



CRITICAL THINKING – A ROAD TO POSITIVE WELLBEING

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ABSTRACT

Children of the present generation face the difficulty of knowledge explosion and intelligence with a lack of skill sets to handle both. They need to be trained with skills which will empower them to perceive, analyse and understand situations, think critically and choose appropriately and lead a contented life with positive well-being. Several researchers have worked towards understanding how humans can develop the mindset to do this and achieve positive well-being. This paper is based on Howard Garner's Project Zero which uses thinking routines to nurture thinking dispositions in young children. The paper focuses on nurturing critical thinking dispositions which may lead to positive well-being.

Keywords:

Introduction

“The purpose of life is to discover your gifts and the meaning of life is to give them away” Martin Seligman & Cathy Pearson. As Marcus Aurelius, Meditations rightly says “The happiness of your life depends upon the quality of your thoughts.” This paper is based on the concept that creative and critical thinking dispositions in young children will enable them to acquire positive well-being. Critical thinking can be defined in many ways to understand how it is going to help an individual in his everyday life. According to Facione, critical thinking is –“judging in a reflective way what to do or what to believe”(2000, p.61) and is a “purposeful, self-regulatory judgment which results in interpretation, analysis, evaluation and inference, as well as explanation of the evidential, conceptual, methodological, criteriological, or conceptual considerations upon which that judgment is based”(1990, p.3). The application of critical thinking is best defined by Bailin et al as “thinking aimed at forming a judgment” where thinking is goal directed and purposive and thinking itself meets standards of adequacy and accuracy”(1999b, p.287). Sternberg rightly has defined it as “the mental processes, strategies and representations people use to solve problems, make decisions and learn new concepts”(1986, p.3) Better defined by Willingham as – “seeing both sides of an issue, being open to new evidence that disconfirms your ideas, reasoning dispassionately, demanding that claims be backed by evidence, deducing and inferring conclusions from available facts, solving problems, and so forth”(2007, p.8)

According to Martin Seligman's Theory of well-being, well-being is a construct and has five measurable elements that account for it (PERMA) :

1. Positive Emotion
2. Engagement
3. Relationships

4. Meaning and purpose

5. Accomplishment

No one element is responsible for positive well-being rather each element contributes towards it. In this paper, efforts are made to use thinking routines to nurture all the above five elements so that children use their critical thinking dispositions to achieve positive well-being.

Objectives

- To nurture critical thinking dispositions through thinking routines in young children.
- To enable children to develop critical thinking dispositions through stories.
- To enable children to analyse any situation critically and choose based on that.
- To collaborate with the parents in order to support the thinking dispositions in young children.

Recent research has found that the link between critical thinking and metacognition is self-regulation and is reported in the APA Delphi report that self-regulation is a component of critical thinking. Empirical evidence is also found by Willingham (2007) indicating that very young children have been observed thinking critically. The APA Delphi report recommends that children need to be taught to reason, to seek relevant facts, to consider options and to understand the views of others right from early childhood. (Facione, 1990, p.27) The report also recommends instruction dedicated to critical thinking skills, abilities and dispositions built into all levels of the K-12 curriculum.

Empirical evidence supports the notion that young children are capable of thinking critically. Koenig and Harris (2005) have shown that 3- and 4-year old children differentiate the credibility of various sources of information. Especially, the 4-year olds appeared to prefer the judgments of adults who had a history of being correct over those who were purposefully

incorrect.

Lutz and Keil(2002) found that children as young as 4-years appeared to be aware of the fact that different people may possess different domains of expertise and these areas may be related to their credibility on certain topics.

Heyman and Legare (2005) have shown that younger children were not consistently critical about the credibility of people with motives to distort the truth whereas children 7-10 became increasingly aware of people's motives.

Theoretical Framework :

Cognition is a term which refers to the mental processes involved in gaining knowledge and comprehension. These processes include thinking, knowing, remembering, judging and problem solving. These are higher level functions of the brain and encompasses language, imagination, perception and planning. Creative thinking is the generation of new ideas within or across domains of knowledge, drawing upon or intentionally breaking with established symbolic rules and procedures. It usually involves the behaviours of preparation, incubation, insight, evaluation, elaboration, communication. Critical thinking is the process of independently analysing, synthesizing and evaluating information as a guide to behaviour and beliefs. Thinking dispositions are inclinations and habits of mind that lead to productive thinking and are teachable over time across diverse thinking situations.

The Visible Thinking Approach (Project Zero, 2007) provides teachers with tools to involve children in thinking activities through the use of thinking routines that are short, easy-to-learn, mini strategies that extend and deepen students thinking and become part of everyday structure of classroom life.

Tishman's definition of Visible Thinking is that it is any kind of observable representation that documents and supports the development of an individual or group's ongoing thoughts, questions, reasons and reflections. Thinking routines is a product of years of research related to children's thinking and learning and were developed by Harvard Project Zero researchers (Ritchhart et.al., 2006, Perkins, 2003, PZ, 2007) in classroom contexts and revised several times to ensure workability. These thinking routines are compatible with NAEYC position statements of providing children with meaningful experiences in an orderly routine that provides overall structure in which learning takes place within a predictable context and children develop cognitive awareness as they revisit documentation.

By enhancing children's thinking, thinking routines also promote a culture of thinking in young children. (Ritchhart 2002; Salmon 2008). A culture is shaped by the beliefs and practices shared by the members of a community. To create a classroom culture of thinking, teachers can begin by revisiting their own beliefs about and understanding of thinking. When teachers think about thinking, their teaching style tends to be more child-centred. Using the language of thinking in daily routines and conversations with children fosters a classroom culture of thinking.

Children can expand their repertoire of cognitive strategies when they are exposed to thinking routines because routines constitute a major form of organising memory and thinking. When thinking is part of the routine, children become alert to situations that call for thinking and as a result, they build up positive attitude towards thinking and learning. (Ritchhart, 2002; Ritchhart, Palmer, Church & Tishman, 2006). Thinking routine is a type of jump-start thinking that reveal the child's thinking and dispositions. (Ritchhart & Perkins, 2008). It provokes thinking / thought provoking activities usually in the form of inquiry such as see/think/wonder that become part of classroom routine.

In a preschool setting, usually the adult's focus is on what the child does not know. But when adults pay attention to what the child knows, they can predict what the child is thinking and create the Zone of Proximal Development (ZPD) as defined by Vygotsky (1978) which is nothing but the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers.

Methodology

Young children construct concepts through concrete experiences using their sense organs. In this study, efforts were made to nurture thinking routines which would trigger the dispositions for critical thinking in young children. Two thinking routines were used viz.,

- Routine 1 - See, Visualise, Draw
- Routine 2 - Listen, Visualise, Enact

These routines included seeing pictures of a story and drawing the same or creating the same in clay or sand and listening to story, visualise the same and enact. The drawings, clay models, sand art by children and children enacting were observed and recorded. The strategies which were used to incorporate critical thinking dispositions are as follows :

- ✚ Visualisation techniques incorporated in children through meditation
- ✚ Role play for various situations and concepts to teach understanding and expression of emotions
- ✚ Theatre activities to nurture enacting skills
- ✚ Questioning techniques after enacting to nurture critical thinking dispositions
- ✚ Clay modelling
- ✚ Sand play
- ✚ Stage shows every week to nurture self-confidence in children
- ✚ Thinking routines using different stories

The framework utilized in Project Zero is the visible thinking framework which is broad and flexible for enriching classroom learning in the content areas and fostering children's intellectual development at the same time. A simple practice which is used in the visible thinking framework is the thinking routines. According to Ritchhart et.al., (2006), thinking routines are tools used over and over again in the classroom that support thinking moves like making connections, describing

what is there, building explanations, considering different viewpoints and perspectives, capturing the heart and forming conclusions, reasoning with evidence.

Making Learning Visible(MLV Project) – draws the attention to the power of the group as a learning environment and documentation as a way for all students, teachers, parents, administrators and community to see how and what children are learning. MLV uses thinking routines as a base for nurturing young children's creative and critical thinking skills.

These routines are compatible with the recommendations from NAEYC. Hence, visible thinking makes thinking a natural and overt part of the classroom discourse.

The case of Vibhav : Vibhav joined the preschool when he was 2 and half and went through thinking routines program when he was 3 and half to 4 and half. The child had a girl twin who was dominating him in everything right from day one. Hence, Vibhav was unique in doing the following in the class –

- Was overly quiet when teacher used to ask questions
- Was very slow in writing though he loved to write
- Did not have any confidence in public speaking
- Was very sensitive to comments given by teachers and children

The thinking routines induced the child to –

- a. Learn the drawing skills and express ideas through pictures
- b. Learn the enacting skills and think of innovative problem solving, analyse the situation and choose accordingly.
- c. Apply the critical thinking skills in real life situations
- d. Make connections between simulated and real situations

Strategies were used to inspire peers to motivate Vibhav whenever he required support

- Teaching Vibhav how to do a task
- Encouraging Vibhav when he is performing the task
- Appreciating Vibhav when he has completed the task even slowly
- Inspiring Vibhav to complete the task quickly

Strategies were also used to collaborate with the parents to nurture critical thinking dispositions at home and reinforce the children's behaviour at home :

- Individual parental meetings to give specific techniques to support the child's critical thinking disposition
- General parental sessions to provide methodologies of nurturing thinking dispositions in children in every situation
- Collaboration sheets providing dos' and don'ts with their child in different situations
- Newsletters with motivating and inspiring stories to the parents in being there for the children

- Answering all the curious questions of the child practically and with simple real answers.
- Encouraging the child to ask questions
- Encouraging the child to imagine solutions for various situations
- Exposing the child to a wide variety of concepts through hands-on experience
- Involving the child in making connections
- Supporting the child to achieve self-regulation

Outcomes ;

The child Vibhav developed very well by the end of the year with support from everyone around him both at home as well as at the centre. The child developed dispositions towards creative and critical thinking and was able to show progress in the following ways :

- Self-confidence
- Inspiration to achieve success
- Motivation to get involved in all the tasks
- Time management in performing tasks
- Finishing almost all the tasks including writing quickly
- Using critical thinking to analyse simulated and real situations and appropriately choose.
- Making connections between simulated and real situations
- Achieve socio-emotional well-being
- Achieve self-regulation
- Enhanced focus on the activities

Conclusion :

The combined framework of thinking routines and well-being theory worked in the case of Vibhav and other children in strengthening their critical thinking dispositions which led to their positive well-being. Here, thinking routines were utilised to contribute to the five factors of well-being viz.,

Positive Emotion- strategies for building self-confidence with the support of peers, teacher and parents.

Engagement – thinking routines which involved the child in understanding and analysing situations

Relationships – building relationships with parents, teachers and peers

Meaning and purpose – stimulated through peers and parents

Accomplishment – achieved through motivation and inspiration by teacher and peers at the centre.

It was found that the combined framework showed positive results. The same strategy could be utilised on a larger sample to draw inferences and arrive at the best practices for developing positive well-being through thinking routines in young children.

REFERENCES

1. *Martin E. P. Seligman; Flourish : A visionary new understanding of happiness and well-being, April 2011.*
2. *Slough, Geoff Taggart, Kate Ridley, Peter Rudd, Pauline Benefield ;Thinking Skills in the early years : A literature review : Research Report, National Foundation for Educational Research, Slough.*
3. *Kim Marie Timothy, (2013); Documentation of IBL : Fostering a sense of wonder, curiosity and imagination in the primary years.*
4. *Angela, K, Salmon , (2010) ; Tools to enhance young children's thinking. Young Children, September 2010, NAEYC 2,3.*
5. *Joanna Tay-Lim, Developing young children's critical thinking skills through conversations; National Institute of Education, Singapore.*
6. *Andreas, Schleicher, (2014), Why should we include critical thinking in preschool; p.vii*
7. *www.pz.harvard.edu*
8. *www.pearsonassessments.com/research*