

RESEARCH AND REFLECTIONS ON EDUCATION

ISSN 0974-648X

a peer reviewed and refereed quarterly journal

UGC- CARE Approved

Volume : 20 No : 02

April-June 2022

Rs. 50/-

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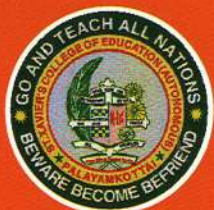
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Greetings from Editorial Board of RRE, SXCE.

The personality reflects the thought process, socialization patterns, emotional expressions, way of communication and physical appearance; but all the above factors are developed by the individual and the society. In other words, the influences of heredity and environment will be seen in all the above elements of the personality. Though heredity becomes the basics of the person, (s)he is strengthened and enriched in and through the experiences in the day-to-day life. This is very much applicable for a teacher and teacher educators. The more one harvests the experiences, the more the teacher becomes richer and relevant; not only the academic experiences with books but also the human relations and cultural interactions moulds the person.

This 21st century has anchored us into new challenges, specially in the forms of technology and time. While the wheel of time running faster, the technology too for its part, has propelled us into mechanized and routine life. The younger generation is very much ahead of the teachers with lots of information and innovations. All the modern scientific developments and consequently the changes of life styles have affected the learning styles of the students. With the new developments intruding our lives, we are forced to update regularly. Specially, exposing the student-community to various directions of the world has become the need of the hour. It is true, the exposure of students to new places, situations and institutions during the study periods, will open their eyes to new culture, scientific developments, social structures and other systems of the society. Therefore, what do we have to do in order to enhance the world outlook? Enable them to transcend the territorial hurdles by linking them with far-off institutions, transform their minds and hearts with global vision and mission, perhaps through tie-ups with national and international institutions. Due organization of field trips, educational tours, academic and cultural competitions and special educational projects will rightly expand the viewpoints and thinking patterns. The educational institutions must be open to such organization of such group activities. More exposure to various culture, environment and geographical points will certainly enhance the understanding and comprehension of the Universe by the prospective teachers. Let each teacher education institution strive for this world immersion programme.

Dear Friends! It is encouraging to receive more oral and casual appreciations about the performance of our quarterly Journal RRE and the number of papers waiting for publication in the future. We request you to continue to send your feedbacks and book reviews. Hope, this issue will offer a good reading.

Editorial Board



RESEARCH AND REFLECTIONS ON EDUCATION

(A Quarterly Journal)

Reg.No : TNENG / 2003 / 10220

ISSN : 0974-648X

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A STUDY ON THE ENVIRONMENTAL CONCEPT ACHIEVEMENT OF HIGHER SECONDARY FIRST YEAR STUDENTS

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ABSTRACT

Normative survey was adopted for the study with a sample of 300 higher secondary first-year students in Puducherry. The environmental Concept Achievement tool was used to assess the level of the first-year higher secondary students. The collected data were statistically analyzed using Statistical Package for Social Studies (version- 16) Differential analyses were carried out to study and check the significant mean difference between variables. The results revealed that the Environmental Concept Achievement of the higher secondary first-year students was average. It was concluded that the Environmental Concept Achievement of the higher secondary first-year students was at the average level. It is recommended that the Environmental Concept of Achievement of the higher secondary first-year students should be improved through their teaching-learning process.

Keywords: Environment, Environmental Concept Achievement.

Introduction

Environment is a term that represents an entire system, geology, and climate. It becomes our responsibility to take utmost care to protect our environment so that, we can live comfortably in this healthy environment. The role of education is very critical to provide awareness to deal with environmental imbalances. It necessitated making the student aware of the concept of environmental education and determinant factors that affect the environmental attitudes of higher secondary first-year students. With the new millennium coming up environmental issues have become a very important issue and are solely depending on us to protect and preserve them. Environmental Ethics has given a new dimension to the conservation of natural resources and it is one of the major concerns of mankind. Hence it is always wise to maintain a relationship between our needs and supplies so that the ecological balance is not disturbed.

Significance of the study

The significance of the study is to develop concern and awareness among students about the total environment and its associated problems and provide experiences to acquire skills for identifying and solving environmental problems.

Method of study

Normative survey method was adopted to study the Environmental Concept Achievement of the 300 higher secondary first-year students. The Environmental Concept Achievement Test of Haseen Taj (2001) was used to study the Environmental Concept Achievement of higher secondary first-year students. The background variable namely Gender, Group was chosen, Locality, Parental education, Parental occupation, and Family monthly income were also taken in order to find out the influence of these variables on Environmental Concept Achievement of the higher secondary first-year students.

Objectives of study

1. To study the level of environmental concept achievement of the higher secondary first-year students.
2. To find out the significant difference, if any, between the sub-samples of Gender, Group was chosen, Locality, Parental education, Parental occupation,

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and Family monthly income of the higher secondary first-year students in the Environmental Concept Achievement.

Hypotheses of study

1. The level of environmental concept achievement of the higher secondary first-year students is not high.
2. There is no significant mean difference of higher secondary first-year students in their environmental concept achievement with respect to gender, group was chosen, locality and family monthly income.
3. There is no significant mean difference among higher secondary first-year students in their environmental concept achievement with respect to parental education and parental occupation.

Sampling procedure

The random sampling method was used by the researcher for the present study. The population of the study consists of higher secondary first-year students studying in the schools located in Puducherry. Five schools are selected through stratified random sampling from the list of schools using nature and type of institution. 300 higher secondary first-year students from five different schools were selected for the sample.

Tools and techniques

The normative survey method was used for the present investigation. The Environmental Concept Achievement Test constructed by Haseen Taj was used as the tool for collecting data. The tool consists of 45 test items, the investigator administered the tool to the sample after getting prior permission from the concerned Head of the institution. The school students were requested to give their free and honest responses to the test items. Each right response carried one mark, otherwise, zero marks are awarded.

The reliability coefficient of the total used for the present investigation was found to be 0.61 by Split – half method. The high-reliability value ensures high face and content validity.

Statistical technique used

The collected data were analyzed qualitatively and

quantitatively to fulfill the objectives of the study. The researcher used descriptive and differential analysis as a statistical technique for the present study.



Analysis and interpretation

Hypothesis 1: The level of environmental concept achievement of the higher secondary first-year students is not high.

Table 1

Level of environmental concept achievement among higher secondary first-year students

N	Mean	Median	Standard deviation
300	45.56	48.00	9.40

The mean of the total sample is found to be 45.56 for the sample (N=300) with a standard deviation of 9.40 which represents an average level of environmental concept achievement. Hence the null hypothesis framed is rejected.

Hypothesis 2 : There is no significant mean difference among higher secondary first-year students in their environmental concept achievement with respect to gender, group was chosen, locality and family monthly income.

Table 2

‘t’-value of the variables gender, group chosen, locality, and family monthly income of the higher secondary first-year students

Variables	Sub variables	N	Mean	S.D.	Mean difference	‘t’ value	Re marks
Gender	Male	182	45.36	8.883	0.524	0.471	NS
	Female	118	45.88	10.170			
Group Chosen	Science	252	44.95	9.770	3.860	3.475	S
	Commerce	47	48.81	6.340			
Residence	Rural	80	45.21	8.854	0.389	0.478	NS
	Urban	220	45.69	9.603			
Family Monthly Income	< 50,000	239	44.99	9.443	2.832	2.113	S
	> 50,000	61	47.82	8.936			

(At 5% level of significance table value of ‘t’ is 1.96)

The analyzed data collected from the subsamples revealed that significant difference exists in the level of environmental concept achievement with respect to group chosen and family monthly income. Hence the null hypothesis stated on group chosen and family monthly income is rejected and concluded that there is a significant mean difference in group chosen and family monthly income. On the other hand, there is no significant difference in the level of environmental concept achievement with respect to gender and locality. Hence the null hypotheses stated on gender and locality are accepted and concluded that there is no significant mean difference with respect to gender and locality.

Hypothesis 3 : There is no significant mean difference among higher secondary first-year students in their environmental concept achievement with respect to parental education and parental occupation.

Table 3

‘F’-value of the variables parental education and parental occupation of the higher secondary first-year students.

Variables	Sub Variables	N	Mean	S.D.	‘F’-value	Re marks
Parental Education	High School	72	43.78	8.751	3.956	S
	Higher Secondary	90	44.52	10.34		
	Higher Education	138	47.17	8.880		
Parental Occupation	Business	64	46.09	9.856	0.166	NS
	Private Sector	152	45.30	8.394		
	Government Sector	84	45.64	10.76		

(At 5% level of significance for (2,297) df table value of ‘F’ is 3.01)

The analyzed data collected from the sub-samples revealed that significant difference exists in the level of Environmental Concept Achievement with respect to Parental education and there is no significant difference exists in the level of Parental occupation. Hence the null hypotheses stated on Parental education are rejected and Parental occupation is accepted.

Findings

a. The level of environmental concept achievement is average.

- b. There is a significant difference with reference to a group chosen and family monthly income and parental education in environmental concept achievement.
- c. There is no significant difference with reference to gender, locality and parental occupation in environmental concept achievement.

Recommendations

The following recommendations are made: (i) Education should be prepared in order to provide the students’ learning by doing and activities should be prepared for students’ gaining Environmental consciousness. (ii) Students must be motivated to volunteer for environmental activities. (ii) On the basis of the above findings from the study the candidates whose family monthly income is less than 50,000 are in need to be motivated in participation of environmental activities. The students must be encouraged to understand the concepts of the environment with a content-based approach in their learning process for a better chance in the behavior of the individual students.

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GUIDANCE AND COUNSELLING PROGRAMMES FOR ADOLESCENT STUDENTS

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ABSTRACT

Students of the present day are faced with a number of problems during the various styles of school life. These problems may be related to personal, behavioral, educational or vocational, or personality factors. Enhancing students to overcome these problems and become self-reliant in the future is one of the major aims of the guidance program. However, one is also aware that the implementation of guidance programmes in the prevailing schools is hardly noticeable. This situation still persists, inspite of various recommendations being made by the government over the last few decades. One of the likely causes for the non-implementation of this program is largely the lack of adequate knowledge among the required or concerned staff regarding the planning and organization of the guidance program in schools. School guidance program constitutes a cluster of activities that enable the students to overcome the educational, vocational, personal, or social problems that they face during the different phases of development. It forms an integral part of school education and is non-instructional in nature. Counseling service is considered to as be the most fundamental part of the guidance process. The purpose of it is to assist the students in the process of all-around development. It provides an opportunity for the individual to discuss their plans and problems with a professional counselor in a conducive environment.

Keywords: *Guidance, Educational, Vocational, Counselling, and adolescents*

Introduction

A child is described as an adolescent when he or she reaches puberty which is when he has become sexually mature to the point, where he is able to reproduce his kind. He ceases to be an adolescent when he has acquired the maturity to play the role of an adult in his society or culture. Maturity, as the term used here, does not mean mere physical maturity; it also implies mental, emotional, and social maturity.

It is very difficult to point out the exact range of the adolescence period in terms of chronological years. Achieving puberty and becoming mature cannot be tied to a universal span or period. In our country in comparison to western countries, the period of adolescence starts early as Indian children achieve puberty earlier, due to the favorable climate and cultural factors. Therefore, the range of adolescence, not only differs from country to country but varies from community to community and from individual to

individual. The standard of living, diet, early or late marriage, health and climate, the cultural traditions and environment, attitude towards other sex, and the role expected from the child at different ages are some of the other factors which control the dawn of puberty and attainment of maturity by children.

Characteristics of Adolescents

Human growth and development take a spiral form and are not linear. Like adolescence is a period of too much restlessness and disturbances. The relationship between parent and child involves a delicate balance between our personality type and child involves a delicate balance between our personality type and our child's. Teenagers are changing dramatically in six ways:

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Physically, Intellectually, emotionally, sexually, socially, spiritually, and morally.

Physical development

The physical growth and development reach their peak and boys and girls get their final body shape. The maximum increases in size, weight, and height are achieved. The average girl reaches her mature height between the ages of seventeen and eighteen and an average boy, a year or so later. The various parts of the body gradually come into proportion. The growth and function of all other Outer and inner organs also reach their maximum and almost all the glands become extremely active at this age.

Intellectual development

Intelligence reaches its climax during this period. Intellectual powers like logical thinking, abstract reasoning, and concentration are almost developed up to the 'how and why' of everything scientifically. The power of critical thinking and observation is developed. Therefore great care has to be taken for cultivating their power of imagination.

Emotional Development

Emotional development reaches its maximum during adolescence. It is a time of heightened emotional tension resulting from the physical and glandular changes that are taking place. It is a period of heightening all emotions like anxiety, fear, love, and anger. The individual experiences emotional instability and intensity during adolescence. He is too touchy, sensitive, inflammable, and moody.

Social development

Adolescents spend more time with their peers. Friends become increasingly more important, and acceptance by peers is a strong motivation for most teenagers. An adolescent develops a good amount of social sense as compared to a child who cares very little for society.

Sexual development

Sexual development reaches its peak during adolescence. The adolescent is sexually mature. In our permissive modern society, adolescents need a good

guidance program on sex and sexuality. The need for sex education is a must in schools and colleges.



Spiritual development

Adolescents of today are interested in religion and feel that plays an important role in their lives. They talk about God, religion, and religious values. Adolescents are drawn towards a deeper spirituality than when they were children. With the development of social and civic sense, the children during this period learn to behave according to the norms of the society and culture. The group sense makes them follow some moral or ethical code. The formation of strong sentiments during this period intensifies the process of moral development.

Vocational Choice and need for self-support

The adolescent's strong desire is to achieve self-sufficiency and make himself or herself quite independent. Preparing for a future career is essential at this time. The vocational choice is an important one for the adolescent and he finds himself not quite up to the mark in making the right choice. Therefore the adolescents want proper guidance and advice with regard to their interests, aptitude, and vocational choices.

Guidance and Counselling for Adolescents

Recent research in the field of adolescent psychology has revealed that the adults, the parents, the teachers, and their unreasonable ways and views are the real problems of adolescence. In dealing with them, the parents and the teacher should realize that the demands of their peer group are more important than their own expectations.

In the adolescents, there is a need for respect and recognition and they also maintain their self-prestige and status among their peers.

The adolescents' five needs, affection, acceptance, approval, achievement, and self-actualization must be met. If these needs are not met, there will be unhappiness, and insecurity in them which can cause maladjustment in their lives. Besides these, the members of the family and teacher need to be gentle yet firm and understand their physical, mental, and emotional changes.

Continued on Page 25

**PERFORMANCE ASSESSMENT PRACTICES ADOPTED BY CBSE
SCHOOL TEACHERS OF VARANASI DISTRICT: AN INFLUENCE OF
PRE-TEACHER TRAINING PROGRAMS**

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ABSTRACT

Performance assessment requires students to demonstrate that they have mastered specific skills and competencies by performing or producing something. The teacher-training institutions have specific accountability to train their student-teachers in all areas of assessment. If a teacher of an institution has some training experiences like bachelor's and master's in Education then they will have a better understanding of practical aspects of performance assessment. At the current time with the internship and other co-curricular programs, institutions are working with prospective teachers to enhance their efficacy and make them knowledgeable in all aspects of the natural school setting. This paper is based on the practices adopted in performance assessment of students' co-scholastic areas by the CBSE school teachers of Varanasi district, U.P., and seeks the answer to the question of whether there is any influence of pre-teacher training programs on the practices adopted by CBSE school teachers in co-scholastic assessment areas? Only three components of co-scholastic assessments i.e. Work Education, Art Education, and Health Education circulated by CBSE for session 2017-18 have been considered.

Key Words: *Performance Assessment, Co-scholastic assessment, Uniform System of Assessment, Pre-teacher Training Programs.*

Introduction

Performance assessment is a form of testing that requires students to perform a task rather than select an answer from a ready-made list. For example, a student may be asked to explain historical events, generate scientific hypotheses, solve math problems, converse in a foreign language, or conduct a task or project on an assigned topic. Experienced raters, either teachers or other trained staff, then judge the quality of the student's work based on an agreed-upon set of criteria. This new form of assessment is most widely used to directly assess writing ability based on text produced by students under test conditions i.e. scholastic areas and also separately for co-scholastic areas.

Advocates of performance assessments maintain that every task must have pre-defined performance criteria for two main reasons:

1. The criteria define for students and others, the type of behavior or attributes which are expected.

2. A well-defined scoring system allows the teacher, the students, and others to evaluate performance objectively. If performance criteria are well defined, any person acting independently will award a student essentially the same score.

Furthermore, well-written performance criteria allow the teacher to be consistent in scoring over time. Stiggins (1991) notes that if a teacher fails to have a clear sense of the full dimensions of performance, ranging from poor or unacceptable to exemplary, he or she will not be able to teach students to perform at the highest levels or help students to evaluate their own performance.

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NCTE, after offering a two-year B.Ed. and M.Ed. programs have modified many areas for quality assurance in these programs. On the basis of the recommendations of NCTE, approximately all institutions in our country have modified these syllabuses and enhanced their practices. They have added and modified papers like assessments for learning, courses on discipline and subjects, reading reflections on texts, music, drama, and other creative, co-scholastic activities, Language Across the Curriculum (LAC), physical education, sports, Yoga in schools, internship, environment, peace, health, and value for quality life, understanding and reflection on the self, Scout & Guide, etc.

The paper will discuss the following objectives;

1. To investigate the performance assessment practices adopted by CBSE school teachers of the Varanasi district.
2. To point out the influence of Pre-teacher Training Programs on teachers' performance practices adopted in Varanasi.

Pre-teacher Training programs and influence :

In this paper, pre-teacher training program investigators mean the programs organized by institutions affiliated with or authorized by NCTE i.e. B.Ed. & M.Ed. While influence means anything which is reflected and can be observed in some once behavior as a glance of their previous training or practices has taken.

Components of Performance Assessment :

A comprehensive performance assessment system can have many assessment tools and techniques like; Developmental Checklists, Portfolios, Summary Report, Open-ended or Extended Response Exercises, Extended Tasks, etc.

Addressing and keeping all the above facts in mind, in this paper the investigators have focused on the

performance assessment of the students' co-scholastic areas under the adopted uniform assessment system by CBSE from 21/03/2017 with circular no. Acad-14 /2017.

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Workout for the Objective 1:

A questionnaire having questions related to performance assessment was used to collect information from six CBSE school teachers of Varanasi district U.P. Inferences drawn from the information and data thus collected have been summarized as follows:

Practices adopted for co-scholastic assessment areas of student's performance:

Co-Scholastic Activities (Classes VI-VIII): In their circular CBSE mentioned it as, "For the holistic development of the student, co-curricular activities in the following areas be carried out in CBSE affiliated schools by the teachers and will be graded term-wise on a 3-point grading scale (A=Outstanding, B=Very Good and C=Fair). The aspect of regularity, sincere participation, output, and teamwork be the generic criteria for grading in the following co-scholastic activities:

(a) Work Education: Work Education refers to skill-based activities resulting in goods or services useful to the community.

(b) Art Education: (Visual & Performing Art)

(c) Health and Physical Education: (Sports/ Martial Arts/Yoga/NCC etc.)" (CBSE, Manual For Teachers)

In CBSE schools of Varanasi, the following practices are adopted by the teachers to assess the above criteria.

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Editor : **Rev. Dr. S. Sebastian, S.J.**

Table 1

Performance Assessment Practices Adopted in Co-scholastic Areas by the CBSE schools of Varanasi



Teachers/ Schools	Performance Assessment Practices Adopted in Co-scholastic Areas		
	Work Education	Art Education (Visual & Performing Art)	Health & Physical Education
School -1	Practices adopted for work education, tie & dye, tacking of button, hook and making buttonhole & eye, soft toys making (teddy), pot designing & coloring, making table cloth with patchwork, jewelry making with quelling paper, cards making, cushion making with different smocked work, making photo frame, bookmarks, envelopes making, block painting, emboss painting, glass painting, doll decoration, making pen holders, bag stitching, flowers making with stocking and argon fabrics, sand painting, collage work, etc.	Practices adopted: object drawing from different eye level. Object drawing with panicle shading. Nature studies (in pencil & color both) Still life (in watercolor, pastel color, and pencil color), Face study (with measurement and proportion), Eye, nose, lips, ear study with pencil shading. Landscapes in watercolor, Architectural drawings, Portraits practice with pencils shading and line drawing, Portrayals in watercolor and pastel color, and Bird study. Folk arts- Nath dwara painting (Srinath Ji), Madhubani painting, kalamkari, etc. Oil paintings on canvas, Stone paintings, Cartooning, etc.	Specific games like kho-kho, Kabaddi, Taekwondo, Shot put and Throw Ball, Yoga & Asanas, Standing broad jump, practice for the overall development of personality of the students. Learning of development of leadership quality in students.

School-2	<p>Designing of the academic calendar at the beginning of the session.</p> <p>Organizing debate or quiz-like programs to time for mental growth.</p> <p>Maintaining teacher's records like a lesson plan, teacher's diary, student's attendance registers, and students progress as well as periodically monitored by principle.</p> <p>Schools have organized sanitation clubs and sent students to the national level.</p> <p>The computer program as well as essay, Nukkad-Natak for presentation as well as to increase communication skills.</p> <p>Visual analysis of each chapter after discussion in the classroom.</p> <p>Every morning assembly, as well as a small speech, are conducted and delivered by each student to avoid stage fear.</p>	<p>Use a multimedia room with enough space where Nukkad-Natak, dramas, and plays are performed by the students of each class relating to their subjects like SST science, etc.</p> <p>Visual representation and explanation by teachers.</p> <p>Special programs for small kids to introduce alphabets and numbers.</p> <p>Organize drawing competitions on cartoons related to literature sections.</p>	<p>Treated health as wealth, target to remain fit, organize special activities like Yoga, Sports, NCC, physical fitness camps from time to time, mental health program, develop a positive attitude towards health with some programs, and tips for health management. Invited some eminent personalities who have great fitness achievement at least national level.</p>
School -3	<p>Following programs under work education;</p> <p>Skill clubs/society,</p>	<p>Arts education into some sections;</p> <p>Primary section (5-8 yr)</p>	<p>Educate in various sections like Different types of Yoga asana, Pranayam, the importance of nutrition-related to health, punctuality, and disciplined life. This includes;</p> <p>Harmful junk foods, taking of tobacco and drinks, etc, and its ill effect.</p>

	<p>Performing arts society, Music society, Art society, Literary club, Eco club, Indian vocal, Indian folk dance, Green club for health and sanitation. Aerobics, Best out of worst, Paper recycling, Computer club, Calligraphy Club, Ramanujam club for math's genius, Abdul Kalam for science club,</p>	<p>Painting, drawing, printmakers, No curve pumpkin ideas, In this we make kids learn 31 ways to decorate pumpkins without putting little fingers at risk. Fingerprinting painting for kids, Fall craft printable. The crayon lwei where children are taught a lesson that when they work together they can do indispensable work as a teammate. Middle section (includes 11-14 years); Where they teach students, about Egyptian mummies, Holiday posters, Sketch look ideas, Mask making, Pop arts etc. And other performances Nukkad-Natak, design in Jewelry, wearing fabrics, and a high-quality program emphasizing a balance of students taught by experts in that field.</p>	<p>Growth and development. Injury prevention and safety needs, personal and community health, emotional and psychological problems etc. Activities: Visual Arts, Paintings, Drama, Nukkad-Natak, Sketches, etc.</p>
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	Budding chefs, Skating, Theatre, Young artists, Junior Einstein, Clay modeling, Different types of games clubs, etc.		
School-4	Pot designing, Stabilized many clubs like music club, art club, computer club, etc. Visual analysis, Stage performance, Bookmarks designing.	Drawing natural pictures Pencil and color picture Students' home pictures, Nation importance drawing, and color sensation.	Aware of many disease Health programs NCC, NSS, Yoga, Pranayam, Games, Virtual programs, etc.
School-5	To be aware of the surrounding images and crafting, Making these with computers, Stage programs, Many clubs Designing pots, clothes, etc.	Gift packing, natural pictures by coloring and identifying the colors from surroundings Organized competitions.	Make Groups and group leaders; make them aware of governments' Swashhata Abhiyan etc. NCC, NSS, and games.
School-6	Making things for daily use, like pen stand, table cloth, wall designing, etc.	Art and drawing competitions, Painting From panicle and different colors.	Growth and development programs, Different plays, Yoga, NCC, Nukkad-Natak, etc.

Apart from this, all schools and teachers use the Proforma provided by CBSE to mention in the report card of the students and this common Proforma is as follows:



Table 2
Co-scholastic Performance

Co-Scholastic Areas: Term-1 [on a 3-point (A-C) grading scale]		Co-Scholastic Areas: Term-2 [on a 3-point (A-C) grading scale]	
Grade		Grade	
Work Education (or Pre-vocational Education)		Work Education (or Pre-vocational Education)	
Art Education		Art Education	
Health & Physical Education		Health & Physical Education	

On the basis of the above it can be concluded that these are some specific practices. Since it requires students to actively demonstrate what they know, what they achieved, what they learn, and what they trained/herself, teachers try to use more valid and reliable indicators of co-scholastic abilities. 'More important, performance assessment can provide the impetus for improving instruction, and increase students' understanding of what they need to know and be able to do' (Sarkar, 2012). In preparing their students to work on a performance task, teachers describe what the task entails and the standards that will be used to evaluate performance. This requires a careful description of the elements of good performance and allows students to judge their own work as they proceed. The key findings can be summarized as:

- a) All schools and their teachers considered the CBSE circular regarding the Uniform assessment system.
- b) All schools and their teachers adopted the same Proforma of the grade and report card for performance assessment areas like co-scholastic and rest two i.e. scholastic and discipline also.
- c) Common practices for Work Education: Teachers of CBSE schools of Varanasi districts have some common practices like; establishing different clubs, designing handmade items, computer programs, Nukkad-Natak for communication skills, and visual analysis.

- d) Common practices for Art Education: Drawing paintings of nature, physical and personal objects, folk pictures and nation importance images and symbols, organizing competitions at different levels also use these all in performing Nukkad-Natak, etc.
- e) Common practices for Health and Physical Education: Organize growth and development programs, different types of games, yoga, NCC, NSS, Scout Guide, Social works, personality programs, health programs, Nukkad-Natak, etc.
- f) Schools have some common while many specific and unique practices to maintain students' quality and performance in co-scholastic areas.
- g) Schools clearly accept the diversity of practices to be followed to develop a uniform assessment pattern as circulated by CBSE.

Workout for Objective 2 :

Influence of Teacher Education Program :

After analyzing the above-mentioned information's about practices adopted by CBSE School Teachers of Varanasi Districts, the investigators have found that most of the steps of performance assessment of students have been already experienced by the teachers during their training programs like B. Ed. and M.Ed. Some specific influences can be summarized as follows;

- a) Influence of the paper assessment for learning, courses on discipline and subjects & reading reflections on texts, with its direct and indirect contents shows to understand the learning level in both scholastic and co-scholastic areas.
- b) The training regarding music, drama and other creative, co-scholastic activities directly influences the practices adopted by the teachers.
- c) Paper related to language across the curriculum (LAC) in teacher education programs enhances the proper understanding of students' private speech and other linguistic problems.
- d) Strong co-curricular and other physical assessments like physical education, sports, Yoga, and Scout & Guide programs become beneficial to developing creative and innovative approaches to evaluate the students' health and other physical development.
- e) Finally the main and important influence of having internships with schools. This program influences the overall practices of teachers in a naturalistic setting with schools.

Implications of this Study on Teacher's Performance Assessment : Like school students, a teacher's performance cannot be bounded between some areas viz scholastic, co-scholastic, and discipline. But on the basis of the above findings, investigators can clearly say that any teachers' performance depends on their strength training programs and impacted courses that have been implicated to them. Implications can be as follows:

- a) With the better implementation of the guidelines of the programs like B.Ed. and M.Ed.
- b) Institutions have needed to organize Formative and summative assessments like school students, many institutions are doing this but the rest have needed to do also.
- c) Trained them clearly about the different tool development procedure with is applicable at the school level and in co-scholastic areas of assessment.
- d) More use of ICTs should be ensured by the institution

during the training program,
that's why prospective teachers
can use them without hesitation
in the class.



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**SCIENCE TECHNOLOGY ENGINEERING MATHEMATICS (STEM)
EDUCATIONAL APPROACH BASED TEACHING INTENTION
IN INDIAN SCENARIO: PERSPECTIVES OF PROSPECTIVE
SCIENCE TEACHERS**

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ABSTRACT

This study focused on finding the impact of various parameters such as knowledge, values subjective norms, and attitudes of the behavioral intention towards STEM Educational approach based teaching among Prospective science Teachers of India. The sample involved in this study was 136 from three states of India such as Kerala, Karnataka, and Odisha. The Pre-service Teacher's Integrative STEM Teaching Intention Scale was used to collect the data. The tool was based on the Five-point Likert scale mode. Data were analyzed using descriptive analysis, independent sample t-test, and analysis of Variance. Results revealed that there was a direct relationship between the various parameters of STEM Educational Approach-based teaching intention. Categorical variables like gender and state of living have no effect on the teaching intention. This study provides an insight for future teachers on integrating a multidisciplinary approach to teaching in the science classroom in the Indian Educational Scenario. Prospective science teachers gave a positive appreciation regarding the outcomes of STEM Educational approach-based teaching.

Keywords : *STEM Educational Approach, Prospective Science Teacher, Indian Education, Multidisciplinary approach.*

Introduction

21st century is the age of digital technology. Human life has become more internationally interconnected. There require more skills to be cultivated in terms of education and career opportunities. According to Silva (2009), "there are hundreds of descriptors of the 21st-century skills set, including life skills, workforce skills, interpersonal skills, applied skills, and non-cognitive skills". The educational fraternity should adopt such a curriculum that should be flexible, focusing on fostering higher-level thinking skills, etc. in the 21st century. "A dynamic 21st-century curriculum will enrich new competencies and skills while reaffirming the importance of core academic subjects and forms of literacy" (UNESCO 2015).

STEM Educational Approach

"The four distinct disciplines (Science, Technology, Engineering, and Mathematics) have their

own history, philosophy, and principles and their own distinct reservoir of knowledge, skills, and functions. The alignment of these four established disciplines into the entity now known as STEM was first proposed in the 1990s by the US National Science Foundation" (UNESCO 2019).

"An authentic STEM education is expected to build students' conceptual knowledge of the inter-related nature of science and mathematics, in order to allow students to develop their understanding of engineering and technology" (Hernandez et al., 2014).

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“Different models of STEM integration into curriculum and teaching practices exist. One way is to teach each of the four disciplines individually. The second way is to teach each of the four STEM disciplines with more emphasis given to one or two of the four. The third way is to integrate one of the STEM disciplines into the other three. Finally, a more comprehensive way is to infuse all four disciplines into each other and teach them as an integrated subject matter” (Asunda, 2014).

Bybee (2013) suggested that for successful implementation of the STEM Education based teaching methods, there should provide proper training for the teachers as well as other educators. From this perspective, this study makes it relevant to get ideas from future teachers who are enrolled in various pre-service training programs. As these programs were focusing on the development of sufficient teaching skills among the learners. As pointed out by Ajzen (1985), “the theory of behavior emphasized individual’s knowledge, values, attitudes, subjective norms, and perceived behavioral control and their relationships to STEM teaching intention was the foundation for this study”.

Need and Significance of the study

STEM Educational approach is one of the innovative multi-disciplinary teaching-learning approaches, which have been implemented in many developing countries. National Education Policy 2020 of India, focuses on the development of change especially giving importance to multidisciplinary approaches. In this scenario, the present study focusing on the perspectives of future science teachers on various aspects of the implementation of the STEM Educational approach based on classroom interaction was relevant.

Objectives

1. To study the impact of various parameters on STEM Educational approach-based teaching practices among Prospective Science Teachers.
2. To study the relationship of various parameters on STEM Educational approach-based teaching practices with respect to gender and states of living.

Hypotheses

1. There is no significant difference in mean scores of the Prospective Science teachers' Behavioral Intention for STEM Educational approach based teaching with respect to Gender
2. There is no significant difference in mean scores of the Prospective Science teachers' Behavioral Intention for STEM Educational approach based teaching based on states of living

Operational Definitions of the Variable

Behavioral Intention

It is the combination of Knowledge, Values, attitudes, subjective norms and perceived behavioral controls towards a particular matter. In this study, the total score of the above parameters is considered.

Behavioral intention towards STEM Educational approach means the level of understanding of the STEM educational approach (knowledge), individual’s self-evaluation of STEM education-based teaching (values), interest and attitude towards STEM education-based teaching (Attitudes), individual’s feedback to implementation of STEM teaching approach (subjective norms), and the degree of difficulty while adopting the approach (perceived behavioral control).

Methodology

Sample involved in this study was 136 from three states of India such as Kerala, Karnataka, and Odisha. The sample was selected based on convenient sampling. Selected samples are those who were enrolled in the B.Ed course program. The sample distributions with respect to various categorical variables are as follows:

Table1
Sample distribution with respect to gender

Gender	Frequency	Percentage (%)
Male	18	13.2
Female	118	86.8
Total	136	100

Table 2
Sample distribution with respect to States of living

State of living	Frequency	Percentage (%)
Kerala	98	72.1
Odisha	22	16.2
Karnataka	16	11.8
Total	136	100

Tool used

‘The Pre-service Teacher’s Integrative STEM Teaching Intention Scale’ was used to collect the data. The tool was based on a five-point Likert scale and it consists of items from Knowledge, Values, Attitudes, Subjective Norms, Perceived Behavioral Control, and Behavioral Intention. The scale consists of 27 items which is a standardized tool adopted by the investigator for the present study. The item-wise questions for each category are as follows:

Table 3
Number of items in each category of the tool

SI No	Categories	Items
1	Knowledge	4
2	Values	6
3	Attitudes	4
4	Subjective Norms	3
5	Perceived Behavioral Control	5
6	Behavioral Intention	5

The items in the rating scale consist of positive and negative statements. The level of agreement or disagreement varies from 5 (Strongly agree) to 1 (Strongly disagree). Data were analyzed by using SPSS software. Independent sample t-test and one-way ANOVA were used to determine whether a significant difference exists or not.

Data Analysis and Interpretation

Behavioral intention of pre-service science teachers with respect to STEM educational approach-based teaching was analyzed. Results were as follows:

Table 4
Correlates of the variables included in the tool

Component s	Knowle dge	Value	Attitude	Subje ctive norm	Perce ived Contr ol	Behavi oral intenti on
Knowledge	1	.716**	.736**	.614**	.702**	.749**
Value	.716**	1	.954**	.603**	.946**	.946**
Attitude	.736**	.954**	1	.647**	.921**	.911**
Subjective norm	.614**	.603**	.647**	1	.610**	.614**
Perceived control	.702**	.946**	.921**	.610**	1	.954**
Behavioural intention	.749**	.946**	.911**	.614**	.954**	1

** Correlation is significant at the 0.01 level.

The correlation coefficients for the parameters of the variable are given in Table 4. Correlation coefficients among the six parameters of the variable were not significant. Results showed that values, attitudes, subjective norms, and perceived behavioral controls should play important role in establishing a STEM educational approach based on teaching behavioral intention. The results indicate that there is a significant relationship between the variables selected for the present study.

Hypotheses Testing

Hypothesis 1 : There is no significant difference in mean scores of the Prospective Science teachers' Behavioral Intention for STEM Educational approach based teaching with respect to Gender.

Independent sample t-test was done to find the difference in mean scores of the Prospective Science teachers' Behavioral Intention for STEM Educational approach based teaching with respect to Gender.

The descriptive statistical parameters such as mean, standard deviation, and the corresponding t value for each of the selected variables have given in Table 5.

Table 5
Independent sample t-test analysis of
Prospective Science teachers' Behavioral Intention
for STEM Educational approach based teaching
based on Gender.

Parameters	Gender	N	Mean	S.D.	t-value	p-value
Knowledge	Male	18	9.44	4.391	1.907	0.06
	Female	118	11.9	3.473		
Value	Male	18	13.33	9.579	0.999	0.32
	Female	118	16.39	8.395		
Attitude	Male	18	9.33	6.225	0.962	0.34
	Female	118	11.1	4.968		
Subjective norm	Male	18	7.22	3.801	0.904	0.37
	Female	118	8.19	2.85		
Perceived control	Male	18	11.33	7.921	0.961	0.34
	Female	118	13.64	6.536		

From the table 5 it is clear that there is no significant difference for the mean scores of Prospective Science teachers Behavioral Intention for STEM Educational approach based teaching with respect to gender. So the formulated null hypothesis is not rejected at 0.05 levels of significance. It means that gender had no effect on the behavioral intention toward STEM Educational approach-based teaching.

Hypothesis 2 : There is no significant difference in mean scores of the Prospective Science teachers' Behavioral Intention for STEM Educational approach based teaching based on states of living.

Table 6

ONE way ANOVA analysis of Prospective Science teachers Behavioral Intention

Parameter s	Source of Variations	Sum of Squares	df	Mean square	F	p-value
Knowledge	Between Groups	47.02	1	47.02	3.636	0.061
	Within Groups	853.612	66	12.934		
	Total	900.632	67			

Value	Between Groups	72.951	1	72.951	0.998	0.321
	Within Groups	4822.03	66	73.061		
	Total	4894.99	67			
Attitude	Between Groups	24.419	1	24.419	0.925	0.34
	Within Groups	1741.39	66	26.385		
	Total	1765.81	67			
Subjective norm	Between Groups	7.26	1	7.26	0.817	0.369
	Within Groups	586.505	66	8.886		
	Total	593.765	67			
Perceived control	Between Groups	41.695	1	41.695	0.924	0.34
	Within Groups	2979.53	66	45.144		
	Total	3021.22	67			

From the table 6 it is clear that there is no significant difference of mean scores of Prospective Science teachers Behavioral Intention for STEM Educational approach based teaching based on States of living. So the formulated hypothesis is not rejected at 0.05 levels of significance. This result shows that the selected parameters on STEM educational approach-based teaching have not affected their behavioral intention with respect to their states of living.

Discussion and Implications of the study

The tool was based on six parameters of the variable behavioral intention towards STEM educational approach-based teaching. Gender and place of living had no effect on influencing the teaching intention. All the selected samples agreed to bring changes in the teaching behavioral intention.

Bybee (2013) suggested that the “effective promotion of STEM education-based teaching approach could help students to develop the valuable skills for addressing 21st-century issues”. It is important to consider the accessibility and management of resources while implementing STEM teaching during pre-service

teacher education programs (Gura, Roberts, and Cantu 2012). Implementation of STEM educational approach has to be started from the beginning of the pre-service training, for that appropriate training should be given to them.

Conclusion

For the implementation of the STEM educational approach in our country, it is mandatory that teachers and other educational fraternity should understand the essential requirement needed for knowing the cognitive and affective ideas connected to the STEM subjects. Pre-service teacher training programs must focus on developing behavioral intention toward STEM education-based teaching among their candidates. This study provides an insight to future teachers on integrating a multidisciplinary approach to teaching in the science classroom in the Indian Educational Scenario. Prospective science teachers gave a positive appreciation regarding the outcomes of STEM Educational approach-based teaching and the need to provide maximum competency and training to the future teachers.

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ANXIETY AMONG ADOLESCENTS IN RELATION TO INTERNET ADDICTION

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ABSTRACT

The present study was conducted in order to investigate not only the prevalence of internet addiction among the girls and boys students in the school students but also the relationship between internet addictions with anxiety. The sample comprised 200 adolescent students from schools in the Amritsar district which included 100 girls and 100 boys. The Questionnaires on internet addiction (developed by the investigators) and anxiety scale (Cattell & Scheier, 1963) were used as instruments for data collection in this study. The data were analyzed using mean, standard deviation, t-test, and correlation. The results of this study demonstrated that there is no significant difference in internet addiction among adolescents with respect to gender. It was also found that there is no significant difference in anxiety among adolescents with respect to gender. However, a significant relationship between internet addiction and anxiety was found.

Keywords: Internet addiction, Anxiety, Students.

Introduction

Internet is a technological tool that makes our life easier and has become an indispensable part of it while its user population increases faster each day (Isman & Dabaj, 2004; Yapici, & Akbayin, 2012). It is a widely recognized channel for information exchange, academic research, entertainment, communication, and commerce (Widyanto & Griffiths, 2006; Douglas, Mills, Niang, Stepchenkova, Byun, Ruffini, Lee, Loutfi, Lee, Atallah, & Blanton, 2008; Byun, Ruffini, Mills, Douglas, Niang, Stepchenkova, Lee, Loutfi, Lee, Atallah, & Blanton, 2009). The Internet has evolved into a 'social technology' that is continually challenging researchers to examine its effects on numerous facets of social life (Kraut, Patterson, Lundmark, Kiesler, Mukophadhyay & Scherlis, 1998). The issue that attracts the most contention appears to be whether the Internet is enhancing or harming participation in community life and social relationships. It is argued that the internet may facilitate social isolation, limit genuine social relationships, and even lead to Internet addiction, to the ultimate detriment of individual wellbeing (Wolfradt & Doll, 2001). Nowadays, the internet is at the peak of the mountain of the digital industrial revolution and any new revolution will have its own new problems. Unique specifications

of the internet like being reachable 24 hours per day, easy to use, cheap, and staying unidentified as a user all made it very popular all around the world (Shaw & Black 2008). So for all these reasons it causes an addiction to the internet that is related to the long hours of using the internet, its high speed, being reachable, and the huge amount of information that is being transferred online if this hypothesis is right so we will have a higher amount of addiction to the internet if we upgrade the modems and the systems and the internet and have better internet and faster speed (Kim, Lau, Cheuk, Kan, Hui & Griffiths, 2010). Internet addiction is generally defined as an uncontrollable desire to use the Internet, the devaluation of time spent without connecting to the Internet, intense nervousness and aggression in the event of deprivation, and progressive deterioration of social and family life (Young, 2004).

The main syndromes of addiction that must continue for at least 20 months are as follows: bearing,

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addiction syndromes (like shaking, anxiety, having repeated thoughts about the internet, hallucination, dreaming about the internet, moving the fingers willingly or unwillingly). Being forced to use the internet to decrease or stop the symptoms of addiction, using the internet more than what is needed and usual, decreasing social, work and fun activities and risk of losing a job, study and job opportunities because of using the internet more than usual (NimzGrifhthz & Ban Yard 2005).

The Internet has been an effective tool in eliminating human geographical limitations and it is globally applied by all lifestyles because of its attractive and unique characteristics in interpersonal communications and everyday life. However, excessive use of the internet has resulted in negative consequences. Internet addiction disorder is nowadays recognized as a new syndrome among psychologist research nucleus and has provided a fresh area of research (Yellowlees & Marks, 2005; Kim, Ryu & Chon, 2005; Amiel & Sargent, 2004; Nie & Erbring, 2008) points out that excessive and ill use of the internet will result in the withdrawal of the individual from friends, family, and lead to behavioral or personal disorders. Siomos, Dafouli, Braimiotis, Mouzas, and Angelopoulos (2008) indicated that some users have reported internet-related problems similar to addiction, and research reports reveal that excessive use of the internet has resulted in social, psychological, and occupational injury. In an influential longitudinal study by Kraut, Patterson, Lundmark, Kiesler, Mukophadhyay, and Scherlis (1998), increases in internet use were associated with declines in the size of a person's social circle and family communication and increases in depression and loneliness. These effects were stronger for adolescents than for adults.

Anxiety is a phenomenon found in every individual. It is a troubled state of mind, worry. It is a common reaction to a hidden and subjective danger, fear to an obvious and objective danger. The internal danger of some sort has been transformed into a fear of presumably external danger. It is mental distress with respect to some anticipated frustration causing a feeling of uneasiness. It refers to the subjective experience of

the individual and a painful uneasiness of mind. Thus, anxiety is a feeling of tension associated with a sense of threat or danger when the source of danger is unknown. It is a state of intense apprehension, uncertainty, or fear resulting from the anticipation of a threatening event or affected person being disturbed. However, anxiety is emotionally painful. Anxiety is a persistent distressing psychological state arising from inner conflict. It is a feeling of disaster and doom with no apparent cause. Often its cause is buried in the unconscious involving problems of disapproval, rejection, failure, disgrace, guilt, sex, integrity, and self-image.

Some researchers (Yellowlees & Marks, 2005; Kim, Ryu, & Chon, 2005; Amiel & Sargent, 2004; Nie & Erbring, 2008) have indicated that some of the addiction symptoms of internet include excessive connection to the Internet; involuntary and fastidious use of the internet; difficulty in time management using the internet; and feeling of a dreary world outside the internet. All of which results in a reduction in social communications and an increase in loneliness and depression.

Davis (2001) believes that internet use is not only an addictive behaviour but also forms a collection of recognition and behaviour factors that leave people prone to addiction leading to a negative effect on the individual's life. He believes that the use of the term ill use of the internet? is more suitable (Davis, 2001). The internet has become an increasingly important tool used by people around the globe today (Ferraro, Caci, DAmico & Di Blasi, 2007).

Behavioural theorists believe that should a user learn that the internet provides the opportunity to escape from reality, acquire love or be a source of entertainment; he would probably only use it when necessary. These reinforcements will result in conditional use of the internet and the continuation of the cycle (Michael, 2003).

In order to investigate the extent of addiction to the internet and identification of its effects and consequences, various studies have been contemplated in many countries: in Korea (Whang, Lee, & Chang,

2001); in India (Nalwa & Anand, 2003). There are many studies in the field of research into internet addiction based on the rate of addiction to the internet among men and women. In some such as Hills and Argyle, Yang and Tung, Bastani and Kennedy and colleagues this rate was shown to be higher in men than women while some other researchers indicated that the reverse was true (Yellowlees & Marks, 2005; Kim, Ryu & Chon, 2005). The findings of Hamburger and Artzi (2000) and Davoodabadi (2006) indicated that the rate was identical in both men and women. The investigation of the rate of affliction with this disorder and the rate of gender-based addiction to the internet in the population under study is some of the aims of the present study (Davoodabadi, 2006).

Anxiety is another factor whose relationship with internet addiction has been studied. The research by Shepherd and Edelmann on a sample of 169 students indicated that for people suffering from social anxiety, it is easier to communicate through the internet than through direct contact and stated the possibility of anonymity as the reason. The findings of this research also showed that social anxiety, lack of personal strength, anxiety, and depression could be related to the rate of internet use (Shepherd & Edelmaan, 2005). A study carried out by Rice and Markey on a sample of 80 women with an average age of 18.8 indicated that some people feel less anxious while communicating through the internet rather than directly, which was due to personal traits such that introversion and psychoneurotic factors (Rice & Markey, 2008).

Significance of the study

Nowadays, the internet provides a constant, ever-changing source of information and entertainment and can be accessed from most smartphones as well as tablets, laptops, and computers. Each person's internet use is different. One might need to use the internet extensively for his/her work for example, or one might rely heavily on social networking sites to keep in touch with far-away family and friends. Spending a lot of time online only becomes a problem when it absorbs too much of adolescents' time, causing them to neglect their relationships, their work, or other important things in

their life which leads to depression or anxiety. Excessive internet use can displace valuable time that adolescents spend with family and friends, which leads to smaller social circles and higher levels of loneliness and stress. Internet addiction also may contribute to anxiety and stress. Adolescents who suffer from anxiety and stress often have a great deal of trouble communicating and interacting with others in a healthy, positive, and meaningful way. So this study basically aims at finding out the anxiety in relation to internet addiction among adolescents.

Hypotheses

1. There will be no significant difference in internet addiction among adolescents with respect to gender.
2. There will be no significant difference in anxiety among adolescents with respect to gender.
3. There will be no significant relationship between internet addiction and anxiety among adolescents.

Design of the study

The present study falls in the domain of descriptive research as it needs to study the anxiety among adolescents in relation to internet addiction.

Sample

The sample comprised 200 adolescent students from schools in the Amritsar district which included 100 girls and 100 boys.

Tools used

1. Anxiety scale (Cattell & Scheier, 1963)
2. Internet addiction test (Prepared by the Investigators)

Analysis and interpretation

Hypothesis 1: There will be no significant difference in internet addiction among adolescents with respect to gender.

In order to test this hypothesis, the mean and S.D of internet addiction among adolescents with respect to gender were calculated. The scores of boys and girls have been described in terms of mean, S.D and t-value in table 1.

Table 1
Mean S.D and t-value of internet addiction among adolescents with respect to gender

Gender	N	Mean	S.D.	SE _D	t-value
Boys	100	84.08	8.303	0.830	0.53
Girls	100	83.47	7.921	0.792	

The table 1 reveals that the mean score and S.D of boys are 84.08 and 8.303 respectively and the mean score and S.D of girls is 83.47 and 7.921 respectively. The t-value comes out to be 0.53 which is insignificant at a 0.01 level of confidence. Hence, the hypothesis, “there is no significant difference in internet addiction among adolescents with respect to gender” is not rejected. These findings concur with those of Hamburger and Artzi (2000) or Davoodabadi (2006) but not with that of Hill and Argyle (2003), and Yang and Tung (2004).

Hypothesis 2: There will be no significant difference in anxiety among adolescents with respect to gender.

In order to test this hypothesis, the mean and S.D of anxiety among adolescents with respect to gender were calculated. The scores of boys and girls have been described in terms of mean, S.D and t-value in table 2.

Table 2
Mean S.D and t-value of anxiety among adolescents with respect to gender

Gender	N	Mean	S.D.	SE _D	t-value
Boys	100	34.45	11.025	1.102	1.54
Girls	100	36.80	10.492	1.049	

table 2 reveals that the mean score and S.D of boys are 34.45 and 11.025 respectively and the mean score and S.D of girls is 36.80 and 10.492 respectively. The t-value comes out to be 1.54, which is insignificant at a 0.01 level of confidence. Hence, the hypothesis, “there will be no significant difference in anxiety among adolescents with respect to gender.” is accepted.

Hypothesis 3: There will be no significant relationship between internet addiction and anxiety among adolescents.

In order to test this hypothesis coefficient of correlation between internet addiction and anxiety among

adolescents was calculated. The score coefficient of the correlation between internet addiction and anxiety among adolescents has been shown in table 3.

Table 3
Coefficient of correlation of internet addiction and anxiety among adolescents

Variable	Internet addiction	Anxiety
Internet addiction	-	0.12
Anxiety	0.12	-

The table 3 reveals that the internet addiction and anxiety among adolescents have a positive but mild correlation hence, the hypothesis; “there is no significant relationship in the internet addiction among adolescents” is rejected. This result shows that excessive use of internet makes students addicted to it and consequently causes anxiety and stress among users. The more one has been addicted to it the more one is psychologically depressed. Our present research concurred with the previous research such as Nima and Nazanin(2012), Lee and Stapinski (2012) and Hong, Zalesky, Cocchi, Fornito, Cho, Kim, Suh, Kim, Kim and Yi (2013), Cho, Sung, Shin, Lim, and Shin (2013) in this aspect of positive correlation between internet addiction and anxiety.

Educational implications

1. Proper guidance should be given to adolescence for using the internet in a positive manner.
2. The institutions and parents must keep an eye on their children while they go online.
3. More opportunities should be provided to the students who are devoid of opportunities at their homes in the form of books, recreational facilities, etc.
4. Teachers should motivate the students by providing them with other co-curricular works and activities in order to remove their stress.
5. As high anxiety negatively affects, teachers should try to identify the level of anxiety among children and try to help them to cope with their anxieties.

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GUIDANCE AND...

Role of Teachers

The school and colleges should provide enough activities, which would give them a channel to release all their pent-up energy. All the pent-up emotions and physical and sexual energies will be released and the adolescents will become more calm and disciplined instead of daydreaming about other useless activities.

Teachers must be patient and tactful in all their dealings with adolescents. They should guard against hurting their feelings or unnecessarily challenging these young people. The teacher must make the adolescent feel that he/she is really interested in them. Once they spot friendly adult who is ready to understand them, they become the nicest people on the earth.

Conclusion

The guidance counselors motivate the school leavers to put in their best efforts or else their onward journey would be jeopardized. The guidance and counselor play a vital role in making sure that the best educational facilities are provided to these students.

The guidance counselors help in need the most at this stage of education. The guidance and counselors would be the pivots around which all guidance programs for students can be organized, career masters providing career information, and subject teachers guiding them into specialized courses and programs.

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PROBLEMS FACED BY ELEMENTARY LEVEL MATHEMATICS TEACHERS: A MICRO STUDY

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ABSTRACT

The educational system of any nation is highly dependent on the quality of education being provided at the foundation stages. The teachers play a big role in providing quality education at any stage of education which sometimes becomes a big challenge for them. At the lower stages of education, they have to deal with the students which are not mature enough to understand the topic or the content so easily. The problems faced by them become more severe when the terms used by the teachers are not commonly used in daily life activities and also need extra teaching-learning materials. This paper highlights the problems faced by elementary-level mathematics teachers.

Keywords: Problems, Mathematics, Challenges, Infrastructure

Introduction

The quality of education is dependent on the quality of teachers dealing with the students at the different stages of education. The government of Arunachal Pradesh has taken initiatives to implement mother tongue as the medium of instruction at the elementary level of education. The students studying in the different stages of education in the state are facing difficulty in understanding the term used in the mathematics subject, especially at the lower level of education. In the state, most of the villages are falling under the rural set up with sparsely populated. So the students coming from different tribes and socio-economic backgrounds find it difficult to cope with the English language being used to teach mathematics. The students at the lower level are habitual of using their mother tongue due to a lack of exposure in the rural setting. There are problems with road and transportation communication due to the hilly terrain in many villages of the state which is also a barrier to the exposure of the people staying in those areas. It creates a lot of difficulty and challenges for the teachers dealing with the students coming from rural backgrounds. The mathematics teacher especially faced many unique problems starting from language problems to the calculation and computation of different problems with the mathematical terms. Besides these, there are also shortages of mathematical teaching aids in many schools. They have to interact with the community members and parents in dealing with

these problems. The mathematics teachers are also facing the challenge to develop an interest in mathematics subjects among the learners from the lower stages of education. It is also true that most the parents also believed mathematics is a tough subject and also the same message is being passed on to the younger generations which automatically increases the challenges for the teacher. The teachers are likely to work rigorously to develop and chalk out strategies to make the mathematics subject interesting for the students. Also, the teachers should love the subject by developing a positive attitude towards it which will be manifested in their teaching methods. There should be a proper matching between the curriculums being framed in the education system. It should be in line with the teachers' understanding of the subject area and the curriculum other it may hamper their active participation. The teachers' perception of the existing curriculum will also affect the interest and attitude of or her effectiveness towards teaching a particular subject. So the teacher must apply different strategies to make the subject very interesting for the students and also love the subject for a better academic atmosphere in the classroom.

Rationale of the study

The qualitative development of any education system is dependent on the quality of education being

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provided at the foundation stage. So it is very pertinent to carry out research work in every stage of education in the different discipline areas. The study conducted in the diverse subject and areas will help assume the existing problems and also chalk out the proper strategy to solve the problems that arise due to different factors. Mathematics is a very vital subject in the field of education. The study will help to identify the various strategies likely to be adapted to curve out those problems.

The studies carried out by the researchers like Tyagi (2015), Pandey and Ahmad (2008), Sangeeta and Surekha (2008), Michelli, Medeleine, (2013), and Porter, B. E. (2019) also added much knowledge to this particular study area in the same way present study will also add new knowledge to the existing research work already carried out.

Objective of study

1. To assess the problems faced by elementary-level mathematics teachers. Method applied to conduct the study

The researcher used a normative survey method to carry out this study.

Sample and sampling technique

The researcher selected 80 elementary-level mathematics teachers from the East Siang district by adopting a simple random sampling technique.

Tools used

The tools were developed by the researcher by considering the various elements of the problems faced by the teacher in teaching mathematics and the same was administered to the 40 mathematics teachers of the East Siang district for further analysis.

Discussion of the result

The results are discussed below:

Sl. No	Questions	Yes	No
1	There is the availability of Teaching Learning Materials for Mathematics teachers.	62%	38%

The above result depicts that 62% of the mathematics teachers agreed about the accessibility of proper study and teaching materials in their schools. Further 34% of mathematics teachers denied the availability of sufficient Teaching Learning Materials in their school.

Sl. No	Questions	Yes	No
1	The Classroom in our school is spacious.	75%	25%

The response given by the teacher shows that the classroom of their school is spacious to accommodate the students as 75% of teachers agreed with the statement.

Sl. No	Questions	Yes	No
1	Are you satisfied with the regular attendance of your students in your classes?	60%	40%

It is quite clear from the study that 60% of the mathematics teachers of East Siang district in Arunachal Pradesh are satisfied with the regular attendance of the students. Some portion of the teachers show unfavorable response towards the same statement.

Sl. No	Questions	Yes	No %
1	Parent helpful in providing education to their children.	80%	20%

It highlighted that 80% of mathematics teachers of the East Siang district responded in favor of the parents' help educate their children

Sl. No	Questions	Yes	No
1	Teach multiple subjects in your school?	38%	62%

The study shows that 62% of teachers denied dealing with other subjects and 38% of mathematics teachers agreed that they are teaching other subjects too in their school.

Sl. No	Questions	Yes	No
1	Students' Complete homework?	64%	36%

It is depicted in the study that most of the mathematics teachers of East Siang district are satisfied with the completion of homework by the students.

Sl. No	Questions	Yes	No
1	Facilitate regular teacher training?	55%	45%

The study revealed that 55% of teachers are getting regular teacher training and at the same time 45% denied getting any regular training from the authority.

Sl. No	Questions	Yes	No
1	Student participates actively while attending mathematics classes?	33%	67%

Most of the mathematics teachers denied the active participation of students while attending classes.

Educational implications of the study

The educational implications of any research work are very vital. So the researcher has drawn out some of the educational implications of the present study for the future incorporation into the field of the education system. Following are the educational implications of the study:

1. The finding will be beneficial for the mathematics teacher to understand the problems of teaching mathematics.
2. The present study is beneficial for the identification of the different problems that existed in teaching mathematics at the elementary level.
3. It is beneficial to identify the availability and non availability of study materials in the study area and the effectiveness of the government initiatives.
4. The study also revealed the status of students' attendance and dedication to mathematics subject.

5. It highlights the necessity of the mathematics teacher to adopt different strategies to make the teaching-learning enjoyable and interesting.

6. It will be beneficial for the concerned authority to frame programs and policies to remove subject phobia among the students.

Conclusion

The mathematics subject at the elementary level needs trained and expert teachers who could understand the psychology of young learners and motivate them to learn. The infrastructure facility and teaching aids provided to the teacher also encourage and motivate the teachers to deal with their subjects more effectively. So it is always suggested to carry out survey work to update the availability of each student in the institutions established in different parts of the nation. The present study highlights the different dimensions of the problems faced by mathematics teachers in the East Siang district of Arunachal Pradesh. The study revealed some of the areas where the concerned authority interventions are required and it is also beneficial for the various stakeholders of the education system. The concerned authority should initiate appropriate action to curtail the different problems faced by a concerned subject teacher then only the teacher will be able to provide quality education. The teachers are generally branded as nation-builder but they also need support from all the stakeholders of the education to build a strong nation.

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STUDY OF TEACHERS' REACTIONS TOWARDS ORIENTATION PROGRAMMES UNDER SARVA SHIKSHA ABHIYAN

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ABSTRACT

The in-service training programmes for teachers are very important because of the updated knowledge and skills teachers. These programmes also make teachers aware of new methods and techniques useful for effective teaching. The present study is undertaken to examine the reaction of teachers towards orientation programmes organized under Sarva Shiksha Abhiyan. The survey was conducted on 200 teachers of Government schools in the Ludhiana district of Punjab. The major aims of this work are to find out (i) the satisfaction level of teachers and (ii) the difference in perception of orientation programmes. The findings of the study are also analyzed statistically.

Key words : Sarva Shiksha Abhiyan, orientation, pre-service education, in-service education, flagship programme.

Introduction

Teacher education is a complex task and its major component includes pre-service and in-service education of teachers. It also includes induction programmes and staff development programmes. The success and failure of the school depend on the teachers who are the backbone of the school. Therefore, adequate and extensive teacher training programmes are essential for proper awareness and expansion of school education programmes in the country. The in-service training programmes, also known as faculty development programmes or orientation programmes, are taking care of the needs of teachers to make the teachers up-to-date with respect to the understanding of their subject of teaching, strategies and different skills, and help in advancing thoughts in each sphere of their academic life. These events are scheduled and systematized by various organizations to help the teachers to improve as persons and to advance as experts.

The Sarva Shiksha Abhiyan (SSA), also called "each one teaches one", is a flagship programme run by the Indian Government to achieve the universalization of elementary education. The scheme SSA was launched in 2001 and presently it is part of the Samagra Shiksha scheme of the Government of India. The main focus of this programme is to strengthen the capacity of existing teachers through (i) effective training (ii) development of teaching-learning material and (iii) academic support

structure strengthening at different levels i.e. at cluster/block/district levels. The aim of this paper is to study the reaction of the teachers towards the in-service training/orientation programmes under SSA being attended by them in recent years.

Review of Related Literature

The in-service training/orientation programmes focus on the development of teachers as professionals. For this purpose, training programmes are being run at district, state and national levels by various organizations. Rachna (2007) advocated that school principals should take the responsibility of organizing orientation programmes for the teachers from time to time so that they may add effective teaching skills in classroom teaching. Eswaran and Singh (2008) studied the efficacy of in-service training being imparted to teachers of primary schools in Bihar and Tamilnadu. Hursen (2011) showed that women teachers have more positive attitudes in professional development activities. He also found that younger and fewer experienced teachers also showed positive attitudes toward professional development activities. Surapuramath (2012) described that the Male & Female and Rural & Urban Teaching Experience of teachers have no

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significant difference in their attitudes towards in-service training programs of SSA. Omar (2014) observed that training is essential for in-service teachers to update themselves for modifications in their education. Kusum (2016) studies the attitudes of elementary school teachers toward the SSA and found that the attitudes of various categories of teachers about SSA are significantly different. Nikhat and Khan (2017) have presented that the quality of teaching in senior secondary school teachers in the Aligarh district has improved as a result of in-service training, especially refresher courses. Nzariwehi and Atuhumuze (2019) resolved that the academic qualifications, performance, and professionalism of teachers are significantly impacted by-service training programmes. Mukherjee and Maity (2019) observed that there is a positive impact of in-service training on teachers' attitudes towards the utilization of ICT resources.

Keeping in view the importance of teachers as key factors in the success of SSA, the purpose of the investigator is to study the reactions of elementary school teachers towards orientation programmes under SSA.

Objectives of Study

1. To find out the level of satisfaction among elementary school teachers about orientation programmes.
2. To find out the difference in reactions of different categories of elementary school teachers towards orientation programmes.

Delimitation of Study

1. The present study has been carried out on 200 elementary school teachers in the Ludhiana district of Punjab state.
2. The study has been carried out on only Government elementary school teachers who have attended the orientation programmes.

Sample

The present study has been carried out on 200 Government elementary school teachers who had attended the orientation programmes under SSA. The sample has been taken from the Ludhiana district of Punjab. The "Random Sampling" technique was used to

collect the sample. This sample was evenly distributed among male, female, rural, urban, science and art teachers who had attended the orientation programmes.

Tool Used

The selection of suitable tools is of vital importance for successful research. In the present study, the investigator constructed a questionnaire for the collection of data.

Administration of the Tool

The investigator contacted each subject under the study and rapport was established with each respondent. The investigator visited the Government Schools to contact the teachers under the study. No time limit was set and enough time was given to the respondents to answer the questionnaire.

Statistical Techniques Used

Mean, standard deviation, mean difference and t-test were employed for the analysis of data.

Analysis and Interpretation

Table 1
Level of satisfaction about orientation programmes among total sample

Level of satisfaction	Total Number of Teachers	Percentage of Teachers
Highly satisfied	120	60
Satisfied	44	22
Less satisfied	12	6
Not satisfied	24	12

To analyze the first objective, the four categories of choices were framed viz: highly satisfied, satisfied, less satisfied, not satisfied. The total score on the questionnaire ranged from zero to 40. As shown in table 1, 60% of teachers were found to be highly satisfied with the orientation programmes whereas 12% of teachers were not satisfied with these programmes. 22% of teachers were found to be satisfied and 6% of teachers were less satisfied with the orientation programmes they attended.

Table 2
Level of satisfaction with orientation programmes among the male and female teachers

Level of Satisfaction	% of Male Teachers	% of Female Teachers
Highly satisfied	68	52
Satisfied	19	25
Less Satisfied	1	11
Not Satisfied	12	12

As shown in table 2, it was found that 68% of male teachers were highly satisfied with the orientation programmes whereas the lesser number of female teachers (52%) were highly satisfied. Only 1% of male teachers found the orientation programmes are less satisfactory whereas 11% of female teachers found it so. 12% each of male and female teachers found the orientation programmes not satisfactory at all.

Table 3
Level of satisfaction with orientation programmes among the rural and urban teachers

Group of teachers	Level of satisfaction	% of Male Teachers	% of Female Teachers	% of total Sample
Rural	Highly Satisfied	33	25	58
	Satisfied	6	20	26
	Less Satisfied	0	2	2
	Not Satisfied	11	3	14
Urban	Highly Satisfied	36	27	63
	Satisfied	13	5	18
	Less Satisfied	1	9	10
	Not Satisfied	0	9	9

As shown in table 3, 33% of rural male teachers and 25% rural female teachers were highly satisfied with the orientation programmes whereas only 11% male teachers and 3% female teachers from the rural area were found to be not satisfied.

Similarly, 36% urban male teachers and 27% urban female teachers i.e. 63% of the urban teachers were highly satisfied with the orientation programmes. No urban male teachers reported not satisfactory level whereas 9% of female teachers from the urban areas were not satisfied with these programmes. 18% of urban teachers were satisfied and 10% reported being less satisfied.

Table 4
Level of satisfaction about orientation programmes among the arts and science teachers

Group of teachers	Level of satisfaction	% of male Teachers	% of female Teachers	% of total Sample
Teaching Arts Subjects	Highly Satisfied	41	35	76
	Satisfied	4	7	11
	Less Satisfied	1	6	7
	Not Satisfied	4	2	6
Teaching Science Subjects	Highly Satisfied	27	17	44
	Satisfied	15	19	34
	Less Satisfied	0	4	4
	Not Satisfied	8	10	18

As shown in table 4, 76% of art teachers reported high satisfaction levels whereas only 44% of science teachers were highly satisfied with the orientation programmes and 18% of science teachers were not satisfied at all.

The analysis of the second objective is further divided into three parts as follows:

(i) Difference in reactions towards orientation programmes among male and female elementary school teachers

As shown in table 5 given below when responses of male teachers were compared with female teachers, the means were found to be 29.85 and 27.75 for male and female teachers respectively as shown in table 5. The mean difference of 1.10 was found to be not significant, t-ratio being 1.39.

Table 5
Comparison of reactions of different categories of teachers

Group of teachers	Sub Group	N	Mean	S.D.	Mean difference	T ratio	Level of Significance
Male-Female	Male	100	29.85	10.50	1.1	1.39	Not significant
	Female	100	27.75	10.96			
Rural-Urban	Rural	100	28.50	11.21	0.8	0.53	Not significant
	Urban	100	29.30	10.26			
Science Arts	Science	100	26.10	11.17	5.5	3.67	Significant at 0.01 level
	Arts	100	31.60	9.57			

(ii) Difference in reactions towards orientation programmes among rural and urban elementary school teachers

As shown in above table 5, the means were found to be 28.50 and 29.30 for rural and urban teachers respectively. The mean difference was found to be not significant, t-ratio being 0.53.

(iii) Difference in reactions towards orientation programmes among science and art teachers of elementary school

As shown in above table 5, the means were found to be 26.20 and 31.60 for science and art teachers respectively. The result indicates that art teachers were highly more significantly satisfied with the orientation programmes as compared to the science teachers under the study, t-ratio being 3.67 which is significant at a 0.01 level. This may be due to the fact that the orientation programmes are mainly theory-based so science teachers were less satisfied as their subject is more practical and science practicals were more or less not given attention in the orientation programmes.

Conclusion

The presented study, in general, has found that the majority of the teachers are highly satisfied with the orientation programmes. The satisfaction level of teachers of rural and urban schools is nearly the same. Similarly, the satisfaction level of male and female

teachers is also equivalent.

However, the arts and science teachers have differences in

satisfaction levels. It is mainly due to the reason that the orientation programmes are mainly theory-based, science teachers were less satisfied as their subject is more practical orientated.

Implications of the Study

As the presented study revealed that orientation programmes are important mechanisms to enhance the knowledge and skills of the teachers, so these should be further strengthened. As a few teachers have complained about shortage of time, time management skills should be made part of these programmes. The school principals/headmasters should encourage the teachers to attend the orientation programmes and adjust the workload of teachers attending these programmes. The inclusion of practical demonstrations will increase the interest of science teachers in these programmes.

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**A STUDY ON THE IMPACT OF RAJIV VIDYA MISSION
PROGRAMME FOR QUALITY EDUCATION IN
SECONDARY SCHOOLS**



ABSTRACT

Education is a tool that can help an individual to acquire and improve their awareness of the world and turn them into productive members of society. The Hindu scriptures and western philosophers made an attempt to conceptualize the significance of education and the same inculcate in the minds of the people. India became a Sovereign Social Secular democratic republic with the commencement of the constitution. The constitution of India made it very clear in article 41(Right to education), article 45 (Compulsory education) for all the children, article 46 (promotion of education) in weaker section, article 282 (grants for education), article 28 (ban on religious education) and 7th schedule reveals that the education is the joint responsibility of center and state (42 amendments).

Key words: *Rajiv Vidya Mission, Sarva Shiksha Abhiyan, Right to Education, Operation Black Board*

Introduction

Useful and relevant education signifies a quest for a system that coordinates Directive Principles of the Indian Constitution with Fundamental Rights seeking education of every child in the age group of 6-14 years. Sarva Shiksha Abhiyan (SSA) provides a wide convergent framework for implementing elementary education schemes with the objectives of achieving educational acquisition, general awareness, and professional competence. Unfortunately, the existing elementary education in Govt. schools suffers from a continuous fall in enrolment, poor infrastructure facilities, deteriorating quality teaching, paucity of funds and absence of social and moral accountability. SSA aims at socializing weaker sections, bringing drop-outs back to schools, mainstreaming gender concerns, and facilitating the disabled with special education thereby targeting all the children within the coverage of complete literacy through formal learning at the doorstep. It installs among children to learn about and master their natural environment in a manner that allows the fullest harnessing of their potential both spiritually and materially. It is based on a process of value learning that allows children an opportunity to work for each other's well-being rather than pursue selfish ends. The SSA scheme was designed and implemented by the Government of India wherein liberal resources are

provided to the states as per legislation for improving the quantity and quality of elementary education.

The RVM was first implemented in the state in 2001-02, and by 2002-03, all districts had been covered. For 2009-10, the funding pattern was 60 (Central): 40 (State), and for 2010-11, it was 65:35, with the latter ratio expected to continue for the next five years. The RVM has the following goals:

1. All children in school, AIE/EGS schools, and back-to-school camp.
2. Every child completes eight years of elementary school.
3. Emphasis on high-quality elementary education with a focus on lifelong learning.
4. At the elementary school level, close all gender and social category gaps.
5. There is universal retention.

Innovative Programmes of Rajiv Vidya Mission RVM(SSA) to improve Quality Education:

The preparatory efforts are planned to kick off a

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process of institutional development and capacity building at the local level for professional management of the elementary education sector. Capacity building must be prioritized through training, rigorous planning processes, an emphasis on community-based data gathering and analysis, and, most importantly, a commitment to delegate school management to the local community. The preliminary phase is projected to take anywhere from four to eight months. Enrollment and retention drive special camps, with the RSTC and NRSTC establishing specific alternative school models, as well as the reinforcement of madrasas and makhtabs for girls' formal education. Community mobilization, attendance and remedial classes, monitoring, and assessment, as well as creating a pleasant learning atmosphere in the school Training programs for community leaders to build capacity for school management committees, the establishment of block and cluster resource centers for academic support, the distribution of free textbooks to all children, incentives such as uniforms, and the provision of school grants, maintenance grants, and teacher grants, as well as periodic feedback on interventions.

Schooling in this country was formerly a privilege reserved for a select few, but thanks to the Right to Free and Compulsory Education Act of 2009, it is now a basic right (RTE-2009). Education for all is an important goal guaranteed by the Indian Constitution, which requires the state to offer basic education to all children aged 6 to 14. Throughout Andhra Pradesh, the Rajiv Vidya Mission (SSA) held Children Conventions (Chinnarula Sabha), Reading Festivals, Library Weeklong Celebrations, and other melas such as Language Mela, Matric Mela, and Learning Material Mela. Children were included, as well as some innovative objects such as a wall magazine, a school post box, and children's clubs. Children took part in them enthusiastically and freely expressed their opinions on the school environment.

Need of the Present Study

The educational programmes are as Operation Black Board Scheme (1987-1988), Andhra Pradesh Education Project 1999, District Primary Education

Project Programme 1996-97, Andhra Pradesh School Health Project, and National programs. Nutrition support to primary education 1995, free supply of textbooks 1995, etc. are implemented in different districts of the state of Andhra Pradesh and achieved some level of development of literacy and enrolment of children in schools. For the purpose of achieving elementary education for all the children by 2010 in India. The Central government launched a universalization of the elementary education program Sarva Shiksha Abhiyan in 2001-02. The same was launched in Andhra Pradesh in all 23 districts. The name of SSA is later renamed Rajiv Vidya Mission in the State of Andhra Pradesh in 2007. RVM and SSA are one and the same project. It is in this background that there is a need to assess the working of the Rajiv Vidya Mission program for which the present study entitled "A study on Rajiv Vidya Mission in Guntur District of Andhra Pradesh" has been undertaken.

Objectives of the Study

The present study has been undertaken keeping in view the following broad objectives:

1. To know the Rajiv Vidya Mission: An overview in general and Guntur district in particular.
2. To analyze the perceptions of respondents on working and impact of Rajiv Vidya Mission in Guntur district of Andhra Pradesh.
3. To find out the comparison between the perception of high school and elementary school teachers.
4. To understand the problems which arise in the work environment and also to suggest suitable measures for the successful functioning of the Rajiv Vidya Mission?

Hypotheses

1. To test the significant relationship between high schools and elementary school practice in Rajiv Vidya Mission.
2. To test the significant relationship of the impact of Rajiv Vidya Mission principles on schools with reference to both high schools and elementary schools.

- To test the significant relationship between benefits and welfare policies likely to be followed by Rajiv Vidya Mission the selected units for the study.
- To test the satisfaction level of teachers for the training programs provided by Rajiv Vidya Mission.

Population and Sample

This project was conducted among high schools and elementary schools that follow the systems adopted from Rajiv Vidya Mission in Andhra Pradesh. The respondents for this research work were selected from Zilla Parishad, Government, Municipal, Aided high schools, and elementary schools. The total population of teachers and headmasters of high schools & elementary schools is 28500. From the universe, 2% of the sample has been selected by adopting a simple random sampling technique proportionately to take opinions. It includes all cadres and categories of employees in schools.

Table 1
Universe and Sample

Schools	High Schools				Elementary Schools					
	ZP	Govt.	Municipal	Aided	Total	ZP	Govt.	Municipal	Aided	Total
Teachers	6650	300	650	1150	8750	11900	100	1400	1250	14650
	-133	-6	-13	-23	-175	-238	-2	-28	-25	-239
Headmasters	450	50	50	150	700	3600	50	350	400	4400
	-9	-2	-1	-3	-15	-72	-1	-7	-8	-88
Total	7100	350	700	1300	9450	15500	150	1750	1650	19050
	-142	-8	-14	-26	-190	-310	-3	-35	-32	-380

Note: Figures in brackets represent sample respondents

Findings of the study

The following are the findings based on the perceptions of the respondents who have expressed their opinions fairly in their interaction process.

- 90% of high school and 94% of elementary school respondents agreed that Sarva Shiksha Abhiyan provides access to elementary education.
- An overwhelming majority of the respondents i.e., 85% agreed, that early childhood care and education promote the goals of UEE under RVM.

- Here the total of 189 high school teachers' respondent's opinions about the 'back to school programme' is agreed to an extent of 87%. In elementary school teachers (38) 91% of the teachers agreed back to the school programme.
- An own majority of the respondents have agreed (85%) all children complete five years of primary schooling by 2007.
- In their own high schools, 85% teachers and 89% elementary school teachers agreed to attend the claps programme.
- An overwhelming covering all the training inputs i.e., 87% of respondents have agreed.
- 88% of high school and 89% elementary school respondents agreed that the teacher and headmaster training is useful for improving their school grade and student achievements.
- An overwhelming majority of the respondents i.e., 88% agreed that response persons transacted sessions very effectively in RVM.
- Hence 89% of the teachers and headmasters agreed that the environment improved under Rajiv Vidya Mission.

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Suggestions

SSA envisages cooperation between teachers, parents and the community. So the teachers have to develop cooperation. The education of girls is one of the primary concerns in SSA. So the teachers have to encourage girls to utilize this SSA programme. The teachers have to take care of the proper utilization of additional classrooms, toilets, and water facilities which were constructed under SSA programme.

- The government has to take risks to reach SSA programme for every village.
- The government has to continue SSA programme.
- The government should encourage the children in age group 6-14 years to utilize SSA programme for their welfare.
- The government has to release funds regularly to SSA programme.

5. The government has to supervise the teachers regarding the distribution of all pens, pencils, posters, sketch pens, and charts equally to all children.
6. The government has to take special care regarding in-service training and should take care to conduct at least 20 days a year.
7. The government has to increase funds.
8. The government has to establish new schools where there is no school.
9. The government has to establish additional classrooms where a requirement exists.
10. The government under the Sarva Siksha Abhiyan program has to give special scholarships to OC students who are poor.
11. The government has to give special training for untrained teachers under SSA programme.
12. The government has to fill the vacancies in the schools regularly.
13. The government should create a drawing teacher's post in every elementary school to develop the skill of the students.
14. The government should provide more TLM to improve the programme.
15. The supervisor should be always available to the teachers to make the SSA program is successful.

Conclusion

The Government of India (GoI) launched the Sarva Shiksha Abhiyan (SSA) with the goal of universalizing satisfactory quality elementary education through community ownership of the school system in response to the demand for high-quality basic education across the country. Later, the initiative was renamed Rajiv Vidya Mission from Sarva Shiksha Abhiyan (SSA) (RVM). As a result, it provides an opportunity for state governments to collaborate with the federal government and local governments to build their own vision for elementary education..

Teacher training is one of the key components of this program's focus on improving the quality of primary

education. Dr.MCR HRD Institute of Andhra Pradesh was given the opportunity to train school teachers from three districts, Mahabubnagar, Medak, and Nalgonda, under the title "Technology for Education," as part of this effort.

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USE OF HUMOUR IN CLASSROOM TEACHING AND ITS IMPACT ON STUDENTS' MENTAL WELL-BEING

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ABSTRACT

The present study aims to discuss the effect of using humour for the students' mental wellbeing and to explore their perception on humour in classroom teaching. A questionnaire developed by Said Shiyab and Reem Rachel Abraham, et.al. has been modified and used for collecting data. 158 samples have been collected using the purposive sampling technique from undergraduate students studying in the colleges of Howrah district, W.B. Frequency analysis of the responses to each item has been done. 71.5% of students responded that the use of humour in classroom teaching builds a good student-teacher relationship. The result indicates that humour is an effective communication device in teaching.

Keywords: *Sense of humour, positive learning environment, mental wellbeing, effective communication device.*

Introduction

Freud mentioned that humour is one kind of pleasure by which emotions can be released. It increases positive emotions like satisfaction and happiness in the heart of the students and also reduces negative emotions like sadness, disgust and loneliness (Gremigni, 2013). Some researchers like Torok, et. al. (2004) indicated humour as a waste of time which decreases classroom morality and teaching efficiency in the classroom. But as time changes, in the learner-centred education system, teachers play only the role of facilitator and they must have the quality of using the proper sense of humour in teaching. Now the usage of humour becomes a significant part of teaching strategy. But learning will not become successful if there exists any mental illness. In March 2020, World Health Organization has given a series of messages useful to support the mental and psychological condition of people during pandemic outbreaks. Especially for children, they suggested providing positive thinking and avoiding fear, sadness, loneliness etc. by support from elders and teachers. Remaining close with teachers and friends is very essential for their mental well being. In online learning platform facilities provided by face to face, learning situation does not exist but teachers try to involve students in this mode of learning by developing a friendly relationship with students with the use of a proper sense of humour. When learners are mentally well they can meet their learning potential, can be motivated and interested in work, cope

with normal stresses, anxiety, loneliness and are connected to the whole world around them (Education & Training, 2019). Sense of humour is a mark of self-confidence, intelligence and ability by which teachers may be connected with learners and can stand by them in bad situations, challenges and adversity (Schwab, 2005).

Research questions

The study follows the following research questions- i) How does humour secure the students' mental health? ii) What are the psychological benefits of using humour in the classroom? iii) What do the students perceive about teachers' use of humour in the classroom?

Objectives of the study

The objectives of the present study are- i) To explore students' perception of teachers' sense of humour used in classroom teaching. ii) To discuss the effect of using a sense of humour on the student's mental well being.

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Method

Research Design

The present study follows a descriptive type of research design and survey method to establish the first objective. Then the second objective document analysis method is followed. Few related literatures is selected as per the desired theme. Then through the review process Government documents, reports, articles from journals, and books are analysed.

Tool

A questionnaire developed by Said Shiyab and Reem Rachel Abraham et.al. has been modified by the researchers and then it has been used. The questionnaire contains fourteen questions based on students' perceptions of humour and its use in classroom teaching. Each question has four options to choose one. The questionnaire has been prepared using Google Form.

Population and Sample

The questionnaire has been distributed online to the students studying in the colleges of Howrah district, West Bengal. Among them 158 undergraduate students studying B.A, B.Sc., B.Com. are taken as samples from Govt. aided colleges of Howrah District.

Sampling Technique

The samples have been collected using the purposive sampling technique.

Statistics Applied

Descriptive statistics have been applied for the calculation of data. Each item given in the questionnaire has been analyzed by taking the frequency and calculating the percentage.

Result and Analysis

Objective 1: Students' perception of humour and its implication in classroom teaching has been analysed. At first the meaning of 'humour' was asked and the students responded differently. Based on the responses it is clear that they have no specific idea of humour. Forty-three students (27.2%) replied that humour is laughing and smiling. Twenty-one students (13.3%) suggested that it is a kind of being friendly with each other. Only one (0.6%) said humour is like dramatizing

and most of the students (58.9%) replied that humour is an integration of all the above categories. About the usefulness of humour in classroom teaching 71.5% of students replied that it increases a good student-teacher relationship. 24.7% of students believe that humour is good for their mental well being. Only one student mentioned that it creates a disturbance in the classroom. 77.8% of students believe that they can understand the content well and get motivation in learning when teachers use humour in the classroom. 64.6% of students also feel relaxed after incorporating humour in the classroom. Only 2.5% replied that it creates a mental disturbance for them at the time of learning. 68.4% of students perceived humour as an effective learning tool used in communication and it is also very useful whereas only three (1.9%) replied it is a waste of time. 65.8% of students suggested that humour must be present in classroom teaching and 89.9% of students like a teacher to have a proper sense of humour because most of the students prefer learning in a friendly way and also like the storytelling method. Some of the students specified that they like teachers who possess a proper attitude and always motivate them. A teacher having a sense of humour makes the students (58.2%) interested in the class whereas three students (1.9%) feel bored. One hundred and twenty-five students (79.1%) feel comfortable with teachers who manage a bad situation by having a proper sense of providing relief in an amusing way. They do not like those teachers who ignore the situation and teach seriously. Few students opined ideal teachers are those who can easily create a humorous situation in the classroom. But most of the students prefer those who spontaneously give answers to funny questions, often use funny things to present the content and also can easily create a humorous situation in the classroom. 58.9% of students think Language teachers have the best quality of using humour in the classroom. Most the students feel that teachers' sense of humour contributes to their mental wellness and it is the best way to make them happy and also attentive in class. Thus, the present study reveals that students prefer humour to be integrated into classroom teaching. It is very helpful for them to be mentally fit and motivated in learning.

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Table 1
Students' perception of humour and its use in classroom teaching



Questions	Option	%
The term 'humour' means	a) Laughing and smiling	27.2
	b) Dramatizing	0.6
	c) Being friendly	13.3
	d) All the above	58.9
Use of humour in classroom teaching	a) Good for students' mental well being	24.7
	b) Bad for students' mental well being	3.2
	c) Increases a good teacher student relationship	71.5
	d) Creates disturbance in classroom	0.6
Effect of using humour in classroom teaching	a) I understand the content very well	3.2
	b) It motivates me in learning	13.9
	c) Obstructs my thought and concentration	5.1
	d) Both a & b	77.8
When a teacher uses humour in the classroom I feel	a) Mentally strong	24.7
	b) Mentally disturbed	2.5
	c) Relaxed	64.6
	d) Both a & b	8.2
I think humour is used in the classroom as	a) A learning tool	9.5
	b) Way of communication	20.3
	c) Waste of time	1.9
	d) Both a & b	68.4
Humour	a) Must be there in classroom teaching	65.8
	b) Should not be there in classroom teaching	9.5
	c) Teachers must have all time	17.1
	d) None of these	7.6
I like a teacher in classroom who	a) Creates fun all time	1.3
	b) Have a proper sense of humour	89.9
	c) Seems serious all time	3.8
	d) Others (specify)	5.1
The content becomes comprehensive when the teachers present a topic in	a) An amusing manner	19.6
	b) A serious way	3.8
	c) Story telling method	32.9
	d) A friendly way	43.7
A teacher having sense of humour makes me	a) Interested in class	58.2
	b) Bored in class	1.9
	c) Comfortable in class	39.2
	d) Others (specify)	0.6
I like a teacher who manages a bad situation in class	a) Having a sense of creating fun	14.6
	b) Make us feel comfortable with him	79.1
	c) Ignore the situation and teaches seriously	4.4
	d) None of these	1.9

The ideal teacher in aspect of sense of humour is who	a) Spontaneously gives answer to funny questions	5.1
	b) Often use funny things to present the content	16.5
	c) Can easily create humorous situation in classroom	31.6
	d) All the above	46.8
_____ subject teachers have the best quality of sense of humour	a) Language	58.9
	b) Social science	22.2
	c) Science	17.7
	d) Mathematics	1.3
The teachers' sense of humour contribute to my mental well being	a) Always	58.9
	b) Sometimes	22.2
	c) Frequently	19
	d) Never	0
I feel humour is the best way to make students attentive in learning	a) Always	53.8
	b) Sometimes	28.5
	c) Frequently	16.5
	d) Never	1.3

Objective 2: According to Cambridge English Dictionary, 2020, sense of humour is “the ability to find things funny, the way in which people see that some things are funny, or the quality of being funny”. During the late 1990s humour is considered a positive human trait, strength of mind by positive psychologists (Peterson & Seligman, 2004). Now, this trend is going on to imply humour as psychological treatment. As a result of the deduction of laughter a man becomes depressed (Fonzi, 2010). So, humour is an important mechanism for the well-being of people and to secure their mental health. According to the World Health Organization (WHO), mental health is “a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community”. People with positive moods may be connected socially and it is expressed through their behavioural factors. The psychological well being of a person by using humour can be supported by the anxiety reduction theory which is described by Herbert saying that the use of humour by the teachers is like a release valve in the classroom. The arousal theory describes the stress decreasing effect of using humour and boosting energy (Lefcourt & Martin, 1986; Martin & Lefcourt, 1988).

In classroom teaching, one element of human development that is present to develop the familial relationship between teacher and student is humour (Makewa, 2011). With the help of humour, learners perceive competency in taking risks, are self-dependent, self-forgiving and increase self-esteem (Pollak & Freda, 1997). This connection always helps students in academic achievement from school to college and beyond (Hickman & Crossland, 2005). According to Ralph Ocon, 2015, there are some psychological benefits derived from using humour in the classroom. These are:

- a) Humour reduces the gap between teacher and students and increases a friendly relationship between them.
- b) It helps students to be relaxed in the classroom and decreases their anxiety and stress.
- c) Humour provides a positive learning environment, fun-oriented and this is helpful for mental wellbeing. They even enjoy the learning situation and the teachers also become self-satisfied.
- d) Students are more attentive and motivated in the classroom when the environment is amusing and comfortable.
- e) Humour keeps students engage in learning and provide support to be involved in teaching-learning.

- f) Humour increases a sense of happiness, pleasure, satisfaction, and appreciation within the heart of pupils and teachers.
- g) Humour helps to reduce self-consciousness, loneliness, and depression and always boosts energy and self-confidence.
- h) Students become open-minded and can easily share their needs with peers and teachers also.

Findings

1. There exists a positive relationship between students' mental well being and teachers' effective use of humour.
2. Humour is an effective communication device in teaching and has a positive effect on learning & creating a positive learning environment.
3. Humour essentially helps the students to be happy and satisfied in life.
4. Use of humour in classroom teaching builds a good student-teacher relationship.

Educational Implication

The study helps the teachers to be aware of having a proper sense of humour and use it in classroom teaching, especially for students' mental well being.

Conclusion

On the basis of the study it can be concluded that the study reveals students' perception of using humour as a teaching tool and a communication device. The result indicates that it is instrumental in teaching and has an impact on students' productivity and creative ability. It also helps students to get motivation, grow interested and comprehend the content well. At the same time, it provides mental strength. To some, people humour is part of life where very few believe it is non-existent. As a result, very few students perceived humour as ineffective and inappropriate in the classroom. In the present situation, when people are suffering from stress, depression, and anxiety, humour may be a factor in creating a healthy environment by declining the negativity of the mind. Teachers should also use an appropriate form of humour to provide support to the students in extremely stressful situations. The research finds out that

humour is a mechanism to reduce tension and support mental health.



So, teachers should use this mechanism in both online and offline teaching to reduce stress among the students and maintain their mental health.

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HIGHER EDUCATION FOR STUDENTS WITH VISUAL IMPAIRMENT IN INDIA: A LITERATURE REVIEW

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ABSTRACT

Education is the foundation of a country's development. Individual rights to high-quality education, including higher education, are at stake. A multitude of policies, regulations, and programs have been developed to provide equal access to education at all levels, including higher education. Disability impacts the lives of 20 million persons in India, or 2.13 percent of the entire population, according to the 2001 census. This article aims to explore current difficulties in higher education for Students with Visual Impairment (SwVI) as well as provide relevant programs to assist them in achieving their goals. The article also identifies the difficulties and challenges that visually impaired students have in higher education, and suggests that, in light of the existing situation, a possible shift of perspective concerning higher education for visually impaired students would be much more effective.

Key Terms : Higher Education, SwVI, HEPSEN scheme, TEPSE scheme, Curriculum.

Introduction

Disability can be regarded of as a dynamic process that appears to have a direct impact on a person's physical and mental health, as well as their intellectual, socioeconomic, and sociocultural aspects. Disabled individuals are not really the underprivileged human beings on the planet, but they have long been one of the most neglected elements of society. In India now, almost 21 million people are at risk of becoming disabled, accounting for 2.1 %, comprising 12.6 million men and 9.3 million women (Census, 2001). The most frequent disability is visual impairment, which represents 48.5 % of all disabilities. From 21 million in the 2001 census to 26 million in the 2011 census, the number of disabled people has increased (Census, 2011).

According to World Health Organization (WHO) estimations, there are 285 million individuals with vision impairments globally, with around 40 million of them experiencing severe impaired vision and blindness. Furthermore, enrollment statistics expose several other data and trends, including the fact that in emerging economies, only 12.5 percent of the population in the 18-24 age group has access to higher education, but in the developed world, more than 50 % of the students receive access (World Bank, 2004). Higher education is a level of education that occurs after a secondary

school education has been completed. It includes teaching, research, and training programs at the university level. As per India's statutory higher education institution, the University Grants Commission (UGC), 6% of the country's youth are enrolled in Indian higher education institutions. Only 1.2 percent of the 3.6 lakhs disabled youth in the nation attended college or university. Only 0.1 percent of impaired individuals find employment, according to the National Centre for Promotion of Employment for Disabled People (NCPEDP, 2005), comprising 0.07 percent of men and 0.03 percent of women. Despite the fact that 3% of seats are set aside for students with impairments, this suggests that these students are unable to progress to higher levels of education. Since India's higher education sector is inaccessible to 98.8% of disabled individuals, there is an urgent need to focus on a range of aspects, including education, health and rehabilitation, assistance for everyday life skills, livelihood opportunities, advocacy, and campaigning to combat disability. In today's world,

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individuals with disabilities must be able to overcome academic problems that arise as a result of their impairments in order to succeed in higher education institutions. In this context, students need to be aware of their disabilities, develop appropriate coping techniques to regulate their situation, accept the capabilities and weaknesses that arise as a result of impairment, and be familiar with the policies and services that are available.

Objectives

1. To explore the existing higher educational policies, services, and programs for SwVI
2. To investigate various concerns and factors impacting higher education for SwVI

Higher Education: Needs and Challenges

Higher education provides a pathway to career opportunities for students, allowing them to contribute their fair share to nation-building. Higher education is required for the visually impaired in order to reduce the impact of their disability and to fully enhance their abilities and potential. This appears as a challenge to some people's unfavorable attitudes toward the abilities of people with visual impairments (Omede, 2015). The gross enrolment rate (GER) in higher education in India is 20.4 percent, with roughly 30 percent needed to meet the need (MHRD, 2012). Disability issues were discussed in the Indian Education Commission (1964-66), and the PWD Act (1995) improved the recognition of disability at various levels, accompanied by the Action Plan of Inclusive Education for Youth with Disabilities (2005), which focused mostly on the freedoms and liberties of people with special needs to higher education. In 1998, the University Grant Commission introduced two programs, 'TEPSE' (Teacher Preparation in Special Education) and 'HEPSN' (Higher Education for Persons with Special Needs), to assist in the establishment of disability units in universities, as part of the IX Five-Year Plan. Funds were distributed to 13 different universities under this plan, and it was extended to XII Five-Year Plan. There are various obstacles to executing such schemes, including a lack of students with recognized disabilities and the fact that the initiative was never widely publicized enough for institutions to apply. Equal Opportunity Cells (EOC) have also been

established by the University Grant Commission, which provides a laboratory for SwVIs to access e-resources and overcome the obstacles utilizing various applications. The UGC has also awarded funding for proposals to remove architectural barriers including disabled-friendly lavatories, elevators, accessible pathways, and rooms. The administration has formulated numerous incentives to strengthen the enrollment of SwVI. The government has placed a greater emphasis in recent years on the coordination of services ranging from health, nourishment, skills training, technology and science, work opportunities, sports activities, social, creative arts, and social assistance in order to promote accessibility among SwVIs in higher education. However, the number of disabled students pursuing higher or professional education is still quite low.

Factors affecting quality in Higher Education for SwVI

The report of the British Council (2014) divulges the fact that Indian higher education is faced with four broad challenges: a) the supply-demand gap b) The low quality of teaching and learning c) Constraints on research capacity and innovation d) Uneven growth and access to opportunity as well as multidimensional inequalities in enrolment across population groups and geographies. In contrast to these challenges, there are several factors that affect the enrollment of SwVI in higher education levels, which includes: Impediments to open distance learning and job possibilities include architectural or structural barriers, attitude barriers, service availability, teacher stigmas, employment prospects, financial assistance, and concerns connected to open distance learning and work opportunities. SwVI finds it difficult to navigate its university campus due to a lack of ramps, railings, and disabled-friendly amenities. Harrison (2001) suggested adopting Universal Design principles to address accessibility issues at multiple levels. The views of members of society, as well as instructors and parents, may inhibit their children's intellectual development. Hergart and Pocklington (1982) suggested that in order to foster positive attitudes and increase acceptance of visually

impaired students alongside pupils without impairments. Haugann (1987) discovered that counseling services for SwVI were not available in his study on the issues of SwVI in higher education institutions. There are not enough Braille printed books, nor are there enough visual readers. Individuals with visual impairments also struggled to acclimate to academic life. Exams were difficult to take, and getting about was challenging. As a result, in order to address these challenges in higher education, an appropriate approach and learning environment are required. Furthermore, similar facilities and training should be provided in order to gain a better knowledge of the subject topics. Philip and Todd (1999) highlight the financial difficulties that SwVI encounter in university education. He emphasizes the key concerns of higher education, such as the enormous cost of conducting and funding increasing educational programs. According to Punani and Rawal (2000), the following are the significant constraints to the employment of SwVI after completion of their education: a scarcity of identification facilities; absence of employment training amenities and inadequate training of hiring officials and employees; lack of effective implementation machines and equipment and lack of a framework of delivery of services; and complacency and apathy of organizations. Burgstahlers (2002) points out that the distant education programs unintentionally create barriers for students with special needs. In other words, SwVIs are vulnerable to accessibility and inclusion when it comes to Open and Distance Learning (ODL). Fuller et al. (2004) also investigated challenges encountered by students with impairments at the higher education level, such as the pace with the delivery of the lectures, the difficulty in participating in discussions, and providing responses to queries. Based on the most recent Gill (2009), SwVI face a variety of challenges in distant education, including a lack of materials, self-indulgence in using technical tools, and trouble adjusting curriculum content.

Plausible Solutions to Increase Accessibility

In the case of open distance learning, it is necessary to plan meticulously during the curriculum construction with an understanding of their situations. To address these concerns, universities must make arrangements for

text recording or brail in order to customize the individual curriculum. In order for students with vision impairments to participate in practical lessons, some equipment or activities must be adjusted. Encourage the student to contact Guidance and Counseling services in order to gain further access. To enable equal access to higher education institutions, Universal Design should be used. At all stages of education, from primary to post-secondary, government literacy initiatives for visually impaired students' e-learning are desirable. In order to assist optical character recognition (OCR) users, it should be made mandatory to develop websites in accordance with international standards. To allow students to use e-learning, all textbooks must've been accessible in all-digital format. To attain barrier-free infrastructure universal design must be followed.

Conclusion

In order to keep up with the developed countries, India has implemented new policies and programs for the education of students with disabilities. In today's world, education has become the expectation for the emancipation and enlightenment of students with diverse disabilities. Higher education's primary goal is to promote services so that visually impaired students can be encouraged to become functionally independent and productive members of society through various channels, such as education, technical programs, healthcare rehabilitative services, and sociocultural restoration. If efforts are made at the secondary levels of education, the inclusion of SwVI will be expanded to include them in higher education. Higher education inclusion and enrolment can be promoted by simplifying entrance and offering proper guidance and counseling.

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THE IMPACT OF TEACHER RETENTION ON LEADERSHIP PRACTICES IN SELF-FINANCING COLLEGES

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ABSTRACT

It is very clear that pulling in and holding key workers is the first concern for any organization deserving at least some respect. The purpose of this article is to find the relationship between leadership practices and employee retention in self-financing colleges of Ernakulam, Kerala. Both primary and secondary data were collected using a structured questionnaire and the results were analyzed. Five variables were used for measuring leadership practices. The paper gives way for the self-financing educational institutes to enhance the relationship between the top-level management representatives and the teaching fraternity to make the teachers stick on to the institute.

Key Words : Retention, Self-financing colleges, Leadership practices, educational institutions.

Introduction

India's advanced education framework is the third biggest on the planet, close to the United States and China. (Annual Report, MHRD 2008) The fundamental administering body at the tertiary level is the University Grants Commission(UGC), which upholds its principles, exhorts the public authority, and helps organize between the middle and the state. Accreditation for higher learning is managed by 12 self-governing organizations by the University grants commission. (2012). Leadership is a term generally utilized all throughout the planet and is portrayed as the correspondence interaction or method through which relational impact directly affects supporters' practices. (Tannenbaum & Massarik, 1957). Other than different government activities, the part of the private establishments in the advancement of the instruction industry in India can't be denied. Presently the abrupt spray in the number of private colleges giving proficient instruction in the new past has brought about the expanded interest of profoundly qualified experts on the lookout. In this manner, countless resources are needed by these establishments for their educational plan improvement and scholarly redemption.

Significance of the study

The self-financing colleges in Kerala are facing a critical issue of attrition among the teachers. When the teachers leave the institution during their tenure it will affect the learning pattern of the students. The studies in

different areas around the world show many reasons for this teacher turnover. This article is mainly to find whether the leadership practices in the colleges are a reason for the teachers to leave the educational institutions.

Objectives of the Study

To study the impact of leadership on employee retention in self-financing colleges

Methodology

Both Primary and secondary data are used for the study. Primary data was collected with the help of pretested structured questionnaire from a selected sample of faculty members of self-financing colleges. Secondary data was collected from published books, periodicals, articles, reports, and official documents of the government authorities and the self-financing colleges in Kerala.

A multi-stage stratified random sampling was used for the data collection in this study. In Kerala, Ernakulam district is having the greatest concentration of self-

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financing institutions belonging to all categories. Hence Ernakulam district was selected as the area of the study. Self-financing colleges are clustered into two categories, namely arts and science and engineering colleges. Thus, arts and science colleges, training colleges, and law colleges are together considered as arts and science colleges and engineering colleges are taken separately. Thus, there are two groups, namely, arts & science and engineering, that is, 59 arts & science colleges at MG university(2019) and 22 engineering colleges(DTE 2018). These 81 colleges are again subdivided into colleges having less than 20 teachers, greater than 20 but less than 50 teachers, greater than 50 but less than 100 teachers, greater than 100 teachers but less than 150, and greater than 150 teachers. Giving proportionate representation to each group 335 faculty members were selected as samples from the randomly selected colleges from these groups.

Data Analysis

Leadership and employee retention

Ng’ethe, Namusonge, Iravo (2012) recommended that the leadership in institutions embrace favorable leadership practices to enhance the retention of academic staff in their institutions since leaders have an influence on a plethora of organizational factors which affect retention. The leadership of the organization plays a vital role in determining the retention of employees in an organization. In self-financing colleges also this is not an exception. The effect of leadership on employee retention is analyzed through the five variables such as management appreciation, listening by the management impartiality by the HOD, management impartiality, and appreciation from the HOD. The association between each of these variables and retention of faculty in the institutions are analyzed and tested in the following paragraphs

Hypotheses 1 : There is no significant impact of leadership on employee retention

Hypotheses 2 : There is a significant impact of leadership on employee retention

Employee retention and appreciation from HOD

Appreciation from the HOD boosts the morale of

the faculty members and it creates a good working environment in the department. The natural impact of this is the continuation of the faculty members in the institution. This was analyzed with the hypothesis given below

H0 : There exists no significant impact of appreciation from department heads on Employee retention

H1 : There exists a significant impact of appreciation from department Head on Employee retention

Chi-square test of independence was used to test the hypothesis and the following results were obtained

Table 1
Chi-Square Tests Employee Retention and Appreciation from HOD

Components	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square test	71.875 ^a	16	0.0
Likelihood Ratio	73.315	16	0.0
LinearbyLinear Association	17.724	1	0.0
Number of valid items		333	

8 cells (32.0%) have expected count less than 5. The minimum expected count is 1.35.

Source : Primary data

Chi-square = 71.875(16); p=0.00 However the number of cells with an expected count of less than 5 exceeded 20%. Hence, the values of likelihood ratios are checked and it is also .000<.05. Hence there is evidence to show that there is a significant relationship between the two variables

Employee retention and listening by the management

The management should listen to the grievance of the employees if they have to feel like continuing in the organization. In the present study, how far management listens to the faculty members and the effect on employee retention was examined with the following hypothesis.

H0 : Listening of grievances by the management is not significantly related to employee retention

H1 : Listening of grievances by the management is significantly related to employee retention

Hypothesis was tested using chi-square test is done on the data collected

Table 2
Chi-Square Tests on Employee Retention and Listening by the Management

Components	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	58.990 ^a	16	0.0
Likelihood Ratio	55.97	16	0.0
LinearbyLinear Association	1.699	1	0.192
Number of valid items 333			

6 cells (24.0%) have expected count less than 5. The minimum expected count is 1.80.

Source : Primary data

The result shows that there is a significant relationship between the two. chi-square 58.990(16) p = .000. But there is a violation of the assumption that the number of cells with a count less than 5 is 24%. But the likelihood ratio is also significant at p<.05. Hence, we have the evidence to say that there is a significant relationship between the two.

Employee retention and impartiality by HOD

When the HOD in the department becomes partial, the environment in the department becomes not congenial for the smooth functioning Some of the employees who felt themselves to be victims feel like leaving the organization. Thus, the impartiality of the HOD affects the faculty members to leave the institution This was tested using the hypothesis

H0 : The impartiality by the HOD and employees are not significantly associated.

Table 3
Chi-Square Test on impartiality by HOD and Employee Retention

Components	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	107.360 ^a	16	0.0
Likelihood Ratio	103.942	16	0.0
LinearbyLinear Association	1.521	1	0.217
Number of valid items 333			

7 cells (28.0%) have expected count less than 5. The minimum expected count is .63.

Source : Primary data

chi-square = 107.360 at 16 degrees of freedom: p value.000. Here also the expected count is less than 5 is 28%. Hence the likelihood ratio was checked and found to be significant at p<.05. Thus, the null hypothesis is rejected and there is a significant association between impartiality by HOD and employee retention

Employee retention and management impartiality

The impartiality by the management is another positive factor that is likely to affect employee retention in an institution. When the management is partial, many faculty members will lose their interest to continue in the organization and this is likely to increase the attrition rate. Data regarding this was collected from the respondents and was analyzed with employee retention.

H0 : Management impartiality is not associated with employee retention

H1 : Management impartiality is associated with employee retention

Table 4
Chi-Square Tests Employee Retention and Management Impartiality

Components	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	119.182 ^a	16	0.0
Likelihood Ratio	125.845	16	0.0
Linear by Linear Association	1.26	1	0.262
Number of Valid items 333			

5 cells (20.0%) have expected count less than 5. The minimum expected count is 2.43.

Source : Primary data

The chi-square test of independence gave the following output.

chi-square results as 119.182 with degrees of freedom of 16 and the p-value are .000. Thus there is strong evidence to show that there is a significant relationship between the two variables analyzed

Employee retention and management appreciation

If the management recognizes the good work done by the employees, then they are likely to continue in the organization. Recognition and appreciation greatly stimulate the workers in their jobs. In the present study also this association between the two variables was analyzed.

H0 : There exists no significant impact of appreciation from Management on Employee retention

H1 : There exists a significant impact of appreciation from Management on Employee retention

The chi-square test used to test this hypothesis gave the following result.

Table 5

Chi-square tests on Employee Retention and Management Appreciation

Components	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	78.541 ^a	16	0
Likelihood Ratio	81.718	16	0
Linear by Linear Association	11.112	1	0.001
Number of valid items 333			

7 cells (28.0%) have expected count less than 5. The minimum expected count is 2.16.

Source : Primary data

The table gives the chi-square value of 78.541 with degrees of freedom of 16 and a p-value of 0.0<.05. However, as there are 28% of cells with a count less

than 5, the likelihood ratio was checked and it is 0.0<.05. Hence, we can reject the null hypothesis.

Thus, there is a significant association between the two variables.

Findings and Interpretation

The above five tables explain the variable leadership practices which include appreciation from the management and HOD, the impartiality of the management and HOD, and the patient listening of the management. All of them give a significant value which implies that employee retention is strongly associated with leadership practices. Taking these results sharing the association between those variables and employee retention the null hypothesis that there is no significant association between leadership practices and employee retention can be rejected

Educational Implication

This paper showed that leadership practices and employee retention show a great relationship and leadership practices have a wide influence on retaining employees in self-financing engineering colleges in Kerala. The ramifications of these findings could help firms in holding their top ability while additionally helping the internal growth of the organizations. As said in the introduction the teachers leaving the organization rapidly will affect the quality of education very much so if strong leadership practices are followed that will make the faculty members stick on to the colleges and hence improve the quality of education.

Conclusion

This article shows a way to retain talents in academic institutions. The people in strategic leadership positions play a vital role in making people sticking on to an organization. This study is beneficial to educational institutions which say that the people in the leadership positions have to appreciate the employees with impartiality and this will in turn retains the teaching fraternity of the college itself.

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ROLE OF INTERNATIONAL EXPOSURE IN HELPING STUDENTS TO JOIN GLOBAL WORKFORCE: A STUDY WITH SPECIAL REFERENCE TO GUJARAT TECHNOLOGICAL UNIVERSITY

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ABSTRACT

Managing business across the globe would be more complex in 2030 as compared to 2020. The new mantra of the business world is 'Global is the new local'. Management students must be well prepared to work professionally in an enlarged complex and dynamic economy. Understanding the internationalization process requires commitment at all levels from top to bottom with a global mindset and progressive approach. This paper introduces a six 'I' framework based on Infrastructural Facilities, Institutional Support, Intellectual Capabilities, Innovative Curriculum, International Collaborations and International Exposure to develop students for joining the global workforce. The framework has been explained with reference to the innovative approaches introduced by Gujarat Technological University (GTU). Researcher also presents an 'International Experience –Global Workforce Matrix' based on the individual international experience and required skills-set with global exposure to join the international workforce.

Keywords : *Internationalization, International Business, International Experience, Global Workforce, Gujarat Technological University.*

Introduction

India has one of the largest networks of higher education institutions in the world with 39,931 numbers of colleges in FY19 and 1014 universities in FY22 (India Brand Equity Foundation IBEF Report, September 2021). India also has youngest human resource power in the world and this leverage of demographic dividend can be utilized to realize the aim of country to become US\$ 5 trillion economy by 2024. India Skills Report 2020 suggests that by 2027, the expansive pool of millennial (group aged between 18 and 35 years who are a hyper-connected and tech-savvy generation) professional in India is going to become significant source of labour forces in the world. In coming years, the growing proportion of globalization, demographic variations, regulatory framework and geopolitical scenario would widely impact India's job scenario. Ethnically diverse workforce, increased global connectivity, specialized manpower, better technological advancements, working from remote locations, more gender diversity will be the profile of global workforce.

Simultaneously there would be few challenges like lack of cultural knowledge about other countries, inconsistent educational standards, low international experience and unawareness about impact of various environmental factors on trade relations between two countries (Engaging and Integrating a Global Workforce (February 2015)). The present study identified that an individual having high international experience would be highly in demand as they would be considered as the most suitable candidates for 'Global Talent Pool'.

Literature review

Ortiz Jaime (2004) studied the international programmes in the higher education system of the United States and suggested that integration of social, legal, economic, political and technological (SLEPT) conditions in business discipline is a must in curriculum. He also emphasized upon the student exchanges, study

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abroad programmes, overseas internship and solid international business curriculum.

Dylan Kissane and John Farrell (2015) identified three important trends– internationalization, university-corporate partnerships and programme specialization that impact upon the higher education industry generally and business higher education specifically. For Business schools in Australia this Internationalization has seen university business schools labelled as “cash cows” for their ability to attract and retail high-fee paying international students (Parker and Guthrie 2010, 7). New York Times in 2011 reported that ‘more than 50% of international students in Australia were enrolled in Management and Commerce degrees’ and that some MBA programmes were composed of more than 70% international students (Delaney 2011).

India Skills Report (2020) published by Wheebox after doing the survey of 3,00,000 candidates from 3500 educational institutes across 28 states and 9 union territories and 150 plus corporates across 9 industry sectors, found that MBA holders have the highest employability score of 54%. Country needs to manage the skills of the workforce as per requirement.

The Global Talent Report (2021) emphasized that the ability to manage diverse employees is one of the most important global operating skills.

Table 1
Global Operating Skills

Ability to manage diverse employees	Understanding international markets	Ability to work in multiple overseas	Foreign language skills	Cultural sensitivity
49.10%	45.70%	37.50%	36.10%	31.50%

Research Methodology

Rational of the study

Various researches have been done on identifying the required skill set for entering in the job market but no research has been done to find the ways to bridge the gap of required global operating skill-set and individual international experience provided by management institutes.

Research questions

1. Exploration of the dimensions satisfied by GTU to fit in the 6 ‘I’ framework.
2. Extent of international experience given to students for joining the global workforce.

Research objectives

1. To study the various dimensions of providing international exposure to students by GTU.
2. To propose the framework for developing the workforce for managing international business.
3. To establish the relationship between required operating skills to join the global workforce and individual international experience provided by management institutes through matrix.

Research Design

Research design of the present study is descriptive in nature. The researcher has used secondary information for the purpose of analysis and conclusion.

Data Collection

Current study is based on secondary data. Several reports from authentic sources, research papers published in journals and other official websites have been studied to know the importance of international business and required skills in the global workforce. Present research is mainly based on the information available on the official GTU website to justify the efforts done by the university in the direction of providing international exposure to its students.

Six ‘I’ framework for developing global workforce

This study presents a conceptual framework to develop global operating skills among management students. The researcher has identified 6 parameters to act as a catalyst in enhancing required international exposure. Based on the identified factors, a six ‘I’ framework has been developed (Refer Fig. No. 1). It is also important to realize that international experience means the ability to recognize the cultural differences, understanding the environmental factors affecting

business, speaking foreign language, connectivity with foreign nationals, interaction with foreign delegates, understanding the international business, feel the ease to do trading in international market, attitude to work in foreign locations, comfort in working with foreign clients, sensitivity towards foreign culture etc. The framework has been explained with reference to the innovative approaches introduced by Gujarat Technological University (GTU).

Infrastructural facilities

Wi-Fi campus, digital classrooms, well equipped computer lab, video conferencing facility, physical and digital library are the common features of well-established management institutes in the country, what makes them different is the attitude towards adopting inclusive culture and inculcating global mind-set so it has been kept at very basic level of the framework.

Institutional Support

The government of India has launched a 'Study in India' programme with the hope to attract 1.5 lakh to 2 lakh international students by 2022. The government, at present, allows 10% to 15% supernumerary seats for foreign students in higher education. The ratio of foreign students is also counted in establishing the global ranking of universities. Currently about 45,000 international students study in India which accounts for just 1% of global student mobility. The reason to present this data is to show the importance of institutional support provided by the university. Department of International Relations (DIR) is the core administrative department of GTU which has been established to inculcate global culture among Indian students. GTU has admitted more than 900 international students from 52 different countries. International Experience Programme (IEP), Winter School Programme (WSP), managing full-time international students at GTU through ICCR scholarship, academic collaboration with foreign universities through MoUs, appointment of international co-supervisors for the GTU PhD programme are the major activities of the department.

Fig No. 1: Six 'I' Framework for Developing Global Workforce

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Intellectual Capabilities

Intellectual assets are required to run the show of internationalization. Every year GTU sends selected professors to foreign countries as an IEP mentor who explore the possibilities of further tie ups with foreign universities. University also conducts international conferences regularly, where speakers are invited from all over the world. Many faculty members have visited European countries under the fully sponsored programmes of Erasmus plus. University has also set up a Centre for Global Business Studies (CGBS). Indo-Canadian, Indo-German and Indo East-Asian Study centres have also been established to promote academic collaborations with selected countries.

Innovative Curriculum

GTU had introduced the Global MBA programme in 2011 with introducing several innovative changes in curriculum. Graduate School of Management Studies (GSMS) is the Post Graduate School of GTU which offers MBA in International Business (IB). The course is a valuable tool for Industries and businesses of Gujarat as it can help them find and explore the untapped opportunities in Global Business. All subjects offered by GSMS have been designed with global business orientation. Country Study Project is the USP of the Global MBA programme. It is a unique tool of studying any foreign country and finding bilateral trade opportunities with the country of study. They do STEEPLED analysis in which Socio-Cultural, Technological, Economic, Environmental, Political,

Legal, Ethical and Demographic factors are analyzed and students become capable of doing business with any country of the world. Foreign language has also been incorporated in the syllabus for students as they become confident to work in a multicultural environment.

International Collaborations

GTU has 35 plus foreign university partners located at America, Canada, Europe, Asia and Africa. GTU has signed the MOU with renowned universities of Canada, Germany, USA, Russia, Poland, New Zealand, UK, Taiwan, Bhutan, South Africa, Netherlands and Slovenia. Faculty and student exchange programmes are executed with the help of these partnerships.

International Exposure

International exposure is the ultimate level of the 6 'I' framework and students can achieve this level only if they are well supported by the remaining five lower levels. The stronger each pillar will be, the more strengthened will be the international experience of each and every student of that management institute. Under the International Experience Programme (IEP), GTU has arranged visits for its students to universities in Canada, USA, Russia, Bulgaria and Germany since 2011 to study two subjects of their respective courses. 2200 plus students from various branches of Management, Engineering and Pharmacy have participated in this Programme.

Proposed research model : international experience – global workforce matrix

Fig. No. 2 : International Experience – Global Workforce Matrix

Required Skills in Global Workforce	High	Existing Talent Pool (ETP) <i>(Question Mark)</i>	Global Talent Pool (GTP) <i>(Star)</i>
		Local Talent Pool (LTP) <i>(Dog)</i>	Domestic Talent Pool (DTP) <i>(Cash Cow)</i>
	Low	Low	High
		Individual International Experience	

The current developments of Indian higher education compelled the researcher to think beyond the available instruments of improving quality. The concept of developing manpower for managing international business can be easily understood by 'International Experience – Global Workforce Matrix'. This matrix is inspired by the well known BCG matrix. 'Individual International Experience' has been taken on 'X' axis and 'Required Skills in Global Workforce' has been shown on 'Y' axis. The degree of international experience is low to high on 'X' and 'Y' axis from left to right and down to upwards respectively. International Experience – Global Workforce Matrix is highly relevant to know the right skill set for joining global industry and equally helpful for Management institutes to implement the 6 'I' framework for developing students to remain competitive at global platform.

Table 2

Implications of International Experience – Global Workforce Matrix

S. No.	Conditions	Implications
1	When an individual and global workforce both require low international experience.	Students would be the part of ' Local Talent Pool ' as no higher order skills are required for the job.
2	When an individual has low international experience and required operating skills to work in a global environment is high.	This is the case of ' Existing Talent Pool ' where students cannot explore global opportunities due to lack of international exposure.

3	When an individual has a high level of international experience and required global knowledge is low.	Students having high international experience may become ' Domestic Talent Pool ' and would get added advantage of having additional knowledge of global market operations over competitors.
4	When an individual has high international experience and required operating skills to work in a global environment is also high.	These individuals would be highly in demand as they would be considered as most suitable candidates for the Global Talent Pool '.

Conclusion

Developing a new set of skilled managers is a challenging task for management institutions. Culturally diverse workforce is the future of international business and capability of dealing with dynamic global trade needs to be inculcated in the blood of young management graduates. There is no doubt that only those students would enjoy the share of success who would prepare themselves for facing these changes in the global market. With the help of proposed 'International Experience – Global Workforce Matrix', students can get the idea of their placement on any one of the four quadrants. They can identify the level of individual international experience and required skills to join global workforce. In post Covid-19 situation, educational institutes need to take a call to revive the survival strategies and proposed framework shall certainly help them to identify their strength in terms of introducing internationalization in Management programmes. Similarly, suggestive matrix shall increase the chance of working in multicultural work environment even on digital platform.

The entire discussion concludes the significance of providing international exposure to students by adopting all six 'I' parameters and helps them grab the prospective opportunities in global world. Young students can certainly help in achieving US\$ 5 trillion economy provided they are getting the right environment.

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XAVIER JOURNAL OF RESEARCH ABSTRACTS

(ANNUAL)

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