"DO IT" CREATIVITY AND EMOTIONAL MASTERY TECHNIQUES IN FOSTERING CREATIVE IDEAS IN ADOLESCENTS WITH SPECIAL NEEDS IN OYO STATE, NIGERIA

Sunday Gbadegesin OLAWALE, Ph.D

Department of Educational Foundations, Faculty of Education, Ajayi Crowther University Oyo, Nigeria.

*Corresponding author: e-mail: sg.olawale@acu.edu.ng

Abstract

Over the past centuries, persons with special needs were ostracized because society considered them as unproductive and liabilities. Therefore, the study attempted to employ "DO IT" creativity and emotional mastery strategies in fostering creative ideas in adolescents with special needs in Oyo State, Nigeria using a 3 x 3 factorial matrix. Ninety participants were randomly selected within the age range of 13-21 years with a mean age of 18.5 years. The Adolescent Personal Data Inventory (α = 0.80) was used to classify the participants into different self-concept categories. Creativity Motivation Scale (α =0.77) and Emotional Intelligence Test (α =0.75) were used as criterion measures. The pre-test scores served as covariates. Analysis of Covariance, t-test and Scheffe post hoc data analyses were used at 0.05 probability level to test the hypothesis. Findings showed that treated participants significantly improved more than controlled participants on creative ideative originality and emotional mastery assessment scores ($F_{(2,81)}$ = 08.28, P<05), whereas participants in "DO IT" category performed better than those in the Emotional Mastery. It was therefore submitted that "DO IT" creativity and emotional mastery strategies should be encouraged in fostering creative ideas, emotional management, self-esteem, social relationships and independent living.

KEY WORDS: "DO IT" creativity, emotional mastery, creative ideas, persons with special needs

Introduction

Attainment of success, excellence, prosperity and self-actualization in this generation and dispensation are contingent upon utilization of new ideas, new concepts, new designs and innovations occasioned by creativity. This means that without creative ideas, man would be unable to make full use of the abundant resources and information at his disposal to improve himself, the society and the world. This is because society has moved from one stage to another all along in a bid to conquer, explore and take dominion of the environment leading to four progressive phases of development hitherto. Asuru (2024) stressed that the first of such epochs was marked by industrial revolution which commenced in 1765 by utilizing coal and bringing about mechanization, steam engine and water power.

The second phase started in 1870 and it was characterized by gas discovery and utilization which facilitated mass production of goods/products and the opportunity for electricity generation. The third era started in 1969 through the invention of nuclear energy and that was marked by electronics brought into existence computer, IT systems and automation. The fourth dispensation began in the Year 2000 when internet and renewable energy provided humanity with cyber-physical systems otherwise known as digital era and knowledge economy.

Brandt (2023) explained that creative thinking is the currency of modern economy and is vital for the

contemporary information and digital age. The World Economic Forum (WEF, 2023) stated that creative thinking describes as the fastest growing and second-most important among the skills required for productivity in all human endeavours. This means that nations of the world would continue to recycle ignorance, tradition, poverty and underdevelopment as long as creativity is sidelined. Umar (2018) maintained that creative teaching is intended to develop student's creative thinking or behaviour. Gabora (2020) articulated that creative idea enables man to escape the present, reconstruct the past, and fantasize about the future to visualize something that does not exist and change the world with it.

Etuk (1992) defined it as being concerned with original thinking and generation of new ideas. Asuru (2024) described creativity as thinking new thoughts and doing new things in this digital age. Animasahun (2002) defined it as conscious cognitive processes stimulated by problematic situation, guided by interest and resulting in generation of statistically frequent, novel, original unique, valuable and appropriate ideas useful in turning challenges of life into fruitful, beneficial and profitable outcomes. According to **Durham Commission on Creativity and Education** (2019) as the capacity to imagine, conceive, express, or make something that was not there before.

Asaju and Gana (2024) described this as self-actualization and human capital development.

The concept of creativity has been viewed in four dimensions in literature. Rubenstein (2000), Runco and Kim (2013, 2024) explained these dimensions as: the person of the creator, the process of creation, the environment of creation, and the product created. In all, it is creative process that is most open to controversy because of variant viewpoints of scholars on how creativity takes place. For instance, Runco and Pritzker (1999) stated that brainstoriming, Capital "C" Creativity, divergent thinking, incubation, lateral thinking, "small c" creativity and synectics are skills needed to inculcate in creativity. Debono (1992) promoted lateral thinking about logical thinking to enhance creativity, while Oslen (2024), Akinboye and Olawale (2007) emphasized "DO IT" procedure.

"DO IT" refers to creativity technique acronyms that describes for the following abbreviations: -

D = Define (the problem);

O = Open (oneself to many possible solutions);

I = Identify (the best solution out of many that are generated); and

T = Transform (the best solution/idea into an effective action).

"DO IT" acronym is comprehensively explained in tables 1-3 below.

Table 1: "DO IT": D = Define

Catalyst	Description
Mind Focus	1) Ask why the problem exists. This may lead to a broader statement of the problem.
	2) Try to subdivide the problem into smaller problems. This may lead to a narrower restatement of the problem.
Mind Grip	Write down at least three two-word statements of the problem objective. Select the combination of words which best represents the precise problem you want to solve. Use this to write a new, more optimal and effective restatement of the problem.
Mind Stretch	List the goals, objectives and/or criteria which the solution of the problem is to satisfy. (Think of the obstacles which must be overcome). Then stretch each goal, objective or criterion and write down any ideas which are stimulated.

Source: Oslen, R.W. (2024). The art of creative thinking. http://members./ozemail.com.au/-caveman/creative /techniques/do-it.htm

Table 2: "DO IT" : O = Open

<table>
<tr><td rowspan="6" style="writing-mode:vertical">**OPEN**</td><td>**Catalyst**</td><td>**Description**</td></tr>
<tr><td>Mind Prompt</td><td>Ask other people with diverse backgrounds, knowledge and intelligence for solutions to your own ideas</td></tr>
<tr><td>Mind Surprise</td><td>List ridiculous, laughable ideas. Use them to trigger more reasonable, possible, usable solutions to your problem.</td></tr>
<tr><td>Mind Free</td><td>Stimulate fresh ideas by forcing similarities between your problem and things which aren't logically related to your problem.
1 - Write down the name of a physical object, picture, plant or animal.
2 – List its characteristics in detail
3 - Use the listed characteristics to stimulate insights into and ideas for the solution to your problem.</td></tr>
<tr><td>Mind Synthesise</td><td>Synthesize the ideas harvested so far from other operations to obtain actionable patterns, concepts, outcomes and opportunities.</td></tr>
</table>

Source: Oslen, R.W. (2024). The art of creative thinking. http://members./ozemail.com.au/-caveman/creative /techniques/do-it.htm

Table 3: "DO IT": I = Identify

<table>
<tr><td rowspan="4" style="writing-mode:vertical">**IDENTIFY**</td><td>**Catalyst**</td><td>**Description**</td></tr>
<tr><td>Mind Integrate</td><td>Review you goals, objectives and/or criteria then trust your own gut-level feeling to select the best idea from the already circled ideas.</td></tr>
<tr><td>Mind Stregthen</td><td>List the negative aspects of your idea. Be vicious! Try to positive the negatives. Then **modify** the **solution** to reduce the negative aspects.</td></tr>
<tr><td>Mind Energise</td><td>Exaggerate the worst and best potential consequence which might result from the implementation of your solution. Modify your solution to minimise bad consequences and maximise good consequences. Proceed to the transformation step if you are sufficiently energised.</td></tr>
</table>

Source: Oslen, R.W. (2024). The art of creative thinking. http://members./ozemail.com.au/-caveman/creative /techniques/do-it.htm

*T = Transform: Carefully write down a statement of your final solution idea.

Transform your solution idea into action. Use the "DO IT" process and catalysts again to help creatively solve the problem which you now have of how to transform your solution idea into action.

Many people have the notion that creativity is exclusively reserved for the gifted and talented individuals. This is because there are human traits such as intellectual ability, abstract thinking, conceptual ability, divergent thinking and inquisitiveness that are congruent with creativity. However, Akinboye (1976a), Owolabi (1988), Animashaun (2002) and Olawale (2007) have shown through their studies that creativity can be developed in all human beings. Canva Team (2020) corroborated the submission stating that creativity can be learned, developed and fostered just like any natural skill. Amabile (2020) stressed the importance of personality and the environment in the exhibition of notable creative ideas.

Man is known to be an emotional being and all his activities are tied to positive and negative emotions. Emotions arise in situations that are meaningful to the individuals, either positive or negative. Akinboye (2001) and Olawale (2007) explained that creativity is tied strongly to emotions which give it power and make it challenging. The reason for this is attributed to the fact that anytime people need creativity, they tend to be in an emotional state. In this regard, strong position emotions such as love, joy, acceptance and surprise can enhance creativity whereas strong negative such as anger, worry, fear and sadness can inhibit creativity (Plutchik 1980; Akinboye, 2003). Thus De Castella (2003) described emotional mastery as the ability to process our emotions so that their messages get to us, and their energy is used for appropriate action. In other words, emotional mastery means doing what we are supposed to do in spite of one's emotional feelings.

Therefore, there is need for individuals with special needs to be inculcated with emotional mastery to imbibe creative ideas so as to become productive, independent, happier, and socially relevant. It is then that they can become assets and be integrated meaningfully in the society. That is the reason why events that satisfy their goals, or that offer the promise of doing so tend to elicit positive emotions and creativity, while conversely events that harm or frustrate them naturally evoke negative emotions and retard creative behaviour. Again, emotions are aroused more by changes in conditions occasioned by education, exposure or training rather than by conditions that remain constant or conservative. In sum, real, training package on creative ideas has a tendency of evoking creative emotional tendencies in individuals with special needs.

Statement of the Problem

Persons with special needs usually have problem with locomotion, motor activities, self-concept, independence living, emotional outburst and productivity. This makes society give them negative labels and stigmas which provoke in them anger, frustration, embarrassment, poor interpersonal relationship, low morale, withdrawal tendency, regret and inferiority complex. These serve as obstacles on the path of their social integration, economic independence and emotional health. It is assumed that such catalogue of challenges affect their creative ideas, creativity, innovation and productivity. Therefore, there is need to device strategies to foster creative ideas in persons with special needs so that they could live independently and productively without constituting a burden to their families and society. Precisely, inculcating creative ideas in them tend to promote their happiness, creative thinking, problem solving skills, emotional health, effective human relations, generation of useful ideas and independent living. To achieve thus purpose, "DO IT" creativity and emotional mastery techniques were packaged to inculcate in the participants creative ideas.

Research Hypothesis: A null hypothesis guiding the study is formulated and stated below at .05 probability level.

H_o: There will be no significant difference in the Ideative originality scale scores of participants in the treated groups and participants in the control group; and the two treatment strategies will have equal effects on the treated participants.

Methodology

Design: This is a 3 by 3 experimental matrix in which there were nine treatment groups obtained by random assignment of participants into the various cells. There were nine cells (I-IX) altogether comprising three rows of two treatment techniques (that is "DO IT" and Emotional Mastery) and the control (that is, non-treated group). There were also three columns signifying the level of self-concept of the participants (low, moderate and high self concepts). Therefore six out of the nine treatment groups (I-VI) were assigned to the experimental condition while the other three cells (VII-IX) were assigned to the control condition. This is shown in table 4.

Table 4: A 3 x 3 Factorial Model of Experimental Design

Treatment Techniques	Level of Self Concept		
	Low	Moderate	High
"DO IT"	DILSCS (I)	DIMSCS (II)	DIHSCS (III)
Emotional Mastery	EMLSCS (IV)	EMMSCS (V)	EMHSCS (VI)
Control	CLSCS (VII)	CMSCS (VIII)	CHSCS (IX)

KEY: The table 2 is described using the abbreviations from cell numbers I-IX:

i. DILSCS: "DO IT" Low Self Concept Subjects

ii. DIMSCS: "DO IT" Moderate Self Concept Subjects

iii. DIHSCS: "DO IT" High Self Concept Subjects

iv. EMLSCS: Emotional Mastery Low Self Concept Subjects

v. EMMSCS: Emotional Mastery Moderate Self Concept Subjects

vi. EMHSCS: Emotional Mastery High Self Concept Subjects

vii. CLSCS: Control Low Self Concept Subjects.

viii. CMSCS: Control Moderate Self Concept Subjects

ix. CHSCS: Control High Self Concept Subjects.

Participants: These are also called participants in the study. A total number of ninety adolescents with special needs were randomly selected from three special institutions in Oyo State, Nigeria. These are: Cheshire High School, Ibadan; Rehabilitation Centre for the Disabled, Moniya, Ibadan; and Federal College of Education, (Special), Oyo. Their age ranged between 13 and 21 with the mean age of 18.5 years. This age range was considered appropriate because Akinboye (1977a) stated that the age of adolescent extends to 21. The participants were matched into three different categories of self-concept (low, moderate and high) based on their scores in the self concept scale of the Adolescent Personal Data Inventory (APDI), while they were assigned into the treatment and control groups on the basis of balloting.

Instrumentation: Two instruments were employed for the study. The first is the Adolescent Personal Data Inventory (APDI) developed by Akinboye (1977a) which is predominantly meant for adolescents. It is a battery of tests with ten sections whereby each independently measures a particular attribute. This study used only Section A (self-concept scale) of APDI to categorize the participants into self-concept levels, (low, moderate and high). It is a 5-point scale consisting of 30 items. The APDI index of construct validity is .62 while coefficient alpha for internal consistency reliability is (r=80, N=207, P<.01) (Akinboye, 1977b). In addition, the study employed Ideative Originality Scale (Section B) of Ibadan Creativity Assessment Scale (ICAS) by Akinboye (1976b) as a criterion measure. It has a reliability of .71 and test re-test coefficient alpha of .77. This scale is considered valid, reliable and appropriate to measure the creative ideas of the participants.

Procedure: Having secured the approval of the authorities of the three institutions, the investigator met with the participants to build rapports with them and to classify them into low, moderate and high self-concept levels (using the APDI) and to collect pre-treatment scores using ICAS. Then there were subsequent meetings with the specific groups made up of two treated group ("DO IT" Creativity and emotional mastery) and control group. The participants were matched into these three groups based on balloting. The treated groups were exposed to a six-week treatment of twelve sessions while the control group was not given any relevant treatment until after post treatment data was collected to compensate for their earlier losses. To stimulate their cooperation, and to avoid boredom, the investigator ensured that each session did not last more than 90 minutes while light refreshment was served each participant at every session.

Data Analysis: The researcher employed analysis of covariance (ANCOVA) to analyze the data collected from the participant. Owolabi (1988) and Animasahun (2002) maintained that ANCOVA is very appropriate for this kind of sensitive and versatile study because it has inbuilt mechanisms to control errors, adjust treatment means, estimate missing data. Corrects initial mean differences between the experimental group(s) and the control group, take correlation between pre-test measures into account, and increase precision in randomize experiments.

Research Hypothesis: The hypothesis tested at .05 probability level stated that: There will be no significant difference in the Ideative originality scale scores of participants in the treated groups and participants in the control group; and the two treatment strategies will have equal effects on the treated participants.

Results: Results of data analyses on the stated hypothesis are presented in tables 5, 6 and 7 in tables below.

Table 5: Unadjusted Mean Scores on Ideative Originality

ROWS GROUPS	Improved Variable	COLUMNS						
	Ideative			Originality				
	Low Self Concept (LSC)			Moderate Self Concept (MSC)			High Self Concept (HSC)	
	$X - \overline{X}$ N $Y - \overline{Y}$			$X - \overline{X}$ N $Y - \overline{Y}$			$X - \overline{X}$ N $Y - \overline{Y}$	
"DO IT"	49.70 91.00	10		49.00 92.60	10		60.40 100.20	10
Emotional Mastery	21.50 79.60	10		52.50 83.30	10		60.90 85.00	10
Control	50.90 37.50	10		60.90 43.10	10		75.30 49.70	10

Table 5 shows that the unadjusted mean scores of treated groups ("DO IT" and Emotional Mastery) and the control group in their various self concept levels. The table clearly indicates the covariates (x-x), the sample (N) and the post-treatment score (Y-Y) of each cell group to determine their improvement at the end of the study.

Table 6: Analysis of Covariance (ANCOVA) for Ideative Originality Variable

Source of Variation	Sums of Squares	DF	Mean Squares	F	P
ROWS	3760.153	2	1880.076	208.28	<.05
COLUMNS	310.101	2	155.051	17.18	<.05
INTERACTION	46.162	4	11.540	1.28	NS
WITHIN	7311.523	81	9.027		

Table 6 shows Analysis of Covariance (ANCOVA) on Ideative Originality Variable of the two treated groups ("DO IT" and Emotional Mastery) and the control group. The rows consist of the treated groups and control while the columns comprise the three levels of self concept (low, moderate and high). The interaction shows the relationship between the rows and the columns.

Result from this table shows that there is a statistically significant difference in the Ideative Originality Scale scores of participants in the treated groups and those in the control (F=208.28, df=2/81, P<05). This indicates that the

participants in the treated were significantly superior to their counterparts in the control group, hence the hypothesis is rejected.

Table 7: Adjusted Y-Mean Scores on Ideative Originality Variable

ROWS	COLUMNS		
	Low Self Concept (LSC)	Moderate Self Concept (MSC)	High Self Concept (HSC)
"DO IT"	(a) 88.51	(b) 89.86	(c) 101.47
Emotional Mastery	(d) 77.74	(e) 81.79	(f) 86.44
Control	(g) 35.43	(h) 44.54	(i) 56.20

Table 7 presents the adjusted Y-men scores of the two treated groups and the control on Ideative Originality Scale. Participants in "DO IT" group scored 88.51, 89.86 and 101.47 respectively with a mean of 93.31 compared to the scores of participants in the Emotional Mastery group (77.74, 81.79 and 86.44) with a mean of 81.99. This shows that participants in the "DO IT" group performed better than their counterparts in the Emotional Mastery group.

Discussion of Results

The study sought to experimentally investigate the relative effects of "DO IT" creativity and emotional mastery techniques in fostering creative ideas among adolescents with special needs, to determined which of the two techniques was more effective and to establish whether creative ideas can be deliberately fostered in the participants. Results of the study in table 6 indicated that "DO IT" creativity and emotional mastery techniques are potent strategies at fostering creative ideas among adolescents with special needs (F=208.28, df=2/81, P<05). It equally established that "DO IT" creativity is more effective than emotional mastery technique, and that creative ideas can be deliberately fostered in humans.

The methodological study seemed to be unique because prior studies had not employed both techniques employed herein on people with special needs. The recent findings corroborated those of Goh (1972), Akinboye (1976), Eysenck (1995) and Tan (2001) that creativity can be fostered in developing creative imagination, initiative, making judgment and finding solutions. Likewise, Pool (1997) observed that emotional well-being is a predictor of success in academics, achievement and job success among other things. Goleman (1998) found that emotional intelligence and emotional mastery determine how successful someone would be in a career.

The significantly superior performance of the treated groups over the control group could be attributed to proper participants of the randomization, sensitivity of the treatment programmes, and sustenance of interest of the participants by the investigator and cooperation of the participants. Perhaps, the anticipated of the participants to become useful to themselves and the society accounted greatly to high performance.

Conclusion

Whenever any mention is made about persons with special needs, the society attitude tends to be negative since time immemorial. In short, society associates persons with impairment with useless, worthless, irrelevance and personalities that attract bad omen and evil to the population. But this study has shown that people with special needs ate educable, trainable, productive, relevant and useful to the extent which society is prepared to train them in creative ideals for useful living. This means that persons with physical impairment can develop creative ideas like other categories of human beings. In essence, "DO IT" creativity and emotional mastery strategies are potent tools at fostering creative potentials in people, even though "DO IT" is statistically more effective than emotional mastery.

Moreover, many persons with special needs resort to alms-begging due to self-pity, inferiority complex, cultural

influence as well as parental and societal neglect. But it is now obvious that such people can be creative and independent rather than being a burden or eye sore to the society. The moment theses people are motivated, active, engaged in creativity, their inferiority would give way to self-esteem and productivity.

Recommendations

From the foregoing, it is hereby recommended that:

1. Society should stop regarding persons with special needs persons as worthless, evil, parasites and nuisance in society.

2. There is need for the government to design functional programmes to make people with special needs creative and functional in instead of living in self-pity, and the places to begin the implementation are rehabilitation centres and special schools scattered all over the country.

3. The curricular of the designated institutions should be overhauled while trained personnel put in place to inculcate creativity in the learners/trainees.

4. Emotional management workshops should be put in place for learners/trainees to lessen intra and inter-personal conflicts and enhance productivity.

5. Persons with special needs should be incorporated into the mainstream of the nation's economy via creative ideas so that they would be able to contribute meaningfully to the development of the nation.

6. "DO IT" creativity approach should be should be employed periodically to boost the ego and productivity of non-disabled population and individuals with special needs.

7. Emotional mastery strategy should be should be employed across strata to manage debilitating emotions and boost the self-worth of non-disabled population and individuals with special needs.

References

Akinboye, J.O. (1976a). An experimental study of the differential effective of three methods of fostering creativity. Unpublished Ph.D Dissertation, University of Ibadan.

Akinboye, J. O. (1977a). The adolescent Personal Data Inventory. Maritime Printers.

Akinboye, J. O. (1977b). The Adolescent Personal Data Inventory Users' Manual.

Maritime Printers.

Akinboye, J. O. (1976b). Ibadan Creativity Assessment Scale (ICAS). Department of Guidance and Counseling, University of Ibadan.

Akinboye, J. O. (2001). University Lectures Series. University of Ibadan.

Akinboye J.O(2003). Creativity, Innovation and Success. CYFO Behaviour services Ltd.

Akinboye, J. O. & Olawale, S. G. (2007). Relative effects of "DO IT" creativity and emotional mastery techniques in fostering life skills among adolescents with physical impairment in Oyo State, Nigeria. In T. O. Adelowo, N. O. O. Osatuyi & T. Ajobiewe (eds.), *Collaborative partnership in special education* (pp. 137-148). Glory-Land Publishing Company.

Amabile, T.M. (2020). How your work environment influences your creativity. Greater Good

Animasahun, R.A (2002). Effectiveness of six thinking hats and practical creativity in fostering postice life skills among convicted adolescents in some Nigerian prisons. Unpublished Ph.D Dissertation, University of Ibadan.

Asaju, K. & Gana, B. L. (2024). The challenges of teacher education and the seven point agenda. Academia.edu/26096065/THE-CHALLENGES-OF-TEACHER-EDUCATION-AND-THE-SEVEN-POINT-AGENDA?email_work_card=title.

Asuru, V. A. (2024). Innovative research paradigm: An imperative for achieving the sustainable development goals. A Keynote paper presented at a workshop organised by Association of Behavioural Research Analysts and Psychometricians (AB-REAP) at the Faculty of Education Conference Hall, Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt, Nigeria on Wednesday, February 14.

Brandt, W. C. (2023). Measuring student success skills: A review of the literature on creative thinking. Centre for Assessment for the Improvement of Educational Assessment. www.nciea.org

Anva Team. (2020). The importance of fostering creativity in the classroom. medium. com/canva

De Bono, E. (1992). Serious creativity: Using then power of lateral thinking to create new ideas. London : Harper Collins Publishers.

De Castella, N. (2003). Keys to emotional mastery. www.infor@eq.net.au

Durham Commission (2019). *Durham Commission on Creativity and Education.* Arts Council England.

Etuk, E. (1992). The Nigerian Public services : In search of creative excellence. Spectrum Books Ltd.

Eysenck, H.J. (1995). Genius: The natural history of creativity. Cambridge University Press.

Goh, K.S. (1972). The economics of modernization and other essays. Asia Pacific Press.

Gabora, L. (2020). Research on creativity (pp. 1974-1983). *Encyclopedia on creativity, invention, innovation and Entrepreneurship. www.google.*com

Umar, H. A. (2018). Assessment of the use of two levels of creative teaching of Literature-in-English in tertiary institutions in Kwara State. *European Journal of Education Studies*, 5 (4): 158-169.

Olawale, S. G. (2007). Effects of "DO IT" creativity and emotional mastery strategies in fostering life skills among adolescents with physical impairment in Oyo State, Nigeria. Ph.D Unpublished Dissertation, University of Ibadan.

Oslen, R. W. (2024). The art of creative thinking. http:members./ozomail.com.au/-caveman/creativetechniques/do-it.htm.

Owolabi, O. (1988). Differential efficacy of brainstorming and behavioral problem-solving in fostering creativity in counselor trainers. Unpublished Ph.D Dissertation University of Ibadan.

Plutchik, R. (1980). Emotions in psychotherapy: A Pre-evolution perspective. In R. Plutchil & H. Kellerman (eds.), *Emotion*. Academic Press.

Pool, C. R. (1997. Up with emotional health. *Educational Leadership*, 61, 33-41.

Ripple. R. E. (1999). Teaching Creativity. In M.A. Runco & S.R. Pritzker (eds.), Encyclopedia of creativity Vol. 2. Academic Press.

Rubenstein. D. J. (2000). Stimulating Children's creativity and curiosity: Does content and medium matter? *Journal of Creative Behavior*, 34, (1): 1-17.

Runco, M. A. & Kim, D. (2013). Four Ps of creativity and recent updates. In E. G. Carayannis (ed.), *Encyclopedia of creativity, invention, innovation and entrepreneurship.* Springer. https://doi.org/10.1007/978-1-4614-3858-8_429.

Runco, M. A. & Kim, D. (2024). The four P's of creativity: Person,product,processandpress. researchgate.net

World Economic Forum. (2023). The future of job report. World Economic Forum. https://www.weforum.org/publications/the-future-of-jobs-report-2023/