VOL 1 | ISSUE NO. 1
MARCH, 2022

ST. XAVIER'S INSTITUTE OF EDUCATION
Mumbai

XAVIERIAN JOURNAL OF EDUCATIONAL PRACTICE

A Peer Reviewed Interdisciplinary Journal

About the Institution

St. Xavier's Institute of Education is the oldest Government aided, Christian minority Teacher Education College for the course of B.Ed., affiliated to the University of Mumbai and recognized by the National Council for Teacher Education (N.C.T.E.). and is accredited by the National Accreditation Assessment Council (NAAC) with an 'A' grade. Besides, it has various courses and extension services for students, teachers and society. The Institute has completed 69 years as a Teacher Education College par excellence, with alumni ranging from Principals of various colleges, a Vice-Chancellor of Mumbai University and Heads of the Department of Education.

The two main programs of the Institute are the Ph.D. program and the present two-year CBCS B.Ed. Program. The B.Ed. Program is affiliated with the University of Mumbai and follows the syllabus and guidelines of the University. At the same time, the Institute has value-added programs like research enrichment programs, curriculum enrichment, community work enrichment programs. The Institute has a research cell that promotes research activities throughout the year. The library is equipped with research theses, journals and has a section for Ph.D. guidance and reference.

The Institute aims at imparting Quality Teacher Education and all round development. The College stands for academic excellence and the development of skills and strives after character formation based on the love of God and the service of man. The ethos of the institute reflects its theme of Building a *Hope-filled Future* which aims at preparing competent men and women of conscience, care and compassion. The Institute as it ascends into the new venture of developing its own e-journal ensures to integrate the essence of the Institute in promoting the current educational and research themes.

Vision

"Joyous, Creative Teacher Education "

Mission

" To Provide Quality Education For Empowerment and Enlightenment To create a just and Humane Society and Strive to build a World of Faith, Freedom and Fellowship For God's Greater Glory "

Our Core Values: MAGIS(Greater and More), Cura Personalis (Care of each person), Ad Majorem De Gloriam (For the Greater Glory of God), Forming Men and Women for others.

E-Journal details

Title of the Journal : XAVIERIAN JOURNAL OF EDUCATIONAL PRACTICE - A Peer Reviewed Interdisciplinary Journal.
Frequency : Biannual
Subscription : Open Access e-journal
Publisher : St.Xavier's Institute of Education, Mumbai
Place: 40 A , New Marine Lines, Opp.State Bank of India, Mumbai, Maharashtra, India 400 020
Editor in Chief : Dr.Sosamma Samuel

Starting year : 2022
First Published : March 2022
Subject : Education - Interdisciplinary
Medium of Language : English
Mode of publication : e-journal Biannual
Contact email : sxiejournal@sxie.in
Phone No. : 022 22014666
Phone Number : 9820817667
Website : www.sxie.info
Specific Url to XJEP: https://ww2.sxie.info/xjep-open-access-journal
Cover Design : Sheetal's Design, Goregaon (W), Mumbai 400 104

Disclaimer

The views and opinions expressed in the articles in this edition of "XAVIERIAN JOURNAL OF EDUCATIONAL PRACTICE" are those of the authors. None of the contributors, sponsors, administrators, or anyone associated with the journal in any way whatsoever can be held responsible for the appearance of incorrect or libellous information.

XAVIERIAN JOURNAL OF EDUCATIONAL PRACTICE

A Peer Reviewed Interdisciplinary Journal

Vol. No.1, Issue 1, March 2022

Published by

St. Xavier's Institute of Education,

Mumbai, India

About the e-Journal

The e-journal "XAVIERIAN JOURNAL OF EDUCATIONAL PRACTICE", is published by "St. Xavier's Institute of Education" is Peer reviewed Open access journal. The name of the journal exuberates the institution's commitment to encouraging innovations in educational practice which can bring transformation and enhance progressive thinking.

The journal aims to corroborate multiple perspectives and innovations in different contexts, leading to collaborative learning and networking. The understanding of how educational practice can be understood for maximising the outcomes of learning is the main thrust of the journal.

The e-Journal is a bi-annual journal and encourages authors to publish their conceptual as well as research articles in the journal. The e-journal will review and publish conceptual papers, research papers, case studies, analytical papers, book reviews, critical views on policies and any other of educational interest.

The e-journal provides a platform for teachers in Higher Education, student teachers, researchers and all those interested in novel educational practices and making them more student-centric in nature. The e-journal provides updates on the current research trends in different disciplines as well as conceptual articles with innovative ideas. The quality of the articles will be assessed by a (double-blind)peer review. The peer reviewers as well as the members of the Editorial Board constitute a group of eminent persons in Education and the institute will have the right to decide the members in these teams. The publication will be a resource for all those striving to carry out innovations in the field of Education.

Guidelines for the Authors

1. Manuscript should be written in English. The submission of the document should be in Doc. Or Docx. and PDF file. The manuscript should be typed on A4 size paper.
2. The manuscript should be typed in MS word in 1.5" line spacing. Margins 1.5" spacing from left and 1" from all other sides.
3. Title of the paper should be followed by name of the author(s) with title, affiliation(s) of author(s) and valid email id of the main author.
4. There must be a single space between the title, paragraphs and sections.
5. All the pages should be numbered with the help of the insert 'Page number' option.
6. Use a single column layout with both left and right margins justified.
7. Use style Times New Roman with black font size 14pt. for the main title and 12pt.for the body of the manuscript including subtitles. The title of the article should be a bold title case. (More details of title case) Do not underline the subtitle. Instead, use the bold font.
8. Tables and Figures should appear in the document near/after where they are referenced in the text. All tables and figures must be properly numbered and their titles must be mentioned below the number. (Eg. Figure 1: Title of the figure, Table 1: Title of the table) Tables and figures should be placed properly. The author must take the responsibility of following the formatting guidelines as mentioned.
9. Please avoid footnotes and include all references at the end.
10. An abstract of the article must be submitted and not exceed 250 words along with the paper with a limit of 1500-2000 words including tables and figures. Key words (4-5 words)must be mentioned in italics immediately below the abstract.

For more guidelines please visit:

https://ww2.sxie.info/xjep-open-access-journal/manuscript-submission

Journal Ethics Policy

Open Access Policy

e-journal provides immediate open access to its content, thereby making research freely available to the public for a greater global exchange of knowledge.

Privacy Policy

"XAVIERIAN JOURNAL OF EDUCATIONAL PRACTICE" has a well-defined privacy policy. Confidentiality of data is maintained. The names, email addresses, and research manuscripts or other information submitted to the journal is exclusively used for the stated purposes and will not be used for any other purpose or made available to any other party.

Ethics for Publishing

1. The authors should ensure that they have written entirely original work and if the authors have used the work and/or words of others that this has been appropriately cited or quoted.

2. Authorship should be limited to those who have made a significant contribution to the conception, design, execution or interpretation of the reported study.

3. The authors should provide proper acknowledgement. Acknowledgement should be brief with maximum of 100 words.

4. Authors are responsible for their citing of sources and the accuracy of their references and bibliographies.

5. It is the responsibility of the authors to seek copyright clearance for any part of the content of the articles.

6. The journal is not liable in any respect for the views and ideas represented in the manuscripts regarding caste, racial, gender, sexual orientation, religious, political or other controversial issues and its solutions prescribed by the authors.

7. If an author discovers a significant error or inaccuracy in his/her own published work, it is the author's obligation to promptly notify the journal editor or publisher and cooperate with the editor to retract or correct the paper.

Editorial

St. Xavier's Institute of Education (SXIE), a College of Teacher Education, is constantly striving for quality education and contributing to education that is context-based and reflective. The first issue of the Xavierian Journal of Educational Practice (XJEP) is all set to enter the world of journals and publications, with an intent to contribute and disseminate inter-disciplinary and innovative educational practices. The journal welcomes both conceptual and empirical literature. It is an open access journal, thus reaching out to several educationists and researchers all over the world.

The XJEP endeavors to be an anthology of such conceptual and research papers which can be a window to the progress in educational practice in different disciplines. The Journal invites authors from different corners of the globe to share educational practices providing a springboard for leveraging educational deliberations and innovations.

The articles in the current issue explore an array of themes on gender concerns, open pedagogy, application-based knowledge, blended learning, metacognition, and gaining insights into the student-teachers' perspectives. The research studies, academic writing, and publications are considered essential for quality educational practices by St. Xavier's Institute of Education (SXIE) for knowledge management and generation and the Journal is being equipped to be a strong channel of promulgating the academic work in educational spheres.

The Editorial Board includes experienced academicians from national and international levels equipped with envisioning a meaningful purpose for promoting intellectual and research skills. The journal aims to fortify excellence in education, so is open to inter-disciplinary educational practice. The Journal though rooted in teacher education, spreads its wings to achieve wider horizons in circles of various academic disciplines trusting that it will be educationally upscaling and liberating. In this issue too we have a collection from fields of different academic disciplines from education, psychology, sociology, management and literature. This makes the journal accessible and collaborative.

The Editorial Board of the XJEP resonates with the digital era philosophy of open educational and technology-enabled resources to reach out to a maximum of earnest readers and learners from local to global levels. The Board believes in motivating academicians and researchers to provide articles which will stimulate and encourage more authors who would find a platform to share their academic contributions and endeavors.

The Journal is mindful of the intellectual property rights and academic accountability, thus has veterans as its peer reviewers. The expectation of the Journal from its prospective authors is to synchronize with the Journal's ethics policy.

The Journal is founded on St. Xavier's Institute of Education's mission to build a humane and empowered society, and the Xaverian Journal of Educational Practice envisages itself to be a mobiliser of education, research, and extension advances.

From this inaugural journal onwards, the editorial board welcomes authors from far and wide to contribute and become a part of the Journal, which is of the educational practitioners, by the educational practitioners, and for the educational practitioners.

Dr.Sosamma Samuel
Editor-in-chief

March 2022

XAVIERIAN JOURNAL OF EDUCATIONAL PRACTICE

Vol. No.1, Issue 1, March 2022

Contents

The Impact of sensation seeking on Depression among Civil Service Aspirants

V. Selva Meenakshi and ****B. William Dharma Raja

[*]Research Scholar and [**]Professor and Head,
Department of Education, Manonmaniam Sundaranar University, Tirunelvei, India.
** Corresponding email: widh07@yahoo.com*

Abstract

Sensation seeking is a personality trait defined by the need for varied, novel and complex sensational experiences and the willingness to take physical, social and financial risk for the sake of such experiences. Most of the human beings seek sensation to some extent that affords the experience within their threshold. But high sensation seekers prefer extremity for sensations in whatever activities they engage. Deprivation of sensation among high sensation seekers leads to frustration and make them deviated from social norms. No challenges and compulsion to continue a routine pattern of work in the profession may cause depression to the high sensation seekers which negatively affects how they feel, the way they think and how they act. Depression causes feelings of sadness and/or a loss of interest in activities once enjoyed. Sensation seekers are preferable to perform jobs that are deviated from normal routine which require different dimensions. Civil service is one such profession that requires people who are equipped to be multifaceted which is different from the normal monotonous job. Civil servants form the stable structure and support of administrative system. There are many external and internal factors that induce the thirst to become civil servants. But the success in their career depends on the intrinsic factors and personality traits like sensation seeking is one such factor. This study attempts to study the level of sensation seeking among civil service aspirants and analyse the relationship between sensation seeking and depression.

Key words: Sensation seeking, Depression, Civil servants, Profession

Introduction

Sensation seeking is the propensity to prefer exciting, optimal and novel stimulation or arousal (Kalichman, 1994). For the sake of such experiences, high sensation seekers engage in activities that serve the threshold of providing desired level of stimulation. They need high stimulation for arousal due to the increase in the electrical activity of the brain and hormone levels. The level of sensation seeking is contributed by genetic biological and environmental factors. The sensation seekers find normal situation to be boring; they

need high stimulation to get aroused. They prefer for profession that provides platform to explore experiences which is varied and uncertain. Many of the challenging professions like Military, Police, Disaster management, etc. need high sensation seekers to sustain and to be productive. Most of the unexplored areas were discovered by constructively motivated sensation seekers. But sensation deprivation in sensation seekers may lead to frustration which in turn leads to depression. Depression is a mood or emotional state that is marked by feelings of low self-worth or guilt and a reduced ability to enjoy life. A person who is depressed usually experiences several of the following symptoms: feelings of sadness, hopelessness, or pessimism; lowered self-esteem and heightened self-depreciation; a decrease or loss of ability to take pleasure in ordinary activities; reduced energy and vitality; slowness of thought or action; loss of appetite; and disturbed sleep or insomnia. Civil service is one such profession which requires people who are equipped to be multifaceted which is different from the normal monotonous jobs. Civil servants form the stable structure and support of administrative system. There are many external and internal factors that induce the thirst to become civil servants. But the success in their career depends on the intrinsic factors and personality traits like sensation seeking. The person with high sensation seeking works for their own novel experience and they seldom influenced by the external factors. Intrinsic motivation is one of the major factor for success in any profession and in civil service, it is the basic factor which keeps our administrative system effective

Literature review

Fornaro M[1] et al.,(2013) studied sensation seeking in major depressive patients to find the relationship to sub-threshold bipolarity and cyclothymic temperament with 280 currently depressed cases of MDD and 87 healthy controls, they were screened using the Zuckerman's sensation seeking scale-Form-V, the Hypomania Check List-32-item (HCL-32), the Temperament Evaluation of Memphis, Pisa, Paris and San Diego Auto-questionnaire-110-item, the Barratt Impulsivity Scale-11-item, the State-Trait Anxiety Inventory modules and the Structured Clinical Interview for DSM-IV axis-I disorders. Cases were divided into HCL-32(+)(sub-threshold bipolar)/HCL-32(-)("true" unipolar depressed) depending on the HCL-32 total score.Upon correlation and multivariate regression analyses, the HCL-32(+) patients showed the highest levels of SS, higher

prevalence of cyclothymic temperament, and higher rates of multiple lifetime axis-I co-morbidities, including SUD.

Carton et al., (1992) investigated sensation seeking and depressive mood among 108 hospitalized depressed subjects to know the relations between dimensions of depressive mood and sensation seeking. Globally, depressed subjects have lower scores of sensation seeking than normal subjects (paired by age and sex); but the weakness of sensation seeking is not proportional to the intensity of depression (Hamilton Depressive Scale) and to the intensity of anxiety (Covi Brief Anxiety Scale). Interesting relations appear with the emotional dimensions of depressive mood, which are consistent with previous studies of sensation seeking in psychology and psychopathology. On the general sample of depressed subjects, the more the subjects stand on the emotional deficit side, behavioural (affective observed monotony, lack of affective expressiveness and responsiveness) and subjective (anhedonia, affective global indifference for pleasant *and* unpleasant events), the lower is sensation seeking. Conversely, emotionally expressive hyper subjects, on the side of impulsivity and irritability, score high on sensation seeking.

Objectives of the Study

The objective of this study is to find whether the high sensation seeking is the factor for the civil service aspirants choose this profession. During aspiration the platform for sensational experience is not as much as they expect. So this study also attempts to study whether the monotonous classes without challenging task other than reading may lead to depression.

Hypotheses

1. There is a significant difference between in Sensation-seeking and Depression with regard to male and female civil service aspirants
2. There is a significant relationship between sensation-seeking and depression among civil service aspirants

Sampling Design

In this study the investigator used purposive sampling technique and collected data from 70 civil service aspirants from the District of Kanyakumari, Tamilnadu, India. All aspirants were in the age group between 19 and 25 and finally 68 valid data were used for the study.

Tools used

Sensation seeking scale – Form V (1996) developed by Marvin Zuckerman was used to assess the sensation seeking. It consists of 40 items under four domains: thrill and adventure seeking, experience seeking, disInhibition, and boredom susceptibility. Each domain has 10 items. Beck's Depression Inventory (1996) was used to assess depression developed by Aaron Beck was used to assess depression. It consists of 21 items which measures from 0 to 63.

Analysis and Discussion

The level of Sensation Seeking among civil service aspirants

Sensation Seeking	Frequency	Percent	Cumulative Percent
Low	64	94.1	94.1
High	4	5.9	100.0
Total	68	100.0	

Table 1. The level of Sensation Seeking among civil service aspirants

Table 1 revels that more than 94% of the respondents show low level of sensation seeking.

Level of depression among civil service aspirants

Depression	Frequency	Percent	Cumulative Percent
Mild	35	51.5	51.5
Moderate	18	26.5	77.9
Severe	15	22.1	100.0
Total	68	100.0	

Table 2. Level of depression among civil service aspirants

Table 2 shows that more than half of the respondents show mild depression, 26.5% moderate depression and 22.1% severe depression.

Gender difference with respect to sensation seeking and Depression

Variable	Gender				't' Value	P Value
	Male		Female			
	Mean	SD	Mean	SD		
Sensation seeking	1.06	0.232	1.08	0.246	0.199	0.039^{S*}
Depression	1.78	0.866	1.63	0.751	0.779	0.144^{NS**}

Table 3. Gender difference with respect to sensation seeking and Depression.

**S- Significant **NS – Not Significant.*

In table 3 the 'p' value 0.039 for sensation seeking shows that there is a significant difference between male and female with regard to sensation seeking and the 'p' value 0.144 for depression shows that there is no difference between male and female with regard to depression.

Correlation between sensation seeking and depression

Variable	N	Correlation	p
Sensation seeking	68	0.324	0.79
Depression	68		

Table 4.Correlation between sensation seeking and depression

The correlation 'r' value of 0.324 from the table 4 shows that there is a mild positive correlation between sensation seeking and depression.

Conclusion of Findings

1. There was a significant difference between male and female pertaining to Sensation seeking among Civil service aspirants.
2. There is no significant difference between male and female with regard to Depression among Civil service aspirants.
3. There is a mild positive correlation between sensation seeking and depression among civil service aspirants.

Implications

Civil service is the sub-division of government without which the government cannot function. The civil servants should have the ability to handle multifaceted task and at the same time which requires more perseverance and tolerance. So it is mandatory to equip

the civil service aspirants in such a way and to govern their depression level while handling such tasks.

Civil services play an important role in the administration, policy formulation and implementation. For this to be effective in the current scenario the sensation seeing of the civil service aspirants can also be assessed and if properly channelised, their nature of exploring novel ideas and readiness to take risk at the cost of their own may contribute to the development of our country.

References

1. Adeoye, E.A. (2011). Prevalence and causes of depression among Civil servants in Osun state: Implications for counseling. Edo journal of counseling, 4, 1-2. oai:CiteSeerX.psu:10.1.1.982.5238.
2. Carton, S., Jouvent, R., Bungener, C., Widlocher, D.,(1992). Sensation seeking and depressive mood. Personality and Individual differences, 13(7), 843-849.
3. Fornaro M, Ventriglio A, De Pasquale C, Pistorio ML, De Berardis D, Cattaneo CI, Favaretto E, Martinotti G, Tomasetti C, Elassy M, D'Angelo E, Mungo S, Del Debbio A, Romano A, Ciampa G, Colicchio S. Sensation seeking in major depressive patients: relationship to sub-threshold bipolarity and cyclothymic temperament. J Affect Disord. 2013 Jun;148(2-3):375-83. doi: 10.1016/j.jad.2013.01.002. Epub 2013 Feb 12. PMID: 23414573
4. Ingram, Rick & Miranda, Jeanne & Segal, Zindel & Richards, Bradford. (2000). Cognitive Vulnerability to Depression. Journal of Cognitive Psychotherapy. 14. 347-350. 10.1891/0889-8391.14.3.347.
5. Meenakshi and Raja (2021). Does sensation seeking sway crime? Presented at International webinar on Positive mental health organised by St. Ignatius college of Education on 31/11/2021.
6. Sarshar, Farley, H., Fiorello, A., Ducette, P.,(2019). T behaviour: Psychological implications of thrill-seeking/risk-taking), Current Psychology, 41, 200-207.
7. Wilson, Laura & Scarpa, Angela. (2011). The Link between Sensation Seeking and Aggression: A Meta-Analytic Review. Aggressive behavior. 37. 81-90. 10.1002/ab.20369.
8. Zuckerman (2015). *Sensation Seeking.* Psyhcology press.

A Bohemian Defiance of Gender Roles: Tracing the Catastrophic Journey of Blanche Du Bois in 'A Streetcar Named Desire' by Tennessee Williams

Dipali Vilas Salunkhe*

Assistant Professor, Mithibai College, Mumbai, India
**Corresponding email: salunkhedipali72@gmail.com*

Abstract

This paper aims at exploring the concept of gender identity manifested in Tennessee Williams' play 'A Streetcar Named Desire'. In context of the play, Allan Gray's homosexuality and suicide creates an initial trauma and guilt for Blanche Du Bois whose tragedy arises from her refusal to adhere to the norms of gender roles prescribed for a woman. Her inability to find a man, stick with him, make a family, to conform, her boldness, her bohemian attempts to look for beauty are beyond the territories charted out for a woman. The characters share toxic and turbulent relationships with each other on account of the conflict between romanticism of individual dreams and inevitable sordid reality of prescribed gender roles.

Key words: Bohemia, Gender Roles, Defiance, Tragedy

Introduction

"They told me to take a streetcar named Desire and then transfer to one called Cemeteries and ride six blocks and get off at - Elysian Fields!"

These prophetic lines appear in scene one of the play 'A Streetcar Named Desire' by Tennessee Williams. In the critical work 'The Cards Indicate a Voyage on A Streetcar Named Desire', Leonard Quirino highlights the symbolic contrast of Elysian Fields as 'the paradise of the happy dead' for the Greek poets with the Elysian Fields where the exiled Blanche is further hurled into an allegorical death and ostracism from the world of sanity. The year 1947 when the play was first published was the period of prosperity, congruity, emergence and empowerment of the largest middle class population. Post economic depression era almost romanticized the blinkered familial values with their assigned gender roles that suited the narrative. The playwright has repeatedly dealt with the transformed post war American society highlighting issues such as exaltation of

family structure, adherence to conventional gender roles and embracing the plebeian white middle class identity.

Twentieth-century American dramatic tradition of Eugene O'Neill, Susan Glaspell, Thornton Wilder and Clifford Odets was furthered into the Dadaistic, realistic expressionist plays of Arthur Miller, Edward Albee, Lorraine Hansberry, Sam Shepherd and David Mamet. The Freudian craze, the urban man's estrangement from the man-made world, the absurdity and tragic nature of life were the prominent themes. Williams' quest of chasing pragmatic ethics of the modern, disorderly, proletarian world underlines the dichotomies such as rationality and absurdity, ethereality and brutality, submission and defiance. His plays portray 'the falling apart' phenomena of his era. Williams' world of characters rejects the domesticity and conformity by blowing up the cover of glorious, almost mythical societal institutions. The counterculture of Rock n' Roll, the rejection of capitalism, the disillusionment of the masses was the Canvas of his plays. The wreckage of contradictions, dissents, discrimination, strife, struggle of identities, and the chaos brewing beneath the surface gave birth to his culturally subversive heroes.

Abandoned for her ill reputation, Blanche the bohemian protagonist arrives in New Orleans after losing her ancestral home Belle Reve due to her ancestors' 'Epic Fornication' and her school teachers' job due to her affair with a seventeen year old. She epitomizes a drifting vagrant bohemian persona who embraces her primal instincts, defies the social norms and refuses to compromise her aesthetic principles. Her morbid past and inability to escape her caged existence leads her into an act of a high class Southern Belle with seductive moves weaving fantasies. Blanche's vulnerability is manipulated by men time and again. Her façade of magic, virginity and aesthetic bohemia is shattered in the jungle like barbaric world of New Orleans flinging her into a state of insanity from where she will never need to escape. Blanche translates her own name as 'White woods, like an orchard in spring', an image of purity and transcendence. However her arrival in the streetcar named Desire symbolises her wanton desires. Her husband's suicide on account of his homosexuality, the Stockholm syndromic sexual tension between Stella and Stanley, the juxtaposition of feminine Virgo Blanche, against the masculine libido of Stanley the goat like gaudy seed bearer' unveils the dark side of sexual politics and gender dynamics.

In the words of Leonard Berkman, Blanche's downfall is a 'tragic irony'. It is either 'too much fantasy' or 'too much reality' that leads to her destruction. It begins with a failed marriage on account of Allan's homosexuality and inability to conform to the gender role in her picture of a perfect family. Further damage occurs when he prefers an older man over her. Her unkind disgust towards him instead of compassionate understanding leaves her with a perennial guilt for his suicide. The fleeting affairs with strangers and the jocular narrations she keeps building are of cathartic nature yet they cannot help her overcome her remorse. She shuns Mitch's advances afraid that he may lose interest in her after physical intimacy. She longs for compassion in intimacy which remains unfulfilled. Her impulse for truth emerges from her refined tastes of the better times she has seen. Her present however requires her to live a life of lies and make believe. The veil of her charade lifted by Stanley's masculine, uncultured, brute force is the most violent moment in the play since her illusions are her charm. She believes that "a woman's charm is fifty percent of illusion". She is made to face the mirror which showcases her ugly aging face that she abhors. The confrontation makes Blanche see her reality which she had been trying to flee. The paper lanterns covering the lights are her attempts to live in the bohemian world of magic and art which are torn down by Mitch. "I don't want realism. I want magic" she screams in response.

The times of society Blanche belongs to needs her to have a man in her life under any circumstances. In the world of New Orleans where she has taken refuge, her sister Stella is in abusive love with her husband Stanley, described as 'a richly feathered mail bird' who believes in the Napoleonic code of male ownership of a woman. He is an American expression of male gender. Robert Brustein in his critical analysis of the play titled 'America's new culture hero without feelings' defines Stanley Kowalski as 'an ignoble savage'. His inarticulate, surly, destroyer image turns vile with the rape and mockery of Blanche. When Stella responds to Stanley's cries of forgiveness passionately, she justifies it by saying "...there are things that happen between a man and a woman in the dark that sort of make everything else seem unimportant". Blanche calls it 'brutal desire', 'the rattle trap streetcar'. The attractive yet cruel driving force of sexuality between Stella and Stanley leads her to submit to Stanley. In Blanche's words, Stanley Kowalski the polish immigrant "…is the survivor of the stone age". She tries to convince Stella to leave him

citing other joys like poetry and music. Stella however cannot get over the conflict of her flesh and clings to her man more fiercely than before.

In Stanley's alpha male like character that gambles, drinks and possesses women by his sexual drive Williams creates a monster that grows stronger and wicked at the sight of his victim. The relation between Blanche and Stanley is of a predator and a prey. Blanche's desperation and self victimization allows Stanley to map out her future for her. In the climax scene he says "We've had this date with each other from the beginning". Blanche who could shun Allan, get in and out from her multiple affairs, frighten Mitch away seems to have lost all the vitality when faced by Stanley. Blanche's exhibitionism and defiance are perceived as a challenge and threat by Stanley who robs her of sanity, dignity and reality. The antagonism which goes beyond ego battle between Blanche and Stanley is rooted in his belief that 'Man is an Executioner'. Theirs is a conflict of Apollonian and Dionysian nature. It is the struggle between reasoning and hedonism with phallic potency.

Blanche's madness is an extension of her constant urge to cloak her ignominious reality. The recurrent theme of 'women and madness' in Williams' works has been explored by Jacqueline O'Connor in her work 'Dramatizing Dementia: Madness in the Plays of Tennessee Williams'. Blanche is the ultimate 'Mad woman in the attic' who finds an escape and revolt in this state. The obsession with the virginity of a woman and virility of a man are the reason for Blanche's pitiable attempts to look like a dainty maiden in a crumpled satin gown, silver slippers and a Tiara. Her constant attempts to show herself as a woman of dignity are battered by men. The poignant end of her last sane attempt to be with a man is ramified with Mitch's refusal to marry her since she isn't clean. Her long, elaborate baths are an act of purgatory acts of cleansing. The terror that Stanley evokes in her from the rape reduces her into a crumbling existence. The illusion of romanticism of civilization and order is abolished with her retreat into insanity. In her book 'The Second Sex' Simone de Beauvoir argues that women have been defined by men and that if they break away from this they are alienated. In her world of bohemia, Blanche journeys from her poetic sensibilities, pure desires, longings and guilt to the ultimate spiritual death. She succumbs to the wild and passionate desires against the norms. Blanche seeking sexual freedom beyond marriage, flirting with men, refusing to submit and breaking every code of conduct prescribed to a woman is perceived to be preposterous

for which she is made to pay the price. Blanche is a rebel in a world of Stellas and Eunices who submit to their drunken, aggressive husbands as a practical solution. Blanche's feminine fragility, pretence, weakness and disillusionment pitted against the garish, primitive machismo results in the defeat and withdrawal into the phantasmagorical journey of redemption alluded to in the epigraph of the play which reads:

"And so it was I entered the broken world

To trace the visionary company of love, its voice

An instant in the wind (I know not whither hurled)

But not for long to hold each desperate choice"

Conclusion

The term 'sexual politics' by Kate Millet discusses the role of patriarchy in the arenas of opportunities, sexuality, violence, family and division of labour. The theoretical equality of genders was questioned and debated by the second wave of feminism. Gender being equated with the anatomical construct of reproductive organs alienated from the psychosocial identity of an individual has been a root cause of gender issues. The defiance of gender roles and embracing one's identity beyond one's socio-cultural framework leads to the tragic downfall of Blanche. The juxtaposition of the romanticized good wife's image prescribed in the manuals for happily married life with a woman like Blanche who is indefinable creates a threat to the norms of subjugation that preach minimization of female voice degrading her existence to a mere gender role play of a domestic goddess. The darkness of reality engulfing the fragile fantasies of Blanche is a powerful metaphor presented by the play. Equity, equality, awareness and understanding of gender related issues through education can be an important step towards a better society that will have a place for Blanches and Stellas who can break free of their illusions and live their realities without having to resort to escapism.

References

1. Book Rags. (n.d.). A Streetcar Named Desire Summary & Study Guide. Book Rags. Retrieved December 13, 2021, from http://www.bookrags.com/studyguide-streetcarnameddesire/.
2. Hunter, C., & Roudane, M. C. (1999). The cambridge companion to Tennessee Williams. South Atlantic Review, 64(1), 141. https://doi.org/10.2307/3201763
3. Bloom, H. (2009). Tennessee Williams's A streetcar named desire. Bloom's Literary Criticism.
4. Adler, T. P. (1990). A streetcar named Desire: the moth and the lantern. Twayne Publishers.
5. Matthew Charles Roudané. (1997). The Cambridge Companion to Tennessee Williams. Cambridge University Press.

Shifting Focus From Knowledge-Based Learning To Application-Based Learning

Ivan Mathew John*

Teaching Faculty, Department of Sociology, Sophia Junior College, Mumbai, India
**Corresponding email: ivanmus29@gmail.com*

Abstract

The value of knowledge application is emphasized within the National Education Policy, 2020. The system of education however continues to be largely driven by the need to disseminate knowledge from teachers to students. As a result, testing also reflects an imbalance in the kind of questions asked; most often 'knowledge and understanding' type questions. An effort is made to highlight the need for educational institutions to transform instructional processes so that they are fine-tuned to the aims, objectives and specified learner competencies. Paper setting too should be guided by a Blue Print with a conscious tilt towards 'application-type' questions and other Higher Order Thinking Skills. It would be necessary to assess these divergent responses with a spelled-out Assessment Criteria, as this would also go a long way in standardizing the evaluation process. These are important as the products of the present educational system need to be well-equipped with twenty-first-century skills before they are sent out into the world.

Keywords: application question, assessment criteria, cognitive domain, evaluation, instructional process

Introduction

For quite some time now the buzzword in several educational circles has been 'application-based' learning. Not merely students but parents and teachers may be concerned about the rejuvenated emphasis on the ability to apply knowledge. This essay aims to provide an overview of the meaning of the phrase "application-based" in the context of learning and evaluation, its need, and its undeniable relevance for us today.

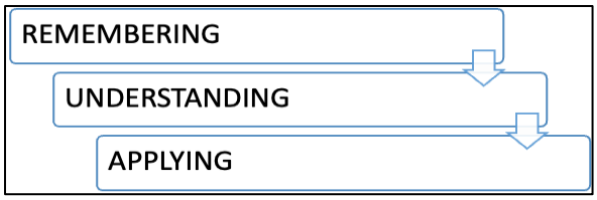


Figure 1: Bloom's Lower Order Thinking Skills within the Cognitive domain

The above diagram is based on Benjamin Bloom's revised Taxonomy of Educational Objectives, published in 2001 as 'A taxonomy for Teaching, Learning, and Assessment'. The original classification used the terms, "Knowledge, Comprehension and Application" for the Lower Order Thinking Skills.

In the cognitive domain, 'Remembering' is the first level of the 'Lower Order Thinking Skills' (LOTS). So, any data, from any source, that learners are expected to recall, based on memorizing is called 'remembering' (that is, an action verb, to remember). This is unlike the originally used term, 'Knowledge' (a noun, that symbolizes something that is a monolith, static; but not dynamic).

Way too much weightage of time and energy tends to be given to the acquisition of knowledge, that a large component of our instructional process revolves around dissemination of data, which, ironically, can otherwise be easily accessed at one's fingertips! Especially during the present Covid-19 pandemic, where much of our teaching is confined to the online mode, can we alter our instructional strategies so that useful learning resources may be given pre-class and the online space could instead be used more effectively for active discussion, debate, analysis, or creative ends? 'Lecturing down' continues to be an authoritarian characteristic and the bane of our educational system. A large majority of teachers, especially as one proceeds towards Higher Education, tend to use the dated 'lecture method'. As a result, much time during the instructional process tends to be 'teacher-talk'. This pushes the learner into a passive mode of learning rather than one that could have otherwise been active, fun, and exciting.

We can agree that recalling data has its due place, for it is necessary to have the knowledge and understand it in the first place; so that one can then apply it to novel situations, to extrapolate arguments, to analyze new content, synthesize ideas, for creative outputs and problem-solving. Today, however, data are readily available and accessible; but this can well be the starting point of a long journey. Mere knowledge acquisition serves an

extremely limited purpose. There are other purposes that go beyond merely testing the 'retentive' capabilities of our learners and examination candidates.

The next level of the cognitive ladder is 'Understanding'. It requires "knowledge" as a pre-requisite. So, for example, a learner would need to know the 'what' of something (for example, gender, biodiversity, Nationalist Movement) before being able to demonstrate one's understanding of the same. The technique of 'Flipped classroom' is a strategy to get learners to read before class and own responsibility for the same. We are quick to argue here that present-day learners don't commit themselves to read; thus, we are back to the 'chicken and egg' argument! As facilitators, we have the freedom to make a start, challenging as it could be. A follow-up quiz is one way of encouraging pre-class reading.

An off-shoot of a teaching process that lays undue value on knowledge acquisition is also reflected in our modes of assessment; there is a skewed emphasis on memorizing/rote-learning. It is pertinent to note that the 2020 National Education Policy aims to diminish the value attached to rote learning. Have we paused to wonder why there has been an excess value to data memorization? Why is there an overwhelming emphasis on data transmission and data recall? Is it possible to shift our focus from providing information to building/constructing knowledge during the instructional process and develop testing methods that gauge the application and other Higher Order Thinking Skills (HOTS)? Application-type questions encourage learners to think outside the box and to employ divergent thinking and problem-tackling strategies. Such questions will refreshingly generate multiple responses and creative ones too. Evaluation can transform into a meaningful process than remain a drudgery.

Twenty-first century learners however, cannot rest content with merely possessing knowledge. More valuable today is the ability to utilize knowledge for problem-solving, analytical, creative and practical use. This would fit in with the notion of constructivism, which has been emphasized by National Curriculum Framework (2005). Are our learners trained for these new-age demands? These demands can be tested through the use of application-type and HOTS questions.

Inextricably linked to Instruction, are the processes of Assessment and Evaluation, of which Paper Setting is at its core. At the Higher Education stage, more often than not,

Paper Setters are not known to work out a structured 'Blueprint of Question Paper'. By stark contrast, this continues to be an essential requirement and pre-requisite for setting Board Examination Question Papers in the Secondary stage of education. A cursory analysis of UG and PG question papers, especially in the Arts/Humanities streams reveal the imbalance of knowledge and understanding-type questions versus application and higher-level cognitive skills.

It is worth noting that mere fulfilling of Blueprint requirements is of limited value. Far more valuable, and worth asking is, whether our instructional processes have *enabled the development* of these varied application skills and cognitive competencies? Are our learners prepared to handle application-type questions and HOTS? One could go further to ask if teachers and examiners themselves are well-equipped to do the same? Shouldn't faculty members acquire these twenty-first-century skills so that we can become effective facilitators of the same?

A case in point: Even if one might ask questions beginning with "Critically evaluate" for example, are we asking candidates to give *their* critical appraisal, or do we expect them to provide regurgitated data citing critical reviews of 'established scholars'? Worse still, is when there are ready-made "answers" to 'application-type questions' which are found in prescribed textbooks, guides, market notes, teachers' handouts or the internet. These practices clearly and blatantly attack the very purpose of 'application-based learning' – which is to facilitate multiple responses, innovative thinking, and creativity.

The third tier is 'applying'; a level that requires learners to 'remember' and 'understand', so that they are better equipped to suitably apply the data that is recalled and understood. Take for example this situation: How can a teacher expect a student to satisfactorily comment on the functionality of family, if the learner does not understand the meaning of 'function' or the Theory of Structural Functionalism, or the Systems Approach? This would be illogical. Foundational knowledge and the ability to recall and understand the data are essential.

Thus, if a learner can recall and understand the meaning of the concepts of 'function' and 'family' and its characteristics, it should be possible to demonstrate the application of one's knowledge to related questions, case studies, problems or situations presented. It is

important to note that this *transitioning* is not automatic. The challenge is especially palpable when a learner moves from School to UG education, from UG to PG, or from a Master's programme to Ph.D. It would be necessary for the facilitator to illustrate with relevant examples, activities, discussions, break-out online/in-person groups, peer-learning, collaborative learning, etc., to enable learners to *develop* application and HOTS skills. Taking students through the process will provide them with the inputs and ideas to proceed successfully towards application and HOTS.

For the vast majority of students who are used to learning by rote, the lament is that there are no ready-made "answers" to 'application-type' questions. This is also the argument presented especially by examiners, when it comes to paper assessment. Application-type questions lend themselves to multiple responses; there is no 'one size fits all' principle here. Each learner has the freedom to demonstrate one's ability to apply 'knowledge' to a new situation or context. This is not to say that 'anything goes'.

To be able to *apply* one's learning is an essential 21st-century skill; the ability to solve, arrive at something new, find solutions, or alternatives or think outside the box is an especially valued 21st-century skill. It is not sufficient to merely re-think our instructional processes and revamp one's paper setting skills; it is equally imperative for evaluators to develop appropriate 'Assessment Criteria' (or an Assessment Rubric). The rubric/criteria would need to be transparent; they would have to be clearly communicated at least to the learners. Explicit criteria will help to standardize the marking of test/exam papers, projects, research reports, presentations, etc.

We have been discussing the value of application-type questions. Compare the examples (Sets A and B) given below:

Set-A:

a) Draw a neat and labelled diagram of the digestive system of an earthworm.

b) Describe the problems of migrants.

c) Explain the features of nitrogen.

d) Identify the rivers marked on the map given.

e) Define 'buoyancy'.

None of the questions in 'Set A' help us to explore 'applying' abilities of examinees. In fact, these questions only lend themselves to finding out the capacity of examinees to dish out previously learned material.

Observe how the questions in 'Set B' below provide more scope for learners to showcase their application skills and HOTS.

Set-B:

a) Read the descriptions of the two situations provided. What measures would you suggest to solve the problems that you anticipate?
b) 'There is a correlation between overpopulation and intense competition in every sphere of society today.' Discuss this statement with relevant examples of your own.
c) Show the effect of buoyancy in the experiment described below.
d) Discuss the role of nitrogen in the given reaction.
e) Why do you think cropping patterns vary between the West and East coasts of India?

The National Educational Policy 2020 encourages teachers and learners to move towards 'application-based' learning and testing. This is not a new suggestion as the National Curriculum Framework had also emphasized the same objective over a decade prior. Those of us who are part of a changing educational system must start making these changes in our teaching styles as well as in the skill of paper-setting, question construction and evaluation. In order that our learners are better-prepared to tackle application-type questions, which is the thrust of this article, we have to rework and rethink our *methods* of instruction, the *objectives* of our lessons as well as pre-determined learner competencies for every module. These would not only need to be in tune with our Aims and Objectives, but they would also need to be inextricably linked to testing, so that *effective* evaluation can take place.

Teachers may shy away from writing and sharing 'Model Answers' with their students. The stated fear is that students would, over time, study these and hence they refrain from going beyond the minimal framework. How then are learners expected to know what a

'model' answer is like if the teacher remains uninclined to demonstrate this in concrete terms? The very suspicion that learners will end up returning these 'model answers' will expose the abject failure of teachers to be creative paper setters in the first place.

To summarize, Application-based learning involves the interaction between the instructional process and evaluation. The facilitator plays an instrumental role as one has the freedom and autonomy to incorporate active learner participation during instruction. This is possible if there is well-thought out academic planning. As regards the evaluation process, here are some suggestions to move towards asking application-type and HOTS questions: (i) Prior to paper-setting, design a 'Blue Print of Question Paper' that is tilted towards Application-type and HOTS. (ii) Factor in the aim and objectives of the paper and take into account the stated learning competencies for each module. Question-items must be linked to these measurable learner competencies. (iii) When formulating question items, we must ask ourselves if the questions are those which encourage examinees to cite ready-made "answers", or do they encourage originality of thought, application of knowledge, creativity and divergent thinking? The bases for developing application-type and HOTS questions should take into account the resources and learner experiences of the instructional phase. This includes textbooks, reference materials, videos, guest lectures, webinars, internet sources, activities, life experiences, unplanned events, experiments, etc.

All that is written above focuses largely on the cognitive domain of learning. Have we ever wondered why the 'affective domain' is hardly given any valuable presence while setting question items? One could also bear in mind the value of 'transfer of learning,' within the subject, between subjects, between previous knowledge and newly acquired data, so that a more holistic understanding and application can be demonstrated through questions that are asked. Cumulative learning is important so that ultimately the individual can appreciate the value of holistic rather than compartmentalized knowledge. Such learning will hold the learner in good stead and bring us a step closer to the goal of academic excellence, and perhaps better preparedness for future individual and societal needs.

References

1. Anderson, L. W. and Krathwol, D. R. (2001). Taxonomy for learning, Teaching and Assessing: A revision of Bloom's Taxonomy of Educational Objectives. Pearson.
2. Flanders, N. A., & Simon, A. (1969). Teacher Effectiveness. Classroom Interaction Newsletter, 5(1), 18–37. http://www.jstor.org/stable/23869471
3. MHRD (2020). National Education Policy 2020. Retrieved from https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
4. NCERT (2005). National Curriculum Framework 2005. Retrieved from https://ncert.nic.in/pdf/nc-framework/nf2005-english.pdf

Investigating Teaching Career Choices and Perception towards Teaching Profession among Student Teachers

Bijoy K Thomas*

Assistant Professor, St.Xavier's Institute of Education, Mumbai, India
**Corresponding email : bijoy@ebijoy.in*

Abstract

Education is essential to cultivating respect for the value, dignity, and equality in a diverse society. Teachers believe in the power of education and the importance of providing children with excellent role models, and they teach with that faith. They teach not for recognition or wages but because they are passionate about youth and education. They can play a crucial role in laying the foundation for the future of society because they will educate students in school according to their beliefs and values. Therefore, teachers must internalize universal values to cultivate a dignified generation for a peaceful society. Many factors influence the teachers to play a pivotal role in society. Two significant factors that shape teachers' professional identity are the motivating factors that force individuals to choose the teaching profession and the teachers' perception of teaching. Determining reasons for choosing to teach and career perceptions of student teachers will help to analyze the thinking process of their vision towards teaching. The present research study has been specifically explored to examine the motives behind selecting teaching as a profession and student teachers' perceptions towards the teaching profession. In this study, qualitative methods were adopted for exploring research questions. The participants of the study were 28 second year student teachers. The study identified various themes and subthemes from the participants' qualitative responses.

Keywords: Career path, perception towards teaching

Introduction

Education contributes to the country's economic growth because it is about acquiring knowledge and being able to apply it wisely to our lives while improving the lives of others. Students may learn physical and emotional abilities, good manners, brotherhood, patriotism, and religious tolerance through education. Education aims to ensure that students have the knowledge and skills necessary to work and succeed and the compassion and emotional means to be part of a safe and peaceful society (Bhat, 2018).

A teacher plays a vital role in the entire process of education. Teachers are social engineers. They broaden the young minds of the pupils to build up a society embedded with social values. The teacher encourages the curiosity and imagination of the pupil to create a magical learning experience. They give children a purpose, prepare them for success as citizens of our world, and inspire them to succeed. The role of the teacher in society is of paramount importance in securing a promising future for the nation. Thus, teaching is a service rather than an occupation or profession. Many factors influence the teachers to play a pivotal role in society. Two significant factors that shape teachers' professional identity are the motivating factors that force individuals to choose the teaching profession and the teachers' perception of teaching.

Three types of motivating factors are often emphasized in teacher education research when deciding on a career in teaching. (Bastick et al., 2000; Boz et al., 2008). These are extrinsic motives, intrinsic motives, and altruistic motives (OECD, 2005). Society needs whole-hearted, committed teachers to bear the fruit of education. Thus, it is critical to understand the motivational factors that influence an individual's decision to pursue a teaching profession.

Recent research findings reveal that teachers' broader perceptions towards teaching are critical to their ability to teach effectively. Instructors' beliefs, perceptions, and attitudes impact their practice and, in turn, influence their students' performance. (Eggen & Kauchak, 2001). *It was also found that* teacher burnout is linked to a teacher's positive outlook on the teaching profession, which impacts their classroom performance and practice. (Ispir, 2010). Teachers' psychological experiences and their views of their job may be causes of stress, which might reduce their effectiveness as educators. (Ransford et al., 2009). Teaching is a challenging profession, requiring a high level of accountability and selflessness. However, owing to misunderstandings about this profession, it is seen as a vocation rather than a nation-building process. (Watt, 2012). This study explores motivating factors for choosing the teaching profession and perception towards teaching among student teachers.

Research Questions

The success of every educational system is heavily reliant on the efforts of teachers. They are the driving force behind the learning process, and the entire system depends on them. (Government of Botswana, 1994). Determining reasons for choosing to teach, career perspectives and expectations are some of the critical areas that will be examined to understand the vision of student teachers towards their profession. So the research questions framed for this study are;

1. What motivating factors influenced student teachers to choose teaching as their career?
2. How do student teachers perceive the teaching profession?

Objectives of the study

1. To explore the motivating factors influencing student teachers to choose the teaching profession,
2. To study student instructors' perception towards teaching profession

Research design

In this study, qualitative methods were adopted for exploring research questions. For this, general descriptive research was used. Descriptive analysis aims to provide a detailed description of the investigated problem to establish its current profile. (Borg et al. 1993). The first phase of this study was the collection of data with the help of open-ended questionnaires. The second phase was the analysis phase of the data and interpretation.

Sample

The researcher collected the data from 28 student teachers. The student teachers were from the second year B.Ed. course.

Data collection

A student teacher's motivation for choosing the teaching profession and their perception of it was assessed using a questionnaire. The researcher elicited descriptive responses in

order to ascertain the respondents' motivations and perspectives regarding the teaching profession. Qualitative tools were used to collect the data in this study.

Significance of the study

A review of the teacher education literature reveals that very little study has been undertaken on the elements that impact young people's decisions to pursue a career in teaching. The research study exploring the motivational factors for choosing the teaching profession and student teachers' perception towards the teaching profession is extremely important in the present-day context. The findings of this research may be utilized to better understand student teachers' perceptions about their careers and assist teacher educators in developing positive attitudes toward their profession. This study could serve as a framework for the design and implementation of strategies aimed at increasing the level of commitment and retention among teachers. The findings of the study will help teacher training institutions to develop clear guidelines on framing the policies for teacher education curricula. The findings also will help strengthen the component of professional ethics in teacher training programmes so that student teachers conduct themselves according to the requirements of the teaching profession.

Data Analysis and Discussion

Questionnaire responses were subjected to thematic analysis. The written responses were analyzed by identifying common themes from the statement responses of the participants. Each of the responses was coded.

Question No. 1: What motivated you to pursue a career as a teacher?

Qualitative analysis of the responses helps to identify major themes and minor themes. There are major themes identified as intrinsic, extrinsic, and altruistic.

Major Theme: Intrinsic motives

Subthemes emerge from the analysis of the main theme of intrinsic motivation. Subthemes are cognitive motives and self-confidence. These subthemes are highly influential factors in motivating student teachers to choose the teaching profession.

Subtheme 1: Cognitive Motives

The first subtheme identified from the responses is cognitive motives. Most of the student teachers are interested in sharing their knowledge with the younger generation through the teaching profession. Participants indicated that teaching is a profession where a more knowledgeable person (a teacher) shares the knowledge with the children.

"Teaching is Nobel profession and I love to share my knowledge with the upcoming new generation."

"The interest towards teaching the concept to others."

"There are various factors, but one of the most important factors is that I love teaching and love to interact and impart knowledge to the students."

Subtheme 2: Self Confidence

The second subtheme identified under intrinsic motivation is self-confidence. Student teachers have shared their view that they have selected this profession because they have excellent communication skills and are confident in delivering knowledge successfully.

"I feel that I have good explanation skills, and I'll be able to deliver knowledge to my students successfully."

"I am interested in teaching, and it suits my personality."

Student teachers share their view that they selected the teaching profession because they are interested in sharing knowledge or teaching concepts clearly to young students. The research results of Chong & Low (2009) and Jungert et al. (2014) also revealed that cognitive motive is a significant factor that causes intrinsic motivation to choose the teaching profession. Struyven et al. (2013) reported that self-confidence was also one of the reasons to choose the teaching profession.

Major theme: Altruistic motives

The second major theme was identified based on the responses as altruistic motivational factors. Rarely did the participants share their views regarding the altruistic motivational factor to choose their career as teaching. Based on the data analysis, two significant

subthemes have been identified. The subthemes are the transformation of the young generation and society and self-transformation.

Subtheme 1-Transformation of the younger generation and society

Participants stated that they selected teaching as a career because they wanted to make a difference in the minds of future generation.

"I took teaching as work because I feel that teachers teach students and have a great role in changing students' lives, which will help bring change in society."

"The factors that have led me into teaching are the interest in teaching, making a difference to society, and being with the young minds to help them do things positively for society."

Subtheme 2: Self-Transformation

One comment indicates that choosing a teaching profession is for self-transformation through self-regulated learning and reflection.

"The zeal and passion for being driven towards the sharing of education. I also believe this was truly a time to transform myself internally and externally and mould me as a different personality."

Major theme: Extrinsic motives

The third major theme identified was the extrinsic motivational factor based on the analysis. Different factors are involved in the extrinsic motivational factor. The majority of the student teachers have chosen this profession due to external factors. The subthemes identified under extrinsic motivational factors are family pressure, family influence, teacher's motivation and status of the teaching profession.

Subtheme 1: Family Pressure

The first subtheme under extrinsic motivation is family pressure. Participants shared that they had selected the teaching profession due to family pressure.

"My family members wanted me to become a teacher."

Previous research findings show that family plays an essential factor in choosing a career. Stambler (1998) found that parents are often influential when young people make career decisions. Parents are also the most commonly reported catalyst for initiating the decision-making process (Biggart et al., 2004).

Subtheme 2: Family Influence

The second subtheme was the family influence. In some cases, student teachers are influenced or motivated by their family members to become teachers.

"My mother motivated me to teach; besides, I developed some interest in teaching initially before joining B.Ed. program."

"After finishing my graduation, I discovered that I love to teach students and looking at my Mom touching students life through her knowledge inspired me the most."

Based on the responses, it was found that students are observing their parents' profession. Through observation, they learn the values imbibed within a particular profession.

Subtheme 3: Teacher's motivation

The third subtheme identified as the teacher's motivation to choose the teaching profession is due to the teacher's motivation. Many of the student teachers responded that their teachers are the role model, and due to their motivation, they have chosen this profession.

"There was a teacher in my school; she was an inspiration for me, and I always aspire to be a teacher."

"While in school, I observed and listened to teachers who inspired me to be like them, to teach students skills that will help them succeed in life."

Subtheme 4: Status of the teaching profession

The fourth subtheme was the status of the teaching profession. Student teachers responded that teaching is the most respectful job in the current context. They have selected this career due to the status given to the teaching profession by society.

"Teaching is one of the respected professions, and it's the mother of all professions."

"I am always looking towards satisfaction and happiness, and no job brings you more happiness than being with children. I believe it's the most respectful job. And these things have attracted me towards teaching."

Discussion

Analysis of the above theme reveals that the student teachers have selected this profession based on intrinsic, altruistic, and extrinsic values. The elements that influence an individual's decision to pursue this profession is different from each individual. Among the three major subthemes, the altruistic theme and related responses were not emphasized much. At the same time, it was also analyzed that extrinsic motivational factors were well dominated by the student teachers in choosing their careers. Previous research findings also revealed three different motives behind the teaching profession (Bastick 2000; Boz and Boz 2008). The student teachers did not mention critical motivational factors like service to society, interest in learning, and teachers as social engineers. Findings reveal that intrinsic motivations to choose the teaching profession, including job satisfaction, sense of achievement, their love of the subject and enjoyment of working with children, were rarely mentioned by student teachers.

Question No. 2: What does teaching mean to you?

The analysis of the statement reveals that the concept of teaching is emphasized with cognitive aspects rather than a harmonious development. The major themes identified are knowledge transfer, overall child development, learning opportunities, community empowerment, and profession or occupation.

Major theme: Knowledge transfer

The major theme identified by the researcher based on the responses is that teaching is a mode of knowledge transfer. The student-teachers mentioned various purposes for transferring knowledge. Sub themes identified by the knowledge transfers are knowledge transfer for character development, knowledge transfer and value integration, and sharing of subject knowledge.

Subtheme 1: Knowledge transfer for character development

The first subtheme identified as teaching is a knowledge transfer process for character development. According to them, character formation is directly connected to acquiring knowledge.

"Teaching, in my view, is a medium through which I can create development in the knowledge and character of a learner."

"Teaching, in my opinion, is transacting the best-known knowledge to the knowledge seekers."

"Learn and share what you learn, guide students to learn, help them understand what they are learning and why - to encourage students to like and seek learning."

Subtheme 2: Knowledge transfer and with value integration

The second subtheme identified as teaching is a process of educating the future generation with knowledge and values.

"Teaching is the transaction of knowledge and values in my students to make them responsible citizens and good human beings."

"Imparting the knowledge to students and making them believe that they can change the world if they can set their minds. Teaching has the power to mould one's life and make it fruitful."

Subtheme 3: Sharing of Subject knowledge

A few comments reflected that teaching is a process of simplifying the subject content and transmitting subject-specific knowledge.

"Simplifying the subject as much as I can."

Major theme: Overall development of Child

A few of the responses revealed that teaching is a process that goes beyond the transmission of knowledge. Teaching is a process based on the moral values that support the child's harmonious development.

"Teaching means that we as a teacher are responsible for making changes in society or inspiring students to do good in their lives."

"It means moulding children towards a better path. If I successfully make a better person out of the child, I will be satisfied. My goal is as many hearts and minds I could touch I would."

"Teaching means trying my best for the child's holistic development and doing my best to also cater to their mental health and the curriculum."

Major theme: Provide learning experiences

A group of student teachers commented on teaching as providing quality learning opportunities with students at the centre of the teaching strategies. The subtheme identified are learning experiences from teachers and peer groups and self-regulated lifelong learning.

Sub theme 1: Learning experience from teacher and peer group

The qualitative responses reflected that teaching is the process of providing meaningful experiences to the students. One of the comments reflected that teaching is a process to help students learn from the teacher and their peer group.

"Teaching is a motivation to provide a meaningful learning experience."

"Teaching for me is not what I do but also what wonderfully I make students do and learn together."

Subtheme 2: Self-regulated lifelong learning

Student teachers commented that teaching is a process of lifelong learning. According to them, teaching is possible only when learning takes place. The following comments refer to the professional development of teachers.

"Teaching is not one-way process in this process teaching, and learning happens from both the sides from teachers and students."

Major theme: Empowering the community

Comments were also reflected concerning social empowerment. A few comments reflected that teaching is not only a job or transferring knowledge but also a social responsibility to empower the community through education. Through the teaching process, it is possible to uplift the quality of life and develop a society with justice. The teacher could spread joy and happiness among the community members through teaching. This theme was not emphasized much by the student teachers.

"To make everyone at one level."

"Spreading joy and happiness with children."

Major theme: Profession and hobby

A few of the comments reflected that teaching is an occupation or hobby.

"It is work for me."

"Teaching means more than just a profession to me. It's more of a hobby to me."

Discussion

The aim of teaching is a significant aspect in determining a teacher's professional identity and social position. The research found that teachers with a broader view of their professional activities had higher overall job satisfaction and commitment. Teachers' professional obligations are connected with their broader thoughts and sentiments about their work (Day, C. 2007, Hall, S. 2009).

The findings of the study show that student teachers emphasized the cognitive dimension as the purpose of teaching. Most of the responses emphasize that teaching is a transmission process of knowledge. The teaching profession is intended to transfer knowledge and the development of cognitive effort—the perception of teachers towards teaching influences their role. Teachers considering teaching as a cognitive process emphasizes the teacher-centric activity in the classroom context. They impart more knowledge than experience in their teaching process.

Understanding student teachers' perception towards the concept of teaching is necessary to make future teachers develop their teaching quality with better skills and attitudes. It can make their interactions with students more dynamic in and out of the classroom. It's complicated to change a student teacher's perception towards teaching in terms of their cognitive habits and personalities. However, through effective planning of the teacher education curriculum, it is possible to develop a better and broader perception among student teachers towards the teaching profession.

Conclusion

The findings of the study reveal that the current teacher education curriculum helps student teachers to develop teaching competencies and help them gain an understanding of different teaching strategies to deliver the content knowledge to learners. However, it is essential to create a broader philosophical understanding of the teaching profession among student teachers. Teacher educators must pay attention to both the ideals embedded in the teaching profession and the pedagogical abilities of student teachers, exposing them to a range of teaching approaches that allow them to grow learners harmoniously. Possessing a more positive view of teaching among student teachers could serve as a springboard for formulating and implementing strategies that enable the teachers to take an active role in their profession.

References

1. Bastick, T. (2000). Why teacher trainees choose the teaching profession: Comparing trainees in metropolitan and developing countries. International Review of Education, 6(3), 343–349.
2. Biggart, A., Deacon, K., Dobbie, F., Furlong, A., Given, L. and Hinds, K. (2004). Findings from the Scottish School Leavers Survey: 17 in 2003, Scottish Executive, Edinburgh, available at: www.scotland.gov.uk
3. Borg, W. R., Gall, J. P., & Gall, M. D. (1993). Applying educational research: A practical guide. White Plains, NY: Longman.
4. Boz, Y., & Boz, N. (2008). Kimya ve matematik öğretmen adaylarının öğretmen olma nedenleri. [The reasons of becoming teachers of chemistry and mathematic pre-service teachers]. Kastamonu Eğitim Dergisi, 16(1), 137–144.
5. Day, C. 2007. A passion for teaching. Nottingham: University of Nottingham.

6. Eggen, P., Kauchak, D. (2002). Strategies for teachers: Teaching content and thinking skills (4th ed.). Needham Heights: M.A. Allyn and Bacon
7. Government of Botswana (1994). The revised national policy on education - Government Paper no. 2, Gaborone: Government Printer.
8. Hall, S. 2009. How to maintain a passion for teaching. New York. Center for Enhancement of Teaching and Learning.
9. Ispir, O.A. (2010). Teachers' Burnout Levels and Their Attitudes Towards Teaching Profession. EABR & ETLC Conference Proceedings.Dublin, Ireland. pp. 229-233.
10. Organization for Economic Co-operation and Development. (2005). Attracting, developing and retaining effective teachers—Final report: Teachers matter. Retrieved from http://www.oecd.org/edu/school/attractingdevelopingandretainingeffectiveteachers-finalreportteachersmatter.htm.
11. Ransford, C.R., Greenberg, M.T., Domitrovich, C.E., Small, M., Jacobson, L. The Role of Teachers' Psychological Experiences and Perceptions of curriculum supports the implementation of a social and emotional learning curriculum. School Psychology Review, 2009, 38(4), pp.510-532.
12. Reyaz Ahmad Bhat. (2018). Value Based Education: A Need of Present Society. Int. J. of Adv. Res. 6(Oct). 838-843
13. Stambler, B.J. (1998). An examination of the effects of parental influence on secondary school completion. Unpublished EdD dissertation, State University of New York at Albany, Albany, NY.
14. Watt, H. M. G., Richardson, W. P., Klusmann, U., Kunter, M., Beyer, B., Trautwein, U., et al. (2012). Motivations for choosing teaching as a career: An international comparison using the FIT Choice scale. Teaching and Teacher Education, 28, 791–805

Open Pedagogy For Enrichment and Transformation

Vini Sebastian*

Associate Professor, St. Xavier's Institute of Education, Mumbai, India
**Corresponding email:vinseb2@gmail.com*

Abstract

Open Pedagogy has been advocated by many educators and philosophers. The principles of open pedagogy are not yet implemented in our educational institutions in full measure. The paper explains the meaning of open pedagogy in detail, and also expresses a different point of view about open pedagogy. Educational institutions must be able to adopt the principles and techniques of open pedagogy to develop the minds of theirstudents and help them grow in full measure. Growth involves the participation of students in the teaching- learning process. Open pedagogy shifts the role to learners as co-creators of knowledge, promoting full freedom to teachers and students to dissolve the boundaries of the prescribed curriculum and break free into aworld of learning with no strings attached. Open pedagogy also stresses on give and take principle, while focusing on the use of open educational resources. This paper will beneficial to teachers, students and administrators to check their practices and also implement the suggestions for open pedagogy. The author hopes to communicate the principles of open pedagogy, especially for teacher education institutions. The paperalso provides how OERs can be integrated into the teaching-learning situation keeping in mind David Wiley's'OER enabled pedagogy. The paper can be of great significance to policymakers and those involved in the examination and syllabus framing.

Keywords: Open Pedagogy, OER, Academic freedom, Experiential learning, Differential treatment

Introduction

David Wiley states that open pedagogy is the set of teaching-learning practices in the context of free access and having the 4R permissions (reuse, revise, remix and redistribute) which are the characteristics of the openeducational resource. David Wiley while encouraging the use of OERs propagates the use of 'OER enabled pedagogy. Open Pedagogy is not a new idea, in 1979 Canadian Claude Paquette defined three principles of open pedagogy: autonomy and interdependence, freedom and responsibility, democracy and participation. In 1970 Paulo Freire in his book "Pedagogy of the

Oppressed' condemns the 'Banking Model of Education' and firmly confirms that learners must be co-creators of knowledge and the teacher-student relationship must be friendly to facilitate this. Open Pedagogy according to many would be a praxis that engages free discussion and use of learning materials, technology, issues in education and society where much focus is given on freedom of thought and expression.

The situation in our classrooms today is very restrictive where students are taught the concepts in the prescribed curriculum and also restricted from answering beyond the syllabus. The examination system also is restricted to one format and all students adhere to all the rules and regulations imposed in the restrictive environment created to answer the questions. Students are thus not allowed to exercise their academic freedom,as they are perceived as "receivers" rather than "creators" of knowledge. Teachers also consider themselves as recipients of the given curriculum and most often stick to the boundaries determined by the prescribed curriculum. Open pedagogy will break these imaginary boundaries that restrict the teachers and students.

The word "Open"refers to pedagogy that is freely developed, accessible and also adapted for learning. Educational institutions are still to adopt this pedagogy in full measure. There are several ways that this integration can be made in theroutine process. The entire philosophy of 'Open Pedagogy' requires a transformation in the mindset of administratorsand teachers. First of all the "I teach" thought must be removed from the minds of the teachers to "We learn"thought. In classrooms, the hierarchy of learning must be demolished to a "collaborative learning" mode, in which the teachers and students learn together. This is the *first pedestal* of open pedagogy.

Open pedagogy is ensuring students' and teachers' academic freedom. In a study conducted by Sebastian, V.:Academic Freedom, Accountability and Professionalism in Higher Education, perceptions of academic freedom teachers in general and professional education were compared. The findings reveal that teachers in general education, aided institutions and those belonging to education courses have a high perception of academic freedom. Academic freedom is an important ingredient of open pedagogy. There are many ways that teachers can infuse principles of open pedagogy through academic freedom into their teaching practices. Openness with substantial academic freedom for teachers and students must be a part of the institutional culture

also in all the activities.

The learning environment created by the teachers must be free and democratic. All pupils must experience the freedom to ask questions, deliberate on issues that they consider as important related to the topic and also bring in some new information related to the topic. This friendly atmosphere of giving and receiving can bring in more learning and retention which will boost the learning benchmark. The daily interactions must be open and unrestricted all the time. Teachers must break free from the prescribed curriculum, do not stick to the basics and feel free to experiment on related concepts of academic and social relevance. This would satisfy the component of enrichment in open pedagogy. The students who are recipients of open pedagogy must be able to appreciate the knowledge gained.

The teacher-student interaction and classroom assignments are the main factors in which open pedagogical principles can be implemented. The students must possess a high academic motivation to think, explore, solveproblems, develop situations, engage in projects and conduct programs independently. Teachers must assumea supportive role in all these activities with facilitating resources and academic help wherever required. This is the transformation required in the open pedagogy, where the traditional roles of teachers are demolished, and new roles are adopted. Beingstudents in higher education, they must develop qualities of self-regulated learning practices. In an open pedagogy the only criterion of excellence is "creativity", a question asked to oneself is 'How creative were you in a project?'. Students must unleash their creative potential with no strings tied.

Benjamin Bloom and his associates presented the two dimensions: the cognitive process dimensions and the knowledge dimensions. Open pedagogy refers to the higher levels of learning experiences in the cognitive processes that are – Analyzing, Evaluating and Creating. The knowledge dimension: Factual, Conceptual, Procedural and Metacognitive must be considered by teachers to provide different learning experiences and help the students capture their higher mental abilities. The learning experiences planned for the students in open pedagogy must take a drastic change. It must include – Problem formulation, Case study designing, Graphic representations, Correlating with real-world situations, non-contextual situational learning. These are breakthrough learning experiences that open pedagogy would propose for students, where students are

no longer recipients but developers and co-creators of knowledge itself. They do not have to take what is given to them but have a choice of how they want to view content. The constructivist approach developed by Jean Piaget highlighted the adaptive function of the mind to help the students think differently and think critically.

The assignments given in schools and colleges are designed by the teachers and given to the students to test their knowledge and skills. These assignments become uninteresting to most students, and they do it for the sake of doing. Open pedagogy refers to assignments much connected to the students' own lives and their world. The assignments must give them a chance to explore their world and understand it better. Most of the assignments are done by students, marked by the teacher and shelved for eternity in the storage provided in institutions. Assignments must be designed such that there is growth in knowledge and awareness of conceptsas well as of the real world. This will lead to a transfer of learning in students. Assignments are a resource; they must be shared with the students so that there is a multiplier effect on all students. According to David Wiley, teachers must not aim at 'Disposable assignment' but must have all features of open educational resources. Assignments must therefore be empowering which students are not complaining about but are excited to engage in. The students could join up into a group and club the assignments into a project activity, thus making the assignments are mini-projects that can lead to new findings. These modified projects can thenbe shared as 'Open educational resources.

Open pedagogy involves the preparation of teachers and students towards its principles. The resources used in open pedagogy are open educational resources. Hegarty (2015) describes eight attributes of open pedagogy:using participatory technologies, fostering openness and trust, focusing on innovation and creativity, sharing ideas and resources, building a connected community, learning must be learner-generated, engaging in reflective practice, conducting peer reviews on work. DeRosa and Robison (2017) while explaining open pedagogy stated that students must be engaged with the content, they must be in touch with the open educational resources. There should not be a gap between learners and the educationalcontent that they are dealing with. Teachers must facilitate to remove this gap that learners are experiencing by engaging in a more hands-on activity and free questioning and different modes of interaction. The feelings of being bound and restricted are not the characteristics of open pedagogy.

One way in which educational institutions can promote the creative cognitive style of thinking is to seriouslylook at open educational resources as a practice. There are three levels in which educational institutions can integrate open educational resources in their daily curriculum – Adoption, Curation and Development of openeducational resources (OERs). Teachers must adopt certain OERs as a part of their teaching process, references given to the students must be OERs, which will help them understand the meaning and usefulness of OERs in the teaching-learning process. The knowledge of creative commons licenses must be mandatory in all educational institutions which can be used for OERs depending upon the author's free will on distributing the OER.

The following diagram summarizes the essence of open pedagogy which shows the features of open pedagogy for transformation and enrichment.

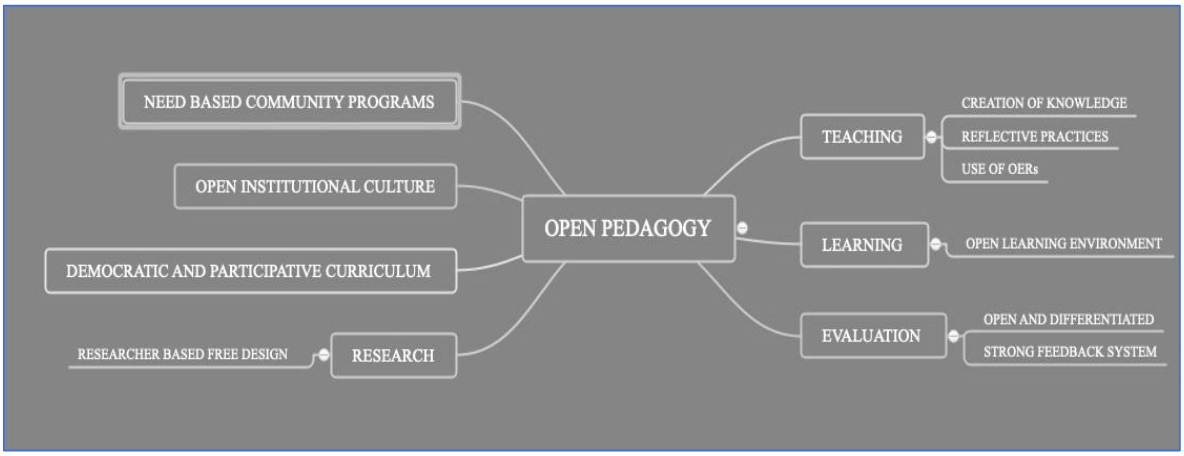


Figure 1. Open Pedagogy in Educational Institutions

Educational institutions are places where students must experience their full growth-cognitive, affective and psychomotor. Teachers can do much if they adopt open pedagogical principles in their teaching, learning andevaluation. Evaluation of students' performance is mostly perceived to be in the hands of teachers and peoplewho don't know the child. Open pedagogy promulgates an open evaluation system. Students can be providedwith a cafeteria approach in evaluation where they can choose their evaluation methods, abiding by the criteria of that mode of evaluation. Most of the time the evaluation is always written in nature with the teachers expecting the same answers from all. Differential treatment to teaching, learning and evaluation can have a tremendous effect on students' perception of themself and their intrinsic motivation levels. Our educational institutions require a total revamp of what they think and do, if open

pedagogy is adopted it will lead to openindividuals in thought and the society can be much harmonious. It will foster respect for each individual and also care and appreciation for each person, with no domination of ideas and imposition of common rules for all. Open pedagogy removes the standardization that is existing as a rigid factor in our educational institutions, which looks beneficial only for the teacher and educational administrators. The voice of the learner is lost in standard rules, prescribed syllabus and preplanned examination system. Paulo Freire highlights the culture of silence and ignorance that exists in our educational institutions which would be diminished under open pedagogy. The shift from recipients to creators, from voiceless to communicative would be a big shift in open pedagogy. The outcome of open pedagogy must be in the reflection of the stakeholders stating the extent of openness experienced by each one of them. This will lead to student and teacher enrichment and transform the entire education system leading to changes in society.

References

1. Commonwealth of Learning. Trends in Open Learning, Lesson 10, https://tell.colvee.org/mod/book/view.php?id=644&chapterid=956

2. Rebus Community. Copy of Open Pedagogy, Open Pedagogy Notebook Sharing Practices and Building Community http://openpedagogy.org/open-pedagogy/

3. Stephem McCloskey (2020) Development Education and Climate Change. https://www.developmenteducationreview.com/issue/issue-30/pedagogy-oppressed

4. Wiley, D. Open Content (2014) Iterating Towards Openness. https://openedreader.org/chapter/open- content/

A Metacognitive Perspective of Triple Loop Learning

Geeta S. Shetty*

Associate Professor, St. Xavier's Institute of Education, Mumbai, India
**Corresponding email: geetashetty@sxie.in*

Abstract

The most crucial factor that influences learning in an individual is the personal factor. What one learns from the environment depends upon how it is perceived by the learner. Depending upon this, there are three loops of learning that determine the depth of learning that has taken place. Educationists should not stop with the first and second loop of learning, rather learners should be made competent in triple loop learning, as it ensures learning through reflection. Triple Loop learning involves focusing on the deeper thought patterns and beliefs that make one arrive at a particular analysis of events /phenomena. To achieve this, teachers need to adopt Metacognitive teaching, so that they can enable the learners to think about the way they think, thereby leading to triple loop learning. Metacognitive strategies would enhance the critical thinking skills of learners leading to meaningful construction of knowledge. The paper endeavours to throw light on the inter-connectedness of the two concepts namely Triple Loop Learning and Metacognition.

Keywords: Loops of Learning, Triple Loop Learning, Metacognition

Introduction

Educationists have always pondered upon the factors influencing learning and the kind of learning that needs to be emphasized, in order that the outcomes of learning are in keeping with the demands of a dynamic society. Different learning theories seem to be attempts to describe universal human traits which are influential in the process of learning. Recent trends in research show an increasing interest in studying individual traits that influence learning. Educational endeavours need to be focussed on producing generations that would have enhanced patterns of thinking and learning. It is therefore necessary to revisit the different paradigms of teaching and learning in order that newer frameworks are evolved.

Loops of Learning

Single Loop Learning: This loop of learning involves one way learning, where the individual gathers knowledge for the sake of it. It is mainly concerned with following rules and regulations blindly and not questioning the assumptions and theories underlying therein. It is all about adapting oneself to changes or knowledge provided, in an unquestioning manner. Reasoning is not applied to the purpose of a learning activity, rather the focus is on performing the learning activity as efficiently as possible. Hence it implies "doings things right".

Double Loop Learning: In contrast to single loop learning, this involves reflecting on the underlying theories, principles and assumptions of information, any learning activity or educational experience. This was referred to as 'Deutero learning' by Bateson in the year 1942. The adaptation to learning is done by carefully examining the knowledge and if need be, changing the outlook or perceptions gained therefrom. Here divergent thinking takes place leading to discovery of new meaning from contexts. Knowledge is accepted only after careful review and considering it from multiple perspectives. It is a proactive form of learning in which learners set goals and strive to achieve them through contemplation and careful action. If contemplation requires modification or resetting of assumptions for the growth of the body of knowledge, then it is necessarily done. The learner looks for frameworks and patterns in a learning activity and then understands, reviews or redesigns the outcome. Here the emphasis is on "doing the right things". This leads to knowledge creation.

Triple Loop Learning: This loop of learning, simply stated is 'learning about learning'. It is not just about challenging the existing assumptions and principles, but it is about reflecting on the thought processes that make oneself take such actions. It involves the understanding about what we think, how we think and why we think the way we think about underlying principles and assumptions of any learning activity. It encourages an individual to learn about what makes him/her think in a particular manner. Higher order learning takes place when the learner reflects upon and challenges the assumptions or self-beliefs that guide his/her double loop learning. In other words, the learner reflects upon the validity and sanctity of his/her double loop learning. The process is concerned about the dynamics of the mind. The emphasis is more towards understanding the context that

guides one's thoughts leading to development of wisdom. It challenges the knowledge created by the second loop of learning.

Triple Loop learning is thus a self-regulatory process, wherein the individual becomes aware of the self-beliefs that influence his/her thought patterns and then directs his/her thinking to take objective stand on any learning or at any event. Zimmerman (2011) considered self-regulation as a generic construct including the regulation of social behavior, metacognition, and motivational regulation. Learners can discern how to control their internal states, beliefs, social behaviors, and external environments in the learning process (Zimmerman 2013). As noted in previous studies (Donker et al. 2015), students with better self-regulation may exhibit greater self-efficacy, be more cognizant of their strengths and weaknesses, and be more likely to achieve academic success. This pattern has been acknowledged as a process of planning, monitoring, and regulating actions toward learning objectives (Ziegler, Stoeger, and Grassinger 2011) or a sequenced set of processes when managing internal and external distractions (Ben-Eliyahu and Bernacki 2015).

Metacognition

Flavell (1970) defined Metacognition as "thinking about thinking", or in other words, an individual's knowledge of and control over one's actions. It is a process of reflecting on one's own thought processes while learning and then regulating them in order to enhance learning. Flavell (1979) according to his definition of Metacognition as 'cognition about cognition' categorized metacognition into knowledge of cognition and regulation of cognition.

Metacognition is a thinking activity that is closely related to cognitive constructivism. It involves higher order critical thinking processes that stimulate self-reflection, initiative and self-regulation. Constructivism, as propounded by Piaget involves development of mental structures by an individual, through reflection on experiences. On the other hand, Vygotsky's theory of Social constructivism, emphasizes the role of more knowledgeable others in the learning acquired by learners. In any case, both forms of constructivism, necessitate the learner to actively manipulate the cognitive processes.

Hashempour M., Ghonsooly B., Ghanizadeh A. (2015) found through their study that there is a direct relationship between level of education and Metacognitive awareness. Greater the level of education, greater the Metacognitive awareness. It appears that as learners advance in studies, the thought patterns become more reflective and self-regulatory. It therefore suggests the importance of developing metacognitive awareness in learners right from an early age, so that rather than becoming an incidental development, it becomes a purposeful endeavour.

Nosratinia M., Zaker A., Saveiy M. (2015) found a significantly positive relationship between self-efficacy and metacognitive awareness. The study recommended that students should be "persuaded to analyze and inspect their own learning processes to improve their degree of metacognitive awareness, which may reinforce their sense of self-efficacy." According to the study, incorporation of learning techniques and metacognition processes in their courses can result in intellectual analytical learners that can overcome their learning difficulties.

Metacognition, according to Flavell (1979), encompasses learners' awareness of their own thinking processes as well as the executive processes involved in overseeing and regulating cognitive processes. Efklides (2008) later described metacognition under the umbrella of cognition, which functions at a meta-level and is connected to the object-world through metacognitive monitoring and control. Metacognition has been classified into three dimensions: metacognitive knowledge, metacognitive control, and metacognitive experiences. In defining metacognitive knowledge, Efklides (2001) framed it as a type of knowledge retrieved from memory and a standard for learners to know about themselves and others as cognitive beings as well as their relations with various cognitive tasks, goals, strategies, or experiences. This definition resonates with an early proposal that metacognitive knowledge involves how cognitive processes should be understood or controlled (Flavell 1999). Although Flavell (1979) suggested person, task, and strategy knowledge as constituting metacognitive knowledge, Paris, Cross, and Lipson (1984) argued that metacognitive knowledge could be organized into declarative, procedural, and conditional knowledge.

Metacognitive control has been identified as the ability to deal with mental operations in metacognitive processes to attain cognitive objectives (Desoete 2008) or to employ

knowledge to regulate cognitive processes and use metacognitive strategies to control one's learning (Ozsoy 2011). However, triggering learners' metacognitive control processes is challenging, and metacognitive experiences may benefit the self-regulation process (Koriat 2007). Metacognitive experiences have been explained as cognitive or affective experiences consciously stored in a learner's intellectual enterprise (Flavell 1979) or the awareness that follows from a learner attempting to process the information needed to complete a task (Efklides 2008). Brown (1987) suggested that metacognitive control and experiences be subsumed into metacognitive regulation, which reflects how learners identify distracting stimuli (internal and external) and sustain effort for executive functions over time. According to Schraw (1998), metacognitive regulation entails three skills: planning, monitoring, and evaluating. Planning refers to the ability to appropriately select strategies and adequately allocate resources for relevant tasks. Monitoring is how learners employ strategies to monitor task performance. Evaluating taps into learners' appraisal of their regulatory processes and products of their learning.

It has been found that metacognitive knowledge develops good thinkers and lifelong learners who can cope with new situations in this rapidly changing world, (Eggen and Kaucbak, 1995 ; Tobias et al., 1999). A great deal of research work has been carried out in the area of learner metacognition. The concept of teacher metacognition has not yet been considered to a significant extent, although some studies have been done with teachers of Science and Mathematics. The studies revealed that individuals' awareness of their thoughts and actions as teachers—i.e., teacher metacognition is a critical layer of professional expertise (Fairbanks et al. 2010). This is because the greater teachers' awareness of themselves and the better their ability to evaluate and adapt their practices, the more effectively these practitioners can enhance their students' own development (Hattie 2012). Thus, metacognition, broadly defined as "cognition about cognition" or "thinking about thinking", has untapped potential to contribute to understanding how teachers can enhance both their instruction and students' learning processes in a variety of settings (Anderson 2002; Borg 2015; Graham and Phelps 2003).

Teaching involves "doing the right thing in the right way and at the right time in response to problems posed by particular people in particular places on particular occasions" (Duffy et al. 2009, 245). It is thus multi-dimensional as well as contextual. Metacognitive teachers

deliberately and actively monitor what they are doing, reflect on the rationale for doing so, and adapt their instructional repertoire as required by various situational demands (McCormick, Dimmitt, and Sullivan 2013).

Among the components thought to make up teacher metacognition are metacognitive knowledge, metacognitive skills (i.e. metacognitive regulation, metacognitive strategies) and metacognitive experiences. Metacognitive knowledge consists primarily of one's conceptions and beliefs of task structures, and the interaction of one's cognitive goals and abilities (Flavell 1979; Schraw 1998; Schraw and Moshman 1995). Metacognitive knowledge would help teachers to critically analyze the various teaching methodologies with reference to the context of the learners as well as personal strengths and weaknesses. Thus as Pintrich (2002) has pointed out, Metacognitive knowledge is a combination of declarative, procedural and conditional knowledge.

Metacognitive skills, on the other hand, are processes used to guide, monitor, control and regulate cognition (Veenman 2016). As Efklides (2009) explains, "the deliberate character of Metacognitive Skills entails that the person consciously and purposively applies strategies, which ensure that his/her thinking will be in the desired direction and will bring about the outcome defined by the goal set". Metacognitive skills implicate teachers' awareness of their performance, the selection of appropriate strategies that can positively impact their teaching, and their appraisal of classroom outcomes and re-evaluation of strategies that were used (Veenman et al. 2006).

Metacognitive experiences consist of feelings, estimates, or judgments related to the features of a task, the cognitive processing which takes place during the task, and the outcome of the task (Efklides 2009). Depending upon how a teacher feels about the way his/her teaching is progressing, the teacher can take measures to ensure that learning takes place in the right direction. Paris (2002) emphasized that Metacognitive experiences are an important aspect of teacher metacognition because they involve an active awareness on the part of a teacher who is performing a task, thus informing them in real time of their progress toward desired outcomes.

Metacognitive Teaching For Triple Loop Learning

Teachers need to focus on developing in learners the acumen for Triple loop learning, that is learning about the way one's thought patterns are shaped. This is essential in order that the knowledge gained is more authentic and objective. In order that this is achieved, teachers would need to practice Metacognitive teaching which is not just teaching about Metacognition, but teaching Metacognitively. "Teaching with metacognition means teachers think about … instructional goals, teaching strategies, sequence, materials, students' characteristics and needs, and other issues related to curriculum, instruction and assessment before, during and after lessons in order to maximize their instructional effectiveness" (Hartman, 2001).

Research has shown that Metacognitive skills are transferable (Fisher 1998, Veenman 2016). Metacognitive teachers plan, monitor and evaluate their teaching learning process. They regulate their practices and constantly watch their own thoughts that influence their action. On reflection, metacognitive teachers also know how to regulate their thought patterns in order that true education is not compromised. They set teaching goals in relation to the context of the learners, plan experiences and monitor their instructional flow. They even modify their thought patterns and actions, if need be, in the best interests of learners, through reflection and self-guidance. This in essence is the manifestation of Triple loop learning among teachers.

Besides teaching Metacognitively, teachers should also spend time to teach about Metacognition to their learners. Developing Metacognitive skills in learners will go a long way to develop the strategies for triple loop learning in learners. This however cannot be achieved only through a session or two. It has to be made a regular practice, if true learning is aimed at. These endeavours will have to start young, which means that teachers at all levels of education would have to be trained in metacognitive skills. When teachers are aware of how to think about their thought patterns that influence the way they perceive phenomena / events / information / data, they get into triple loop learning. Such teachers, in turn, influence the learners to get initiated into learning about the way they learn by thinking about the way they think.

Conclusion

It is important that teacher education pays attention to training in metacognitive competencies among future teachers, so that the realm of knowledge remains authentic and relevant to the times. Metacognitive skills can enhance triple loop learning leading to a dynamic learning environment that can challenge existing models and evolve more relevant ones. Teachers with metacognitive acumen can be "capable of both teaching strategically and helping students learn strategically (Ozturk, N. 2018)

References

1. Anderson, Neil J. 2002. The Role of Metacognition in Second Language Teaching and Learning. Washington, DC: Center for Applied Linguistics, ERIC Clearinghouse on Languages and Linguistics.
2. Ben-Eliyahu, A., and M. L. Bernacki. 2015. "Addressing Complexities in Self-regulated Learning: A Focus on Contextual Factors, Contingencies, and Dynamic Relations." Metacognition and Learning 10: 1–13. doi 10.1007/s11409-015-9134-6.
3. Borg, Simon. 2015. Teacher Cognition and Language Education: Research and Practice. London: Bloomsbury.
4. Carter M. 2005. Different Kinds of Learning adapted from 'Field Guide to Consulting and Organizational Development' retrieved on 4/12/2021 from https://managementhelp.org/misc/learning-types-loops.pdf
5. Desoete, A. 2008. "Multi-method Assessment of Metacognitive Skills in Elementary School Children: How you Test is What you Get." Metacognition and Learning 3 (3): 189–206.
6. Donker, A. S., H. de Boer, D. Kostons, C. C. Dignath van Ewijk, and M. P. C. van der Werf. 2015. "Effectiveness of Learning Strategy Instruction on Academic Performance: A Meta-analysis." Educational Research Review 11: 1–26.
7. Duffy, Gerald G., Samuel Miller, Seth Parsons, and Michael Meloth. 2009. "Teachers as Metacognitive Professionals." In Handbook of Metacognition in Education, edited by Douglas J. Hacker, John Dunlosky, and Arthur C. Graesser, 240–56. New York: Routledge.
8. Efklides, A. 2001. "Metacognitive Experiences in Problem Solving." In Trends and Prospects in Motivation Research, edited by A. Efklides, J. Kuhl, and R. M. Sorrentino, 297–323. Dordrecht: Springer.

9. Efklides, A. 2008. "Metacognition: Defining its Facets and Levels of Functioning in Relation to Self-regulation and Co-regulation." European Psychologist 13: 277–287.
10. Efklides, Anastasia. 2009. "The Role of Metacognitive Experiences in the Learning Process." Psicothema 21 (1): 76–82.
11. Eggen, P. & Kaucbak, D. 1995. *Strategies for Teachers: Teaching content and thinking skills*. Boston: Allyn and Bacon.
12. Fairbanks, Colleen M., Gerald G. Duffy, Beverly S. Faircloth, Ye He, Barbara Levin, Jean Rohr, and Catherine Stein. 2010. "Beyond Knowledge: Exploring Why Some Teachers Are More Thoughtfully Adaptive Than Others." Journal of Teacher Education 61 (1–2): 161–71. https://doi.org/10.1177/0022487109347874
13. Fisher, R. (1998). Thinking about thinking: Developing metacognition in children. Early Child Development and Care, 141(1), 1–15.
14. Flavell, John H. 1979. "Metacognition and Cognitive Monitoring: A New Area of Cognitive-Developmental Inquiry." American Psychologist 34 (10): 906–11. https://psycnet.apa.org/doi/10.1037/0003-066X.34.10.906
15. Graham, Anne, and Renata Phelps. 2003. "'Being a Teacher': Developing Teacher Identity and Enhancing Practice through Metacognitive and Reflective Learning Processes." Australian Journal of Teacher Education 27 (2): 11–24. https://doi.org/10.14221/ajte.2002v27n2.2
16. Hartman, H. J. (2001). Teaching metacognitively. In H. J. Hartman (Ed.), Metacognition in learning and instruction: Theory, research,and practice (pp. 149–169). Boston: Kluwer.
17. Hashempour M. , Ghonsooly B., Ghanizadeh A. 2015 A Study of Translation Students' Self-Regulation and Metacognitive Awareness in Association with their Gender and Educational Level; International Journal of Comparative Literature & Translation Studies ISSN 2202-9451 Vol. 3 No. 3
18. Hattie, John. 2012. Visible Learning for Teachers: Maximizing Impact on Learning. London: Routledge.
19. Hiver, Philip & Whitehead, George. (2018). Teaching Metacognitively: Adaptive Inside-Out Thinking in the Language Classroom. 10.4324/9781351049146-13.
20. (Mark) Feng Teng (2019): The role of metacognitive knowledge and regulation in mediating university EFL learners' writing performance, Innovation in Language Learning and Teaching, DOI: 10.1080/17501229.2019.1615493
21. McCormick, Christine B., Carey Dimmitt, and Florence R. Sullivan. 2013. "Metacognition, Learning, and Instruction." In Handbook of Psychology, Volume 7:

Educational Psychology. 2nd ed., edited by Irving B. Weiner, William M. Reynolds, and Gloria E. Miller, 69–97. Hoboken, NJ: John Wiley

22. Nosratinia, Mania & Zaker, Alireza & Saveiy, Maryam. 2015. Higher-Order Thinking and Individualized Learning: Metacognitive Awareness and Self-Efficacy Among EFL Learners. The Iranian EFL Journal. 11. 189-207.
23. Paris, Scott G. 2002. "When is Metacognition Helpful, Debilitating, or Benign?" In Metacognition: Process, Function and Use, edited by Patrick Chambres, Marie Izaute, and Pierre-Jean Marescaux, 105–20. Boston, MA: Kluwer. Pintrich,
24. Ozturk N. 2018. The Relation between Teachers' Self-reported Metacognitive Awareness and Teaching with Metacognition. International Journal of Research in Teacher Education, 9(2), 26-35.
25. Paul R. 2002. "The Role of Metacognitive Knowledge in Learning, Teaching, and Assessing." Theory Into Practice 41 (4): 219–25. https://doi.org/10.1207/ s15430421tip4104_3
26. Schraw, Gregory, and David Moshman. 1995. "Metacognitive Theories." Educational Psychology Review 7 (4): 351–73. https://doi.org/10.1007/BF02212307
27. Tobias, S., Everson, H. T., Laisis, V.,Andfields, M. 1999.Metacognitive Knowledge Monitoring: Domain Specific or General Paper presented 171 at the Annual meeting of the Society for the Scientific Study of Reading, Montreal.
28. Tosey P., Visser M., Saunders M. 2011. The origins and conceptualizations of 'triple-loop' learning: A critical review retrieved on 4/12/2021 from https://journals.sagepub.com/doi/full/10.1177/1350507611426239
29. Veenman, Marcel V. J. 2016. "Learning to Self-Monitor and Self-Regulate." In Handbook of Research on Learning and Instruction. 2nd ed., edited by Richard E. Mayer and Patricia A. Alexander, 197–218. New York: Routledge.
30. Veenman, Marcel V. J., Bernadette H. A. M. Van Hout-Wolters, and Peter Afflerbach. 2006. "Metacognition and Learning: Conceptual and Methodological Considerations." Metacognition and Learning 1 (1): 3–14. https://doi.org/10.1007/ s11409-006-6893-0
31. Ziegler, A., H. Stoeger, and R. Grassinger. 2011. "Actiotope Model and Self-regulated Learning." Psychological Test and Assessment Modeling 53: 141–160.
32. Zimmerman, B. J. 2011. "Motivational Sources and Outcomes of Self-regulated Learning and Performance." In Handbook of Self-regulation of Learning and Performance, edited by B. J. Zimmerman and D. H. Schunk, 49–64. Mahwah, NJ: Lawrence Erlbaum.

Blended Learning for Smooth Transition

Sindhu Thomas*

MCT's College of Education and Research, S.D.V. Campus, Navi Mumbai, India
**Corresponding email: chiramel.family@gmail.com*

Abstract

The paper discusses the different models of Blended method and also, the procedures for conducting a lesson using one of the models of blended method. Blended learning is also referred to as "hybrid" learning which is to enjoy the best of both online and offline world of learning. When students are taught in a hybrid or blended mode, they are benefitted with the collaborative learning experiences which enriches and enhances their content knowledge as many studies have shown. Blended learning facilitates many students to learn independently, at their own pace and can benefit from performing their learning through a blend of digital and face to face environment. So, it is important that blended learning be used for enriching the student's learning thoughtfully and justifiably.

Keywords: Blended, station rotation, flex, ala carte, virtual.

Introduction

In the field of education, there is a monumental shift from offline to online and from online to Blended mode. Most of the countries cautiously reopened classrooms, as education remains a pivotal barometer of progress. There has been wide use of blended learning gradually, mainly because of the lockdown which was prevalent due to pandemic and the ongoing trend of using digital learning technology or virtual platform. Hybrid mode of instruction is student centred that engages them effectively. There are many blended models that can be adopted by teachers in their classroom teaching.

Avazmatova M (2020) in her article significance of blended learning in education system mentioned that blended learning is the integration of traditional face-to-face learning with technology, the internet, and distance learning. The research paper examines the importance of blended learning in teaching and the objective of the article focuses on the reasons and essential factors for successful blended course in education. By combining the advantages of both online and in person learning the quality of the blended course can be

intensified. The article also provides other factors that can help to design a productive blended course which is an effective way of teaching that is flexible and easy to access, and it can increase students' motivation and their achievement of the course.

Lalima; Dangwal.K. L (2017) in their article blended learning: an innovative approach discusses blended learning as an innovative concept that embraces the advantages of both traditional teaching in the classroom and ICT supported learning including both offline learning and online learning. They mention that blended learning has scope for collaborative learning; constructive learning and computer assisted learning (CAI).

There are four different types of Blended Learning which are discussed in detail:

Rotation Model: This model is commonly used by educators where students rotate within a single class through different learning activities. It is often considered as a traditional method where students used to rotate around the different corners which is deemed as a station, only difference in the blended mode is the use of online platform.

a) Station Rotation: In single classroom students rotate through all learning activities on the same schedule, when prompted by either their teacher or the timer i.e., the bell within specified time.
b) Lab Station: This model is very similar to the previous model that is station rotation, only difference is the students rotate to a computer lab for online learning activities instead within the same classroom.
c) Flipped classroom: In this model, the student spends their time away from school learning content independently through online video lectures delivered and the classroom is used for completing the home assignment. Here, the teacher doesn't spend time instructing students or delivering direct sessions, instead just guide or supervise the practise and provide individual assistance where needed.
d) Individual Rotation: In the model, based on the student's individual unique needs, the teacher rotates them on daily schedule to different activities.

Flex Model: In this model the student's learning is online but still it takes place within the school campus. Here the student can learn at their own pace and also seek guidance from teacher in classroom. In this model online learning is the core, though sometimes it guides the students to do activities which is conducted in an offline mode. Some of the flex model

have face to face teacher's interaction daily while others may provide very less interaction which all depends upon the combinations used by the instructors.

A La Carte Model: It was formerly known as Self-Blend model. This model doesn't give whole school experience as it very different from full-time online learning. In this model the student has to choose a course online so as to decrease the workload at the school campus. It is usually found in high school level, where students can choose an advanced placement or language course which is not offered by their school. Some courses can be taken fully online outside the school, and some are provided with in the school so students can be benefitted from the interaction with teachers and their peers.

Enriched Virtual Model: This model allows the students to spend most of their time completing coursework online remotely, supplemented by the in-person learning sessions with their teacher. It differs from full-time virtual schools as face-to-face learning is a required component of the coursework. So, the students get the important experiences of a school campus. Mostly in Enriched virtual programs it emphasizes full time online schools and then develops it in a blended mode to enrich the students with actual school (brick and mortar) experiences.

Procedure Used for Conduction

A blend of Lab rotation and station rotation model was demonstrated to student teachers, where the google classroom is divided into 3 breakup rooms. This model must be introduced to the students with proper instructions.

1. First step here is to create different groups before explanation of instructions, considering what each learner can learn from others in the group. While working together, these students contribute their varied talents and skills which advances learning and character development in each member of the group.
2. So, three groups were created, and three links of different classrooms was provided with proper instructions like group rules. Here the teacher creates a list of rules but doesn’t share it with students instead encourages the students to come up with their rules, ensuring that both the rules are matching.

   For example: Every team member should contribute to discussions, sharing plans, ideas, actions to be taken and also volunteering for the projects, talking with respect, if

you disagree, disagree with the idea and not the person, offer tentative suggestions when proposing a change in someone else's writing or idea, be responsible, complete the assigned work on time and with your best effort, follow all the group's rules, praise other group members for ideas or jobs well done, politely wait for your turn to talk, etc.

3. After that the teacher explains the structure and the process to the students. Soon after the instructions, the teacher set the stations up so that they are separate from each other and enters the link assigned to each group.
4. Teacher explains the possible scenario by giving instructions: There are three stations set up in different locations in the google classroom. Each person in the group will do the task mentioned in the link provided. You can help each other in your group. You'll have one to five mins to do the assignment at each station and in each classroom, there would be two questions to be answered which should be open ended questions or some thought provoking activities. Each groups had to rotate clockwise to the next links and note down the answer to the questions or do the activity assigned in the classrooms, when they hear the bell ring that is the signal that they must move to the next link and enter another classroom with a pair of questions or activity. Once they rotate in all the three stations, they will assemble in the main classroom where the teacher will ask few students to share their answer and discuss with the class thereby building the content knowledge and making the concept clear to the students.
5. The teacher can also give a computer lab day, assigning each group some targets to be completed for their dominant learning needs. All the group members can sit together in the lab and help each other. The teacher can always differentiate group assignment based on the student's need in the group. The teacher can effectively engage the students in the teaching learning process ensuring maximum participation by the students for attaining the learning outcomes or for achieving the goals set by the educator.

The best part of utilising blended mode of instruction is any content or any subject can be taught effectively with the student's engagement and active participation. This method can be introduced in any aspect of teaching learning process like set-induction, explanation, recapitulation or even during evaluation.

Application of the Blended Method

A topic Poverty in India for Standard eleventh was demonstrated by the student teacher using the blended method-station rotation model and also providing computer lab day. Teacher created three breakup classrooms with three different links. In each link two open ended questions were asked. Once the set induction was done, teacher instructed about the station rotation method and divided the class into 3 groups of 5 students each. Teacher already had a set of rules prepared and she encourages the students to come up with similar types of rules. Teacher gave each group an assignment that targets their dominant learning needs on a computer lab day. And then the students rotate in clockwise to all three links provided in breakup classroom and note down the answer in the notebook for the questions mentioned in each station. Once they rotated around all three stations, they assembled in the classroom where the teacher asked each group about their answer to the question asked in the link. All the students discussed their attempted answers and develop the concept of Poverty in India with the help of different scenarios mentioned in the link. Teacher recapitulates the lesson taught along with core element of following small family norms and correlating it with statistical data and graphical representation of Mathematics. Teacher evaluates the students using kahoot assessment tool with objective and critical awareness questions and then concludes the class with an innovative assignment.

Managing Transition through Blended Learning

Due to pandemic, there has been a shift from offline to online and back from online to new normal that is Blended mode or more commonly known as 'hybrid' where all the educators must choose the right blend for their content delivery. Blended learning model always focuses on developing learning outcomes and also lays emphasis on the impact it has on students due to the improved engaging learning process provided by personalization or customisation provided to each student as per their needs and maintaining a balance between online and offline seeking continuous noticeable improvement among students. The benefit of blended learning is the flexibility which is accelerated by the different modes that can be thought by the teachers administering the models. Each and every student is unique and special, and they have a varying need, so the teacher can provide a customised experience to each student through this innovative strategy. As there are different models of blended instruction, the teacher can choose the best model by

connecting the goals with the desired learning outcomes. So, any model of Blended learning can be implemented in the classroom through the guidelines and thereby make the teaching learning process effective.

Conclusion

In the contemporary trend, many strategies of learning like computer-based learning, web-based learning, etc.is emerging but use of hybrid or blended model is an advanced tool which will effectively and successfully be used for the smooth transition of Curriculum. The hybrid or blended mode of teaching and learning environment motivates students to actively participate during lectures and discuss virtually with their teachers and peers and strengthen their bond along with in-depth understanding of the concepts**.**

References

1. Horn M.B.; Staker H (2014). Blended: Using Disruptive Innovation to Improve Schools. Retrieved from https://www.christenseninstitute.org/blended-learning-definitions-and-models/ dated 20th December 2021
2. Corbett K (2013). Blended Learning - 4 Models. Retrieved from https://kevincorbett.com/blended-learning-4-models/ dated 20th December 2021
3. Avazmatova M (2020) "Significance of Blended Learning in Education System." Retrieved from https://www.researchgate.net/publication/343970415_Significance_Of_Blended_Learning_In_Education_System#:~:text=Abstract%20Blended%20learning%20is%20the%20integration%20of%20traditional,examines%20the%20importance%20of%20blended%20learning%20in%20teaching. Dated 24th February 2022
4. Lalima; Dangwal.K. L (2017). Blended Learning: An Innovative Approach. Retrieved from https://files.eric.ed.gov/fulltext/EJ1124666.pdf dated 24/02/2022
5. Dhull P; Beniwal R (2019): Blending Learning: Effective Use of Technology in Classrooms Retrieved from https://www.ijsr.net/get_abstract.php?paper_id=ART20199890 dated 24th February 2022

A Study of Impact of Mentoring on Trainee Teachers Coping with the B.Ed. Course

Shadab Paloji*

Associate Professor, St. Xavier's Institute of Education, Mumbai, India
**Corresponding email: shadab.paloji14@gmail.com*

Abstract

Mentoring has a long long-standing tradition. The word "Mentor" is deciphered from the Greek mythology, wherein the story tells about Ulysses who entrusted his remarkably close friend named Mentor the responsibility of his son when he set out for his epic voyage on the seas. This is from where got the word mentor and the mentoring as an action for the assigned mentor. This is a relationship of faith, trust, confidentiality, and responsibility. It is a one-on-one relation between a mentor and a mentee. The mentor could be defined as someone who is matured enough to share his/ her knowledge, skills, and experience with other people to progress in life and career most importantly. The progress is professional, personal, emotional stability, supporting work/life balance and to have a relaxed, stress-free life. Mentoring has become in present times especially important part of any organization be it educational or corporate because with the changing times there is an increase in the stress level of individuals. This stress leads to poor mental health and as the situation deteriorates the result of it may develop into drastic steps taken by the individuals.

Keywords: mentoring, work life balance, stress, career growth, quality

Introduction

Today India has the largest trained workforce in the world, yet we find that when it comes to quality Indians have less chance and they must go through extra tests to compete on a global forum. Students are graduating unprepared to meet the demands of the society. There have been innumerable discussions on quality and its benefit but when it comes to actual implementation we fail. We have not been able to stand up to the existing parameters of requirements in the profession. In short, overall quality of higher education imparted at our own institutions has shown a downfall at the level of teaching as well as learning, leads to a huge output of "functionally illiterates." What can a teacher education institute do about this as we prepare the future teachers. It is important to know what

happens when they go through the training and whether they are on the right path looking deeply into the needs of their existence or is it just another training to get a 'job.' It is found that mentoring can fulfill this void that stays when a fresher is dealing with lots of stress and confusion during a training program. Mentoring is an act of a very collaborative and continuous type. It requires a lot of individualized attention and responsibility from both the people involved in the relationship of a mentor and a mentee. Since times immemorial mentoring has always been a very specialized kind of behaviour which is conferred by the people who are matured or in authority. As times changed institutions realized the need for mentoring and it has today become important in all the sectors of work.

Research question

Does mentoring have an impact on the professional growth of B.Ed. trainee-teachers? It is seen that mentoring is a regular activity in all educational institution? Does it also help the future teachers to cope up with the hectic and tiring training programme that they go through in the two years. Thus, the present study was taken up as

A Study of Impact of Mentoring on Trainee Teachers Coping with the B.Ed. Course

Aim of the study

To study how mentoring helps trainee-teachers to cope up with the two-year B.Ed. Programme

Objectives of the study

i. To find out the mentoring techniques used at the teacher training level

ii. To find out the expectation of teacher trainees for the purpose of mentoring

iii. To study the impact of mentoring on the coping mechanism of trainee-teacher

Operational definitions

Mentoring – the help of support that a student is expecting from the teacher for academic as well as professional purpose.

Coping mechanism – to reduce the anxiety and stress that may be caused due to the rigors of taking part in various activities at B.Ed. Level.

Trainee - Teacher – students who have graduated or post graduated from arts, science, or commerce stream and are getting trained for becoming secondary and higher secondary school teachers.

B.Ed. Programme – Two-year teacher training program that is divided into four semesters with a variety of courses and project works

Review of literature

Career benefits associated with mentoring for protegee: a meta-analysis was a study conducted by Allen, Eby, Poteet, Lentz, & Lima, (2004)– The method of meta-analysis was used to review and put together existing empirical research concerning the career benefits associated with mentoring for the protégé. The objective variable of compensation and the subjective variable of career satisfaction and career outcomes were evaluated. The target groups were mentored, and non-mentored groups and their comparison and relationship revealed that mentoring was a good support and beneficial for them. The objective outcomes were small, but the size of subjective variable was big and showed superior results.

An article by Bunjes and Canter (1988) on Mentoring: Implications for career development studies the work done on mentoring and how it benefits persons in the profession of dietetics. The process of mentoring supplies career and psychosocial support and the mentee benefits from the wide variety of career and social opportunities put up through the relationship. They proposed an alternative to mentoring, the patron system. This system includes peer friends, guides, and sponsors. Networking is a crucial aspect of career development, and it also increases the opportunities for prospective mentors, mentees, and sponsors to meet and interact. New entrants can receive help from the mentoring relationships, and it would also help in grooming them. There is more work that can needs to be done by the community to see how such relationships are beneficial and various work settings.

The study by E.A. Rankin (1991), on Mentor, mentee, mentoring understands the process of mentoring and its uses for career development in the clinical research and educational arenas of the nursing profession. The roles of mentor and mentee as guide and learner are described. Purposes for mentoring are discussed and five stages of the mentoring relationship are counted. ("Mentor, mentee, mentoring: building career development ...") There are many genuine and grave problems and obstacles, and these factors will help to ease successful mentoring. Through mentoring lot of development could be fostered among individuals and organizations and it would be also very cost effective and fulfilling once the aims are achieved.

Measuring the Effectiveness of a Mentoring Program, an article by Pritika Padhi February 18, 2020 – suggests that mentoring is a relationship in which both the mentor and the mentee are helped, the former in becoming a better leader and latter in being guided. Process adherence whether the information is passed and processed well, pulse check i.e., the frequency with which the mentoring is taking place is of immense importance. During this time, it is important to get and pass both quantitative and qualitative information to its full effect. To understand the effectiveness of the program it is important to meet the mentors and the mentee separately. Mentees engage in a mentoring relationship with a specific goal. For the first stage it is better to have an individualized plan for the personality development. As the program goes ahead it is also important to track the progress of the mentee. It would be good to know the impact of the overall mentoring program of the organization and compare the outcomes for making positive changes. Analytical tools for collecting feedback and seeing the impact may help the organization at various levels.

National Education Policy 2020 recommends developing a system of mentorship by experiences, distinguished and retired faculty

Research Design

There are two basic approaches to research. One is quantitative approach, and another is qualitative approach. The two approaches differ starkly in the following that in the Quantitative approach involvement of data and its generation is important while in Qualitative approach to research is concerned with mostly subjective assessment of which

could include attitude, behaviour etc. The aim of the present study was to study the impact of mentoring on professional growth of trainee-teachers. The research design for present study is descriptive in nature where mentoring is qualitative.

The study is conducted on B.Ed. students from college of education in Mumbai city.

Target group: B.Ed. trainee-teachers
Sample of the study: Sample of the study included forty-eight trainee teachers

Tool of the study

The tool for the study was developed by the researcher. It is a composite tool that was used for the purpose of data collection. It was a mix of rating scale and open-ended questions. The Likert rating scale was used for quantitative response

Findings and Inferences

From the forty-eight trainee-teachers thirty-six responded. Following are the findings & the inferences.

Finding No. 1: The areas for which mentoring is provided

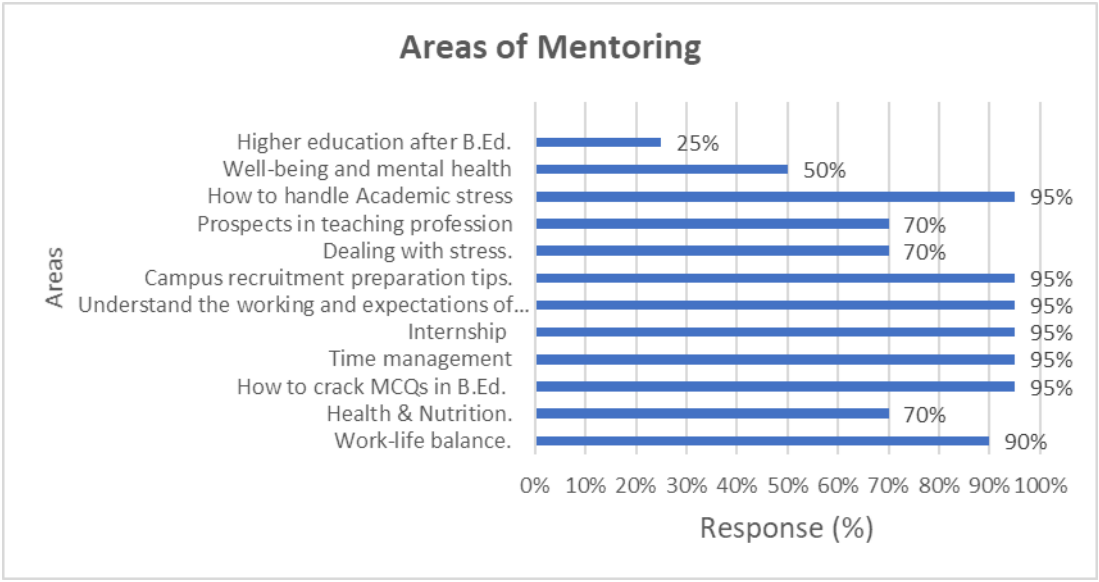


Figure 1. Areas of mentoring

The figure 1 above shows that major area of discussion and mentoring is concerned with examination, internship, study habits, and campus recruitment. These are the major

requirements of a B.Ed. course and therefore students are given guidance majorly in these areas, though it is also seen that there are other areas where the mentors sometimes may just touch upon.

Inference: The areas of mentoring are more academically oriented, and the personal mentoring is in decreased amount. It may be possibly because of two reason one may be due to the requirement of the course and secondly since the students are adult learners, they already have their own mentors or advisors for their personal problems.

Finding No. 2: Frequency of mentoring leading to its usefulness

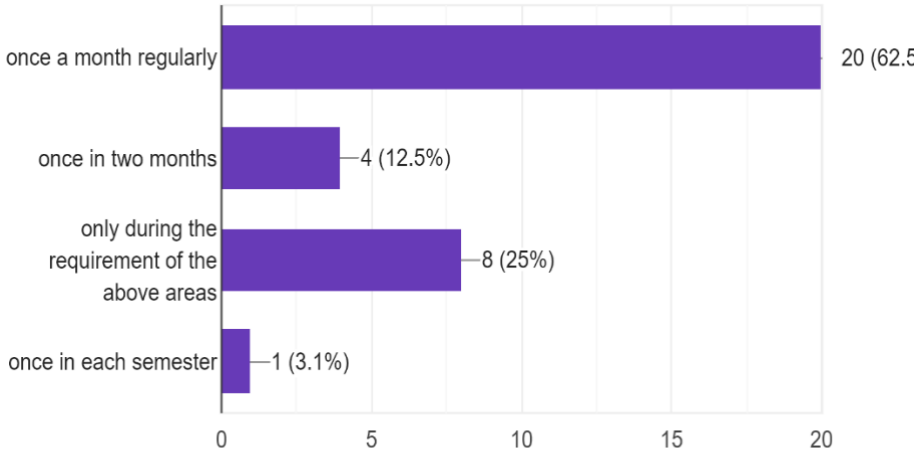


Figure 2. Frequency of mentoring

The above response in the graph shows that 62.5% of students prefer once a month the formal mentoring scheduled on the timetable, while 25% also feel whenever there is a requirement to guide the students mentoring should be given irrespective of the time scheduled for it. There are 15.6% responses that also show that students do not need much of mentoring

Inference: There is a need for mentoring amongst the students and majority feel that it should happen. Some who do feel it too necessary are more confident with the way they work or may be already having a mentor to guide them.

Finding No. 3: Type of mentoring preferred

The pie chart (figure 3)projects that 87.5% of students prefer teacher to student mentoring while only 12.5 % of students prefer peer to peer mentoring or same group and there are no takers for buddy or senior to junior mentoring

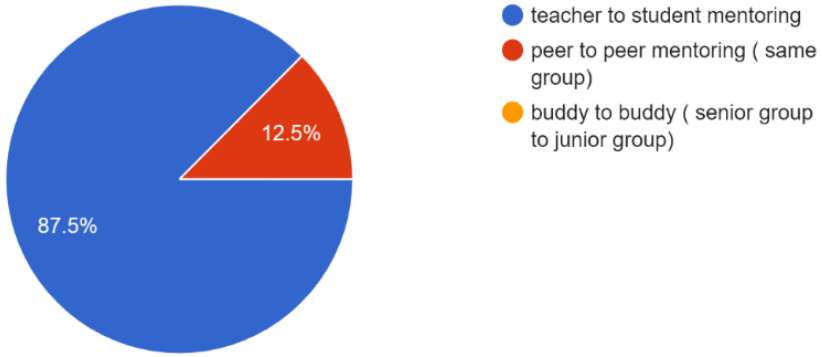


Figure 3. Types of mentoring

Inference: The result shows that students' preference may be due to the opinion of students, those teachers who have more experience and knowledge and will be able to guide well.

Finding No. 4: Information/ help expected from the mentor

Following chart shows the areas that students expect mentor to help with –

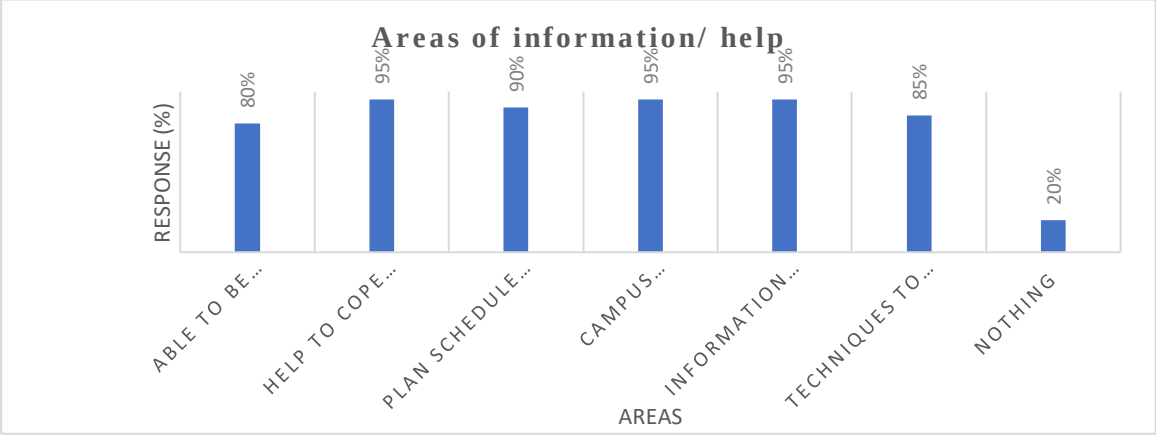


Figure 4. Areas of mentoring that can be looked into

The above figure shows the areas where trainee-teachers feel more initiative could be taken to supply mentoring**.**

Inference: Thus, it shows that students do feel that there is lot of guidance given to help in coping up with the B.Ed. and yet there seems to be more requirement often for the same.

Finding No. 5: Support through E-mentoring provided in the B.Ed. during Covid-19

- Requirements of teaching profession
- Time management
- Preparation for CTET
- Teacher student bonding

Finding No. 6: Some constructive suggestion to help in improving the Mentoring Programme

1. More individual or personal mentoring is better than a group mentoring.
2. Mentoring session should be held twice a week and advice relating planning assignments and timetabling can be done
3. Individual mentoring during job hunting phase.
4. Having one session dedicated to how we can constructively convert our stress into productivity because B. Ed is a hectic course, and we need to know places where we can channelize our energy and overcome stressful situations.
5. There can be a special mentoring for some special times like pandemic etc., how to cope with classwork and assignment or mentoring before the semester starts. This will help students to plan and space out their work and not get stressed every time some new work is announced.

The researcher feels following process of mentoring would be helpful in dealing with stress and coping up with all the requirements which going through the B.Ed. Course. It must be a 360-degree approach. The induction could be through peers (senior to Junior as the B.Ed. has the structure and then move on to mentors assigned for the trainee-teachers.

As per the need of the students from time to time the principal and then the professionals from the industry could be included

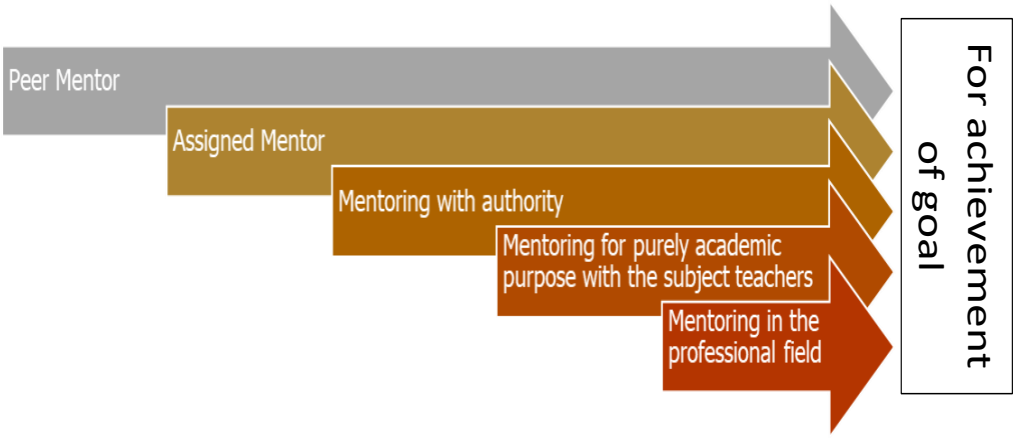


Figure 5. Process of Mentoring

There are also many models designed for mentoring, The five phased mentoring relationship model (figure 6) given on mentoring by Cooper and Wheeler in 2007, does help to conduct mentoring in any education / professional institution.

Phase 1 – Purpose – Why do I want a mentor or to be a mentor?

Phase 2 – Engagement – How should I begin to find a mentor or to become a mentor?

Phase 3 – Planning – Development of a Mentoring Action Plan – How could we achieve the goals together?

Phase 4 – Emergence – Engaging in the Conversation – What are the requirements? how is the session going? is there any learning taking place?

Phase 5 – Completion – Celebrating Accomplishments – What would we do next to do excellent work?

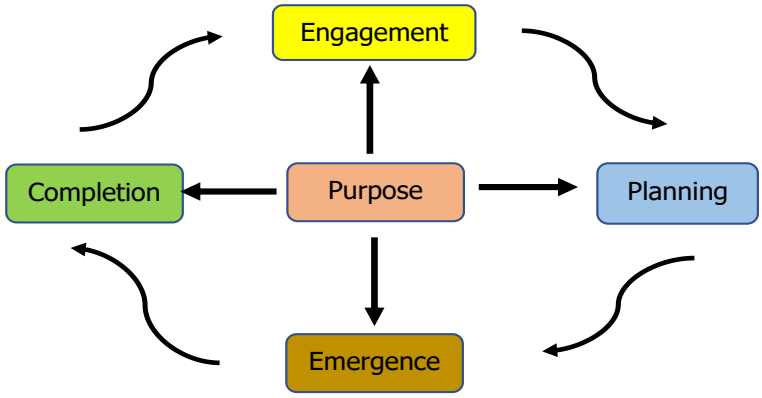


Figure 6. Mentoring Relationship Model

Conclusion

Thus, to conclude, a good teacher can motivate his or her students to get interested in their subject, to become creative and to build up on their self-confidence. Such teachers who accept the role of the mentors are an asset to any educational institution and a source of inspiration to their students. The functionally illiterates appear because of the failure of our institutions to respond to change function as to the requirement of the stakeholders. Our institution should realize that the rate of change and the resultant rate of obsolescence are phenomenally high these days. With globalization and tough competitors, we have no other way then to adopt the mantra of 'quality' for survival.

"The delicate balance of mentoring someone is not creating them in your own image, but giving them the opportunity to create themselves" ---- Steven Spielberg

References

1. A., R. E. (1991). Mentor, mentee, mentoring: building career development relationships. Nursing Connections.
2. Allen, T. D. (2004). Career benefits associated with mentoring for protégeé: a meta-analysis. 89(1), . The Journal of applied psychology,, 127–136. Retrieved 2020, from https://doi.org/10.1037/0021-9010.89.1.127: https://doi.org/10.1037/0021-9010.89.1.127
3. Bunjes, M. &. (1988). Mentoring: implications for career development. Journal of the American Dietetic Association,.

4. C.H.Patterson. (1961). Counselling and Guidance in Schools. Illinois, Urbana : Harper & Brothers Publishers.
5. Council, N. A. (2004). Quality Enhancement in Teacher Education. New Delhi, India : NAAC.
6. McGowan, J. F., & Schmidt, L. D. (1962). Counselling : Readings in Theory and Practice . New York: Holt, Rinehart & Winston .
7. Patterson, C. (1966). Theories of Counselling and Psychotherapy. Illinois , London : Harper& Row Publishers.

Impact of 5E Constructivism on Students' Learning Approaches towards Science

Marishka Flocida D'souza

Science Teacher (IGCSE), Dubai Scholars Private School, Dubai, UAE
**Corresponding email: marishka.dsouza@gmail.com*

Abstract

Education is the ingredient that can bring about a makeover towards a progressive society. Quality of education depends on the quality of instruction. Students Learning Approaches range from a surface to a deep learning strategy. The present study on Grade 8 Students from SSC Board, Mumbai, Maharashtra, was aimed to find out the impact of 5E Constructivism on Students' Learning Approaches in Science understanding. The study was conducted in three phases, a pre-test in the first phase followed by interventions, and a post-test. In the second phase, the independent variable was 5E Constructivism whereas the dependent variable was Student's Learning Approaches in Science understanding. The mean values of the pre-test and post-test findings for surface learners were found to be 198.153 and 181.38 respectively; the mean values of the pre-test and post-test findings for deep learners were found to be 204.57 and 211 respectively. The Baseline Pre-test had maximum students with a score range from 0 to 3 and the Post Test showed maximum students in the 7 to 10 range. This marked shift in the Students' Learning Approaches revealed that the 5E Constructivism Approach was effective for enhancing the surface learners into deep learners. A semi-structured interview was also conducted with the pre-test and post-test to qualitatively analyze the impact of the interventions. With a Constructivist Approach, students synthesize new understanding from prior learning and new information. As learning becomes an interesting activity, it becomes meaningful and sustainable.

Keywords: 5E Constructivism, Learning Approaches, Science, Surface Learning, Deep Learning.

Introduction

A learning strategy like constructivism dapples with the learners existing knowledge, beliefs, and skills. A learner can synthesize new understanding from prior learning and new information. A constructivist teacher sets up problems and monitors student

exploration, guides student inquiry, and promotes new patterns of thinking. Working mostly with raw data, primary sources, and interactive material, constructivist teaching asks students to work with their data and learn to direct their explorations. Ultimately, students begin to think of learning as accumulated, evolving knowledge. Constructivist approaches work well with learners of all ages, including adults.

The 5 E's can be used with students of all ages, including adults. Each of the 5 E's describes a phase of learning, and each phase begins with the letter "E": Engage, Explore, Explain, Elaborate, and Evaluate. The 5 E's allows students and teachers to experience common activities, to use and build on prior knowledge and experience, to construct meaning, and to continually assess their understanding of a concept.

5E Constructivism is a considerable pathway to learning because it allows students to:

- ✓ Manage their thought process
- ✓ Manage their interactions to develop a range of experiences
- ✓ Manage their reflection through their written expression
- ✓ Manage their real-life linkages to their learning.

Learning Approaches

The commonly referred approaches drawing reference in this research are the "deep" and "surface" approaches. Those who adopted a "deep" approach are known to engage in an active approach to learning. Those who adopted a "surface" approach to learning focused on rote learning and not reaching the depths of their learning. To provide further elucidation, a summary of the differences in motivation and study process of surface and deep approaches to study is provided in Table 1.1 below:

Approach	Motivation	Strategy
Deep	✓ Personal Understanding ✓ Interest in the subject	✓ To discover meaning by reading widely ✓ Inter-relating with previous relevant knowledge.
Surface	✓ Course completion ✓ Fear of failure	✓ to limit the target to bare essentials ✓ Reproduce content through rote learning.

Table 1. Summary of the differences between Motivation and Strategy seen in Surface and Deep Learning Approach

Methodology and Methods

The research methodology that was followed for this study is the embedded mixed method. The study was divided into 3 phases.

In the first phase, the study adopted a primarily quantitative method where data from the preliminary questionnaire and the baseline was analyzed quantitatively to acquire the status of surface and deep learners in Science learning. In the second phase, the study intended to apply the 5E Constructivist Approach and find the impact on their learning approaches using an experimental design. The post test results using the same questionnaire and a baseline test was compared to know the overall impact of the interventions. In the third phase, the researcher analyzed quantitatively as well as qualitatively the impact of Constructivism on Learning Approaches in Science from a relatively small number of participants.

Over the past years, many studies have been undertaken to prove the impact of 5E constructivism on learning. Some researchers have proved it across different subjects using quantitative and qualitative methods. Very few studies have explored the possibility of an impact of Constructivism towards learning approaches that is why the researcher of this study explores the same quantitatively and qualitatively using a mixed-methodology design.

The objective of this study was to find out about the impact of 5E constructivism on learning approaches in science. Sometimes the information obtained from a questionnaire may not be sufficient and inadequate as the students may not know or understand the items in the questionnaire or may merely respond to the alternatives in a non-committed manner.

But along with the questionnaire, a baseline test and a semi-structured interview is also taken of the students a holistic and comprehensive angle to it.

Quantitative Research

Quantitative research, according to Creswell (2008), is defined as an investigation process that can be used for exploring trends and explaining the relationship among different variables. A quantitative research approach depends on quantitative data such as survey questionnaires or focuses on testing a hypothesis confirmation (Johnson & Christensen, 2000; Wiersma & Jurs, 2009). Here, the focus of the quantitative research was determining the study process and their achievement scores using a baseline test

Qualitative Research

Qualitative research is an umbrella term for several research strategies (Bogdan & Biklen, 2007). It refers to the collection, analysis, and interpretation of comprehensive narrative and visual data to gain insights into a particular phenomenon of interest (Springer, 2010). As the purpose of this study is to understand the effectiveness of applying 5E constructivism, a focussed group analysis seemed to be appropriate as a part of this mixed-methods research.

Sample & Sampling Method

For the study, students of St. Paul's High School, Dadar, Mumbai are taken. The distribution of our sample was with respect to grade of study and a science subject. For the qualitative study, data was collected from a relatively small number of participants (N=10) and for the quantitative study data was collected from 50 participants.

Instruments of Data Collection

Following research tools will be used for this study

1. Modified Biggs Questionnaire: The Revised Two Factor Study Process Questionnaire for assessing the amount of Surface and deep learners developed by the researcher

2. Baseline test on the Chapter Air from the SSC Science textbook for assessing the number of surface and deep learners based on their scores developed by the researcher.

The data was collected using the following steps-

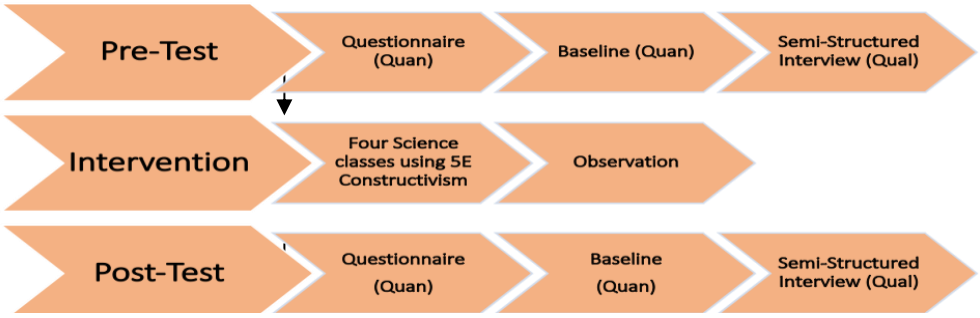


Figure 1. Procedure of Data collection

Analysis and Discussion

Mean Scores of Data on the basis of Surface and Deep Learning

Deep learning		**Surface learning**	
Pre-Test	Post-Test	Pre-Test	Post-Test
56.15	57.92	50.50	46.23

Table 2. Mean Scores of Data on the basis of Surface and Deep Learning

From the table, it is evident that in the post-test, the mean scores for deep learners has increased as compared to the pre-test. The opposite is seen in the case of surface learning where the mean scores have decreased in the post test from the pre-test. Thus, we can say from the table that students have moved towards being more of deep learners than surface learners.

Student's Scores from the Baseline Test

Range	**Pre-test**	**Post-test**
0-3	33	3
4 to 6	15	12
7 to 10	2	35

Table 3. Student's Scores from the Baseline Test

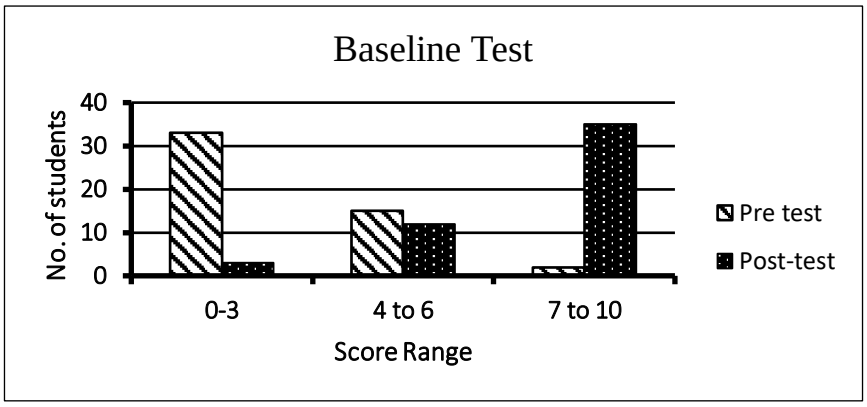
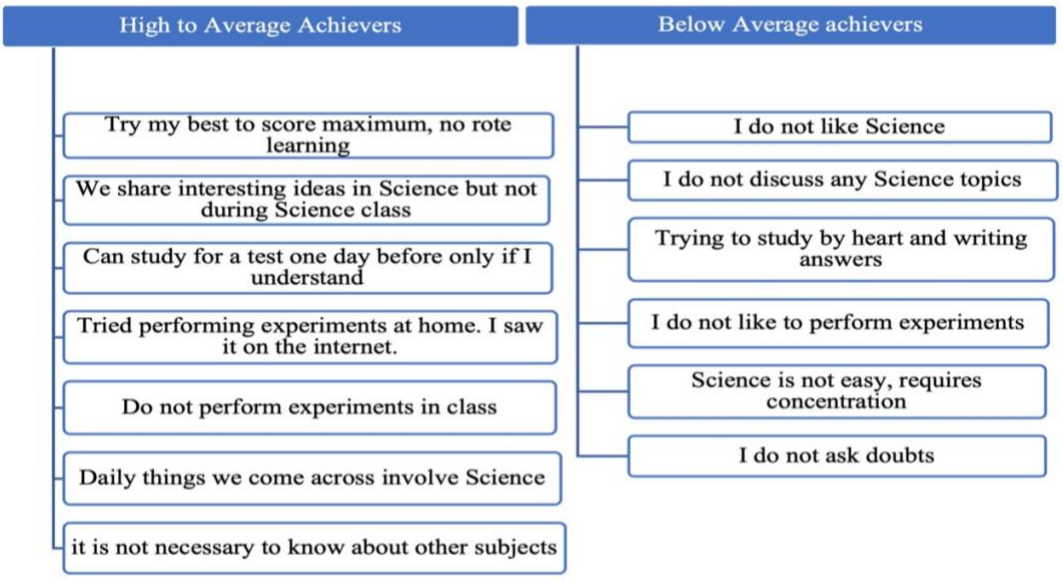


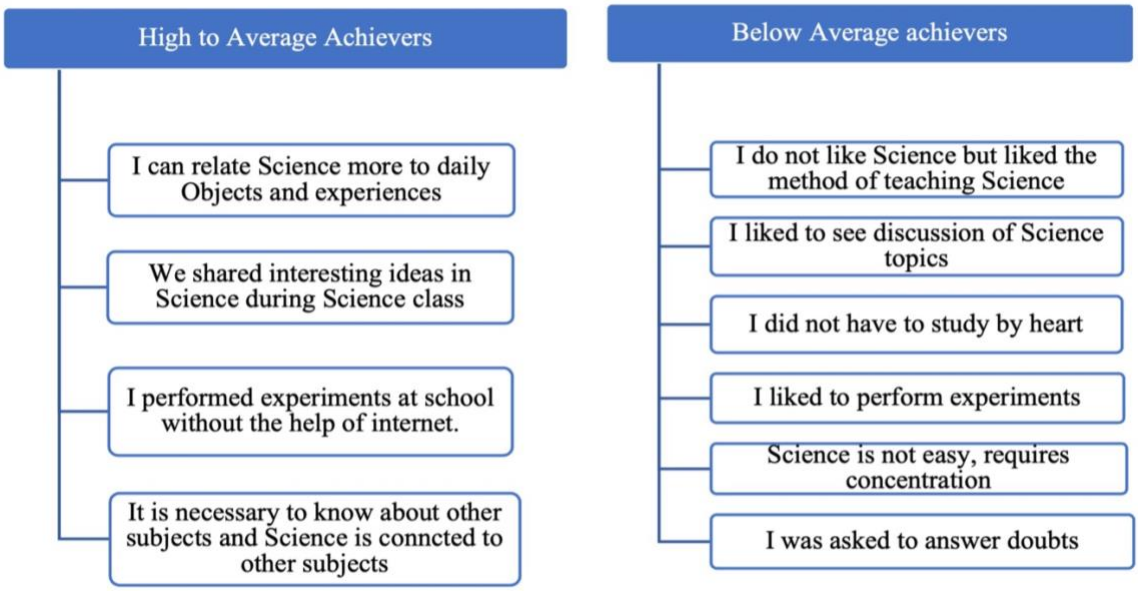
Figure 3. Student's Scores from the Baseline Test

The above graph tabulated from the scores of the Baseline Content Test by the researcher shows the students' score range comparing their scores obtained from pre-test and post-test. From the table and the graph it is evident that in the post-test, the number of students scoring above 7 is much more than it was in the pre-test. The same but in the opposite stands for the scorers with less than 3 being more during the pre-test and less than 5 students scoring in that range for the post-test. The middle range remains more or less the same. This graph simple, reiterates the impact of 5E Constructivism on student learning where students are actively involved in constructing their understanding over concepts with time.

Summary of Semi-Structured Interview : Pre Intervention Program



Summary of Semi-Structured Interview : Post Intervention Program



From the above analysis, average achievers who did not seem to like science, or discussion on any science topic there was a positive change in attitude where after the interventions they seemed to like the method of teaching that was adopted. The baseline post-test did not require them to study "by heart" as against the pre-test but they could answer the questions with ease since they understood the topic covered. From having no fond memory of learning science to making a start with recalling one of the experiments performed as a part of the Explore from the 5E Constructivism Approach, there was a change of attitude and a shift in addressing the subject. However, more interventions and exposure to such a set up will be required to change their notion about Science being "not easy" and their resistance to ask doubts in class. For the High to Average Achievers, the impact of 5E constructivism was seen in the area of encouraging a class discussion on the topic. These students also went a step ahead and got exposure to performing experiments in class as opposed to merely trying out videos watched on the internet at home. One major change was seen in the mindset of recognizing the importance of knowledge of other subjects and keeping a multi-disciplinary approach. Thus, a major change was observed in Below Average Achievers compared to the Higher Achievers.

Summary of Findings

The following conclusions can be drawn from the findings:

1. It can be seen that there is a significant increase in the mean scores of all the parameters in the pre-tests and post-tests after the interventions were administered.
2. There was a significant increase in the Baseline test taken after the interventions.
3. The extent to which the students showed interest in Science and its dimensions after the interventions was higher than it was before the interventions.
4. There is a significant increase in the amount of deep learners from surface learners.

At the start of the study, the students had low Baseline scores and were found to have more of a Surface Learning Approach. The findings revealed that there is an increase in the mean values of the pre-test and post-test conducted after the interventions. The mean values of the parameters used to determine the effectiveness of 5E constructivism on student learning approaches (deep and surface) the pre-test and post-test showed a significant increase from surface learning to deep learning. Learning Approaches in Science understanding is positively influenced by the application of Constructivist Approach in the classroom. The 5E's helped to change the Learning Approaches of these students. The study also suggests that Achievement In science is enhanced through 5E Constructivism. The student responses received on their shift in their view about different dimensions about Science learning also showed a significant difference positively.

Findings of the Qualitative Data

The interview finding were analysed from the responses recorded from their pre and post-test. A change was noted in the response during the post-test interview phase. The students who were below average showed a glimmer of change in their attitude towards the subject of Science. They seemed to develop a liking towards the new method of 5E Constructivism. They also appreciated the strategies that were used during the interventions. The higher achievers appreciated the model of 5E constructivism and showed a shift in attitude with respect to multi-disciplinary needs to understand science

Conclusion

It can be seen that there is an increase in the Baseline test taken after the intervention. This increase can be justified through the impact of the interventions which followed the 5E Constructivism. There was an increase in the mean scores of all the parameters in the pre-tests and post-tests after the interventions were administered. This shift in the students moving from a surface learning approach to a favourable deep learning approach is due to the engaging and exploring nature of 5E Constructivism. The extent to which the students showed understanding after the interventions was higher than the understanding before the interventions. There is an increase in the interest level, confidence level, motivation and orientation towards understanding the subject after administering the interventions. When you use the 5E Instructional Model, you engage in practices that are different from those of a traditional teacher. In response, students learn in ways that are different from those they experience in a traditional classroom. The change in attitude of students shows that there is a difference before and after the interventions. Through the present study, it is revealed that 5E Constructivism facilitates the development of Learning Processes in Science understanding. As Constructivist Approach is process oriented, learning through Constructivist Approach allows students to use their Skills and knowledge. While transacting curriculum, it becomes imperative for teachers to engage their students in the process of learning. For this, teachers themselves should have awareness on 5E Constructivism. Moreover, science teachers should be given in service training for process oriented teaching. More effective instructional strategies based on 5E Constructivism should be developed and used for the enhancement of Learning Approaches.

Recommendations for Further Research

The main focus of this study was on the impact of 5E constructivism towards learning approaches of students in science understanding and how this model affects their attitudes and classroom behaviour. Similarly, it was the researcher's intention to find out if 5E constructivism can help change surface learners into deep. In addition, to narrow the scope of the study, only secondary school students were participants.

Further research can be conducted on:

1. A study to see if other models can influence students towards deep learning

a. The influence of 5E Constructivism in other subjects

b. Study can be conducted on the feasibility of 5E constructivism across all boards

c. 5E constructivism workshops can be conducted for a longer duration say for a week for pre and in service teachers

References

1. Biggs, J.B., Kember, D., & Leung, D.Y.P. (2001) The Revised Two Factor Study Process Questionnaire: R-SPQ-2F. British Journal of Educational Psychology. 71, 133-149
2. Miami Museum of Science (2001). Constructivism and the Five E's. The pH Factor. http://www.miamisci.org/ph/lpintro5e.html. Viewed 3/1/07.
3. Maryland State Department of Education- http://www.mdk12.org/instruction/curriculum/science/design_sci_model.html.
4. Alf Lizzio, Keithia Wilson & Roland Simons (2010) University Students' Perceptions of the Learning Environment and Academic Outcomes: Implications for theory and practice, Studies in Higher Education,27:1, 27-52, DOI: 10.1080/03075070120099359
5. Baruch Offir *, Yossi Lev, Rachel Bezalel (2007), Surface and deep learning processes in distance education: Synchronous versus asynchronous systems, Science Direct, Computers & Education 51 (2008) 1172–1183
6. Entwistle, N., & Waterson, S. (1988). Approaches to studying and levels of processing in university students. Journal of Educational Psychology, 58, 258–265.
7. Geethu Nair (2014), "Influence of Constructivist Approach in the Teaching of Science on Process Skills of Students at Primary Level"
8. Hemant Lata Sharma, Poonam (2015), Constructivist Approach for Teaching English: Making Sense of Paradigm Shift from the Traditional Approach, International Journal of Science and Research (IJSR) ISSN (Online): 2319-7064
9. Kimeko McCray (2007), Constructivist Approach: Improving Social Studies Skills, Constructivist Approach: Improving Social Studies Skills Academic Achievement
10. Ecaterina Sarah Frasineanu (2013), Approach to learning process: superficial learning and deep learning at students, Procedia - Social and Behavioral Sciences 76 (2013) 346 – 350
11. Margaret Birse (1996) studied The Constructivist Approach to Science and Technology
12. Dr.(Ms.) Meenu Dev studied on Constructivist Approach Enhances the Learning: A Search of Reality.

13. Dr. Sunita Singh , Sangeeta Yaduvanshi (2015) studied Constructivism in Science Classroom: Why and How
14. David Kember (2000) Misconceptions about the learning approaches, motivation and study practices of Asian students
15. Chin and Brown (2000) Learning in Science: A Comparison of Deep and Surface Approaches
16. Shaljan Areepattamannil (2014) Are Learning Strategies Linked to Academic Performance Among Adolescents in Two States in India? A Tobit Regression Analysis
17. Laird, Shoup, Kuh, Schwarz (2007) the Effects of Discipline on Deep Approaches to Student Learning and College Outcomes

Published by
St. Xavier's Institute of Education
Mumbai