the ongoing development and enrichment of the labour force.

The curriculum/syllabus

Teachers' and learners' perceptions of what is possible in a subject area do not always conform to the skills and competencies listed in curriculum prescriptions. This is often evident in the tension arising from student's requests to engage with language more expressively on the one hand and their teacher's need to allocate classroom time to written work with a focus on formal grammar and lexis. Despite the fact that the language classroom offers many opportunities for talking about teaching and learning, teachers tend to report that the prospects for developing a more consultative approach are significantly diminished by increasing demands for improved performance on attainment tests. Time, which could most profitably be spent gaining feedback on tasks or even on doing tasks themselves, is often spent extending knowledge, sometimes of intricate and marginal structures and lexis that are never activated, particularly in monolingual situations. Regular attainment testing also imposes constraints in terms of time, inflexibility, and adherence to a syllabus, which is designed to be testable, and often linked to prescribed materials.

The classroom

The classroom is the most obvious teacher's box, and rather than escape from it, possibly the best tactic is to make it one's own by judicious use of the two dimensional and three dimensional spaces it offers together with the furnishings, teaching aids and equipment available. The walls of the classroom are one of the best metaphors for the teacher's box. These walls may be seen as threefold, and

equally applicable to learners, teachers, and the differences between them:

Psychological Inner	Socio–psychological	Socio–physical
conflicts/confidence	Family Economic/cultural	Smells/sounds/sights
arguments/pressures	differences	Furniture/spaces
Money/health/time	Gender balance/issues	School rules &
problems	Teacher’s & learners’	regulations
Emotions/experiences/	mannerisms/methods	Motivation/purpose/goa
fears Personal	Physical	ls
successes/failures	appearance/popularity	Masks/insincerity/trust
Political/religious pressures		Classroom language

These walls are essentially about insecurity and fear of losing control from the teacher’s point of view, and about insecurity and fear of accepting responsibility from the learners’ angle. Breaking down the walls involves commitment to a positive learning environment typified by empathy, sensitivity, honesty, patience, motivation, variety, tolerance, support and other attitudinal factors well documented by adherents to humanistic language teaching. The assured teacher has the confidence to tell the learners what they are doing and why they are doing it. The assured learner has the right to ask the question ‘why?’ without fear of reproach or repercussion.

Classrooms contain learners, and far from being a constraint, the learners often provide the motivation for the teacher to find new and more effective ways of teaching and facilitating learning. Whether teaching is geared towards a prescribed syllabus or an attainment test, it also provides a bridge to the outside world and life after the classroom. Hence, whatever the immediate goal, one step out of the

box is to strive for learner autonomy. It has been argued that teacher autonomy is a precondition for learner autonomy, but at best the two go hand in hand. A case in point might be that of materials preparation:

- The teacher uses materials from a book.
- The teacher uses tried and tested materials provided by a trainer.
- The teacher uses materials he/she has prepared him/herself.
- The teacher and the learners prepare materials together.

The benefits of personalisation and student generated materials and activities are well known; yet the safety and security of the tried and tested, albeit for a global market, leads to an inertia which is hard to overcome. The sight of a teacher pacing the classroom holding on to a coursebook like a lifebelt is a common sight, symptomatic of the fear of letting go.

References

- Abraham, A. (2015). Gender and creativity: An overview of psychological and neuroscientific literature. *Brain Imaging and Behavior*, 10(2), 609–618.
- Al-Jarf, R. (2009). Al-Jarf, R. (2009). Enhancing freshman students' writing skills with a mind mapping software. *Paper presented at the 5th International Scientific Conference, eLearning and Software for Education*, Bucharest.
- Darn, S. (2006). Thinking outside the Teacher's Box. *Online Submission*.
- Hakak, A. M., Boloria, N., Dabbagh, A., & Venhari, A. A. (2016). "Thinking Out of the Box" from Out of the Box! Increasing the Dimension of "Starting Point" Case Study: Architecture Students. *Psychology*.
- Jones, D. (2012). *The Aha! Moment: A Scientist's Take on Creativity*. Baltimore, USA: JHU Press.
- Walker, B. (2019). *Thinking Outside The Box: How to Think Creatively By Applying Critical Thinking and Lateral Thinking*: Tsz Kin Lee.
- Yusnaeni, Corebima, A.D., Susilo, H., & Zubaidah, S. (2017). Creative thinking of low academic student undergoing search solve create and share learning integrated with metacognitive strategy. *International Journal of Instruction*, 10(2), 245–262.
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https://www.researchgate.net/publication/299423036_Thinking_Out_of_the_Box_from_Out_of_the_Box_Increasing_the_Dimension_of_Starting_Point_Case_Study_Architecture_Students
<https://dictionary.cambridge.org/dictionary/english/think-outside-the-box>