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Editorial

EDUCATION FOR LIFE

Education is a facilitating process for enriching a pedagogue with knowledge, experience, skill and attitude. It moulds an individual to be civilized, refined, cultured and educated. For a civilized society, education is an inevitable factor to make individuals perfect. It is a panacea for all evils and the key to solve the problems of life.

John Dewey viewed Education as the process of living through a continuous reconstruction of experiences. Educators hence should give utmost importance for creating situations and relationships for learning rather than try to drill knowledge into pupils.

The research papers and articles in this issue focus on certain philosophical and psychological concerns in education - kaizen philosophy, conservative modernisation, yogic education, deschooling tendency, influence of yogic principles in study skills and other such vital educational subjects. Through these educationally significant articles and research papers, it is hoped, the readers will be so enlightened as to lead a satisfied and contended life.

Editor

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RELATIONSHIP BETWEEN ENGLISH LANGUAGE PROFICIENCY AND ACADEMIC PERFORMANCE OF B.Ed. STUDENTS IN KERALA

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ABSTRACT

The main purpose of the study was to find out the relationship between English language proficiency and academic performance of B.Ed. students in Kerala. It was found that the English language proficiency of majority of the B.Ed. students was only moderate. It was also found that irrespective of the optional subjects, majority of the B.Ed. students had only moderate level English language proficiency. Except in the case of B.Ed. students who belonged to Physical Science and Social Science, no significant relationship was found between English language proficiency and academic performance.

INTRODUCTION

In an era of globalization and educational standardization, of policy borrowing and of international comparisons of achievement, there is high demand and need to respect context and to appreciate how countries with different traditions and sources deal with the challenges of teacher education. This is not simply a matter of ensuring representation but a unique and distinct way of integrating traditions within which education and pedagogic systems are embedded.

The state of Kerala is one among the highly literate states in India. Educational innovations and experiments taken up by the state are highly appreciated all around the

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country and globally. The educational attainment of the state is at par with those of the developed countries. In order to justify the visions and acquire the goals of the state educational system, new practices are in operation. The functions at all levels in the educational scenario are being strictly evaluated and changes are seen everywhere. In spite of all these some dark spots are observed in the existing system especially in the areas of professional development of teachers. Several measures have been taken to enhance the capacity of teachers through effective teacher education. In this respect one of the aspects highlighted by experts was the general weaknesses of students in their language proficiency. The details of this with respect to student teachers will be highly useful to curriculum planners and policy makers.

The single most essential factor that could enhance the quality education is dedicated and professionally empowered teachers. English is one of the languages followed mostly in the world can help to carry out effectively one's job whatsoever it is, without any difficulty or problems. It demands adequate proficiency in the use of English language by all especially the budding teachers.

OBJECTIVES

1. To find out the extent of language proficiency in English of the B.Ed. students (whole sample as well as optional wise sample)
2. To find out the relationship between the English language proficiency and academic performance of the B.Ed. students (whole sample and optional wise sample)

HYPOTHESES

1. There is significant difference among the B.Ed. students of different optionals in their English language proficiency.
2. There is significant relationship between the English language proficiency and academic performance of B.Ed. students.

METHODOLOGY IN BRIEF

Correlation research design was employed in the present investigation. It explains the relationship between two quantitative variables (Language proficiency and academic achievement).

SAMPLE

A representative group of 191 B.Ed. students from University of Kerala was taken as a sample for the present investigation. The total sample was randomly selected from different optional subjects, namely, Natural Science (42), Physical Science (49), Social Science (28), Mathematics (62) and other subject streams (10). Stratified random sampling technique was used for the collection of data.

TOOLS USED

1. Language Proficiency Test in English
2. General Data Sheet for B.Ed. Students

STATISTICAL TECHNIQUES USED

The statistical techniques adopted for the study consist of Percentage Analysis, Mean, Standard Deviation ANOVA and Pearson's Product Moment Coefficient of Correlation.

RESULT AND DISCUSSION

EXTENT OF ENGLISH LANGUAGE PROFICIENCY OF B.Ed. STUDENTS IN KERALA

The present study is mainly intended to analyse the relationship between English language proficiency and academic performance of B.Ed. students in Kerala. A language proficiency test in English is administered to the student teachers. It has multiple sections, each comprised of 10-15 questions. Section A consists of first level Grammar with 15 questions, Section B consists of second level Grammar with 15 questions, Section C consists of 10 Vocabulary questions and Section D with 10 questions to test Reading Comprehension. Total marks provided for the language proficiency test in English is 50.

In order to find out the extent of English language proficiency of B.Ed. students in Kerala, the student teachers were classified into three groups, namely, high, moderate and low. For this purpose the Mean (M) and Standard Deviation (σ) were calculated. Those getting scores above (M+σ) were taken as student teachers having high English language proficiency, those getting score below (M-σ) were taken as student teachers having low English language proficiency and those in between were considered as those having moderate English language proficiency. The scores obtained in the English language proficiency test were analysed, classified and discussed.

Table 1

Level of English Language Proficiency of B.Ed. Students

Level of English Language Proficiency	No. of Student Teachers	Percentage (%)
High	40	20.94
Moderate	105	54.97
Low	46	24.08
Total	191	100
Mean = 29.18		Standard Deviation = 7.88

Table 1 shows that 40 (20.94%) student teachers have high English language proficiency, 105 (54.97%) have moderate English language proficiency and 46 (24.08%) have low English language proficiency. From the results, it can be concluded that majority of the student teachers have only moderate level language proficiency.

COMPARISON OF ENGLISH LANGUAGE PROFICIENCY OF STUDENT TEACHERS BASED ON THEIR OPTIONAL SUBJECTS

The total sample of student teachers were classified on the basis of their subject specialisation, namely, Natural Science (42), Physical Science (49), Social Science (28), Mathematics (62) and other subject streams (10). The English language proficiency scores of student teachers belonged to the different subject streams were compared in order to find out whether there is any significant difference between these groups in their English language Proficiency. One- way Analysis of Variance (ANOVA) was used for the comparison and the obtained F- value was tested for significance.

Table 2

Summary of ANOVA of the Mean English Language Proficiency of Student Teachers based on their Optional Subject

Source of Variation	Sum of Squares	df	Mean Square	F
Between groups	105.873	4	26.468	0.42
Within groups	11688.714	186	62.843	
Total	11794.586	190		

(F for df 4, 186 at 0.05 level = 2.43 and at 0.01 level = 3.45)

It is evident from the table 2 that there is no significant difference between student teachers in their English language proficiency based on their optional subjects as the obtained F – value is not significant (F value 0.42; p> 0.05). This means that the English language proficiency of student teachers belonging to Natural Science, Physical Science, Social Science, Mathematics and other subject streams are more or less similar at same level.

COMPARISON OF ACADEMIC PERFORMANCE OF STUDENT TEACHERS BASED ON THEIR OPTIONAL SUBJECTS

The academic performance of student teachers belonging to the different subject stream were compared in order to find out whether there is any significant difference between the different groups in their academic performance. One-way Analysis of variance (ANOVA) was used for the comparison and the obtained F value was tested for significance.

Table 3

Summary of ANOVA of the Mean Academic Performance of Student Teachers based on Optional Subject

Source of Variation	Sum of Squares	df	Mean Square	F
Between groups	23.706	4	5.926	0.37
Within groups	2990.684	186	16.079	
Total	**3014.390**	**190**		

(F for df 4, 186 at 0.05 level = 2.43 and at 0.01 level = 3.45)

Table 3 shows that there is no significant difference between student teachers in their academic performance based on their optional subjects as the obtained F- value is not significant (F value = 0.37; p > 0.05). This indicates that the academic performance of student teachers belonging to Natural Science, Physical Science, Social Science, Mathematics and other subject streams are more or less at similar levels.

RELATIONSHIP BETWEEN ENGLISH LANGUAGE PROFICIENCY AND ACADEMIC PERFORMANCE OF STUDENT TEACHERS

The relationship between English language proficiency and academic performance of student teachers was found out using Pearson's Product Moment Coefficient of Correlation. The obtained correlation coefficients have been interpreted using significance of 'r', tested against null hypothesis (viz., r = 0). The coefficients have also been verbally interpreted by the following conventions (Garrett, 1981).

Table 4

Relationship between English Language Proficiency and Academic Performance of Student Teachers

Group	N	r	Level of Significance
Total Sample	191	0.051	0.481 (NS)
Natural Science	42	0.242	0.122 (NS)
Physical Science	49	0.335*	0.019 (0.05)
Social Science	28	0.385*	0.043 (0.05)
Mathematics	62	0.073	0.573 (NS)
Other Subjects	10	0.177	0.625 (NS)

NS- Not Significant, *Significant at 0.05 level

Table 4 shows that the coefficients of correlation obtained between English language proficiency and academic performance are not significant for the total sample of students, students belonging to Natural Science, Mathematics and other subjects. This means that there is no significant relationship between English language proficiency and academic performance for these groups. In the case of Physical Science ($r = 0.335$; $p < 0.05$) and Social Science ($r = 0.385$; $p < 0.05$), significant relationship was found between these variables. This shows that for Physical Science and Social Science students, higher the language proficiency, higher will be their academic performance and vice versa.

DISCUSSION

It could be inferred from the above findings that proficiency in English language is required for all student teachers. The findings in this research therefore disagree with the findings of some earlier studies which proved the result that proficiency in English language significantly determines performances in academic tests. Low language proficiency has been considered a barrier to learning and academic success at the higher education level, where universities require students seeking admission to obtain a score on English language proficiency tests to indicate that they can academically success (Williams, Powers, Kong & Starr, 2012; Wille, 2006; Wilcox, 1975).

The findings further confirm that a lack of adequate mastery of English language (language of instruction) is a major problem relating to inadequate understanding of the teacher's speech (listening problem) that results from poor vocabulary and syntactic knowledge (note-taking problem), deficient language background and compromise in qualifying entry examination into current stratum of the school's leader among students as source of understanding constraint. However, the present study deviates from the above contention and asserts that the language of instruction challenge to attitudinal problem among students and lecturers of other disciplines. It also found that many students regard proficient knowledge of English language as only subordinate to the mastery of their main course of study. So is the proficiency in mother tongue. These students erroneously assume that language proficiency is a problem of the prospective teachers' language proficiency. The results of this study further indicate that competence in English is not very important for the student's success. Vehemently, English language proficiency could go a long way in affecting students' academic performance in the case of prospective teachers of English language as this is a gateway to their educational advancement. The more reason referred to English language as the language of achievers and that the language counts as far as rising up and being a member of the elite class is concerned. Students who understand this do strive to do well in English language as this invariably affect their performance in other subjects. However, this study contradicts the above said findings.

SUGGESTIONS

In pre-service training language practice of student teachers may be encouraged with the help of language lab and other self learning devices. Essay competitions and similar language activities have to be conducted in the colleges of teacher education in a serious manner which will help greatly in enhancing language proficiency of student teachers.

Group discussions are to be organised periodically by teacher educators and other language experts. Teacher educators shall act as instructors in group discussions and guide them in the free communication of students. The use of grammatically correct sentence patterns may be taught to the student teachers in these situations.

In the present education system, even without better language proficiency, one can get better scores through memorization. So the student teachers may be encouraged to acquire adequate language proficiency which may result in better academic achievement and thereby they can make an impact on their students when they become teachers. If the teachers do not show language proficiency, the performance of them in their classroom will be poorer and the future generation will not get adequate language skills. So proficiency in laguage may be given utmost priority in the teacher education institutions thorough revamping of the existing system of teacher education curriculum. A teacher, who is not proficient in languages, be it English or any other language, cannot conduct curriculum transaction effectively and will cut a sorry figure in their classrooms. Teachers with sound language proficiency alone can bring liveliness in their classrooms and thereby the students will enjoy language classes.

Hence the curriculum designers and planners may include communication skills in language as an essential component in the teacher education programme.

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CONSERVATIVE MODERNIZATION IN HIGHER EDUCATION: A STUDY OF THREE STATE UNIVERSITIES IN KERALA

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ABSTRACT

Conservative modernization is the process whereby education is being practiced in a conservative manner, in certain domains, while following liberal and modern aspects in some other domains, which result in benefit to those who control the process of education. Conservative modernization can be seen in different domains of society. In education also the practice of conservative modernization is present in different layers. A close look at autonomous institutions like state universities reveal that conservative modernization is rampant in these institutions. The present paper is an attempt to identify the elements of conservative modernization palpable in three state universities in Kerala. For this, the text of circulars and orders from three state universities in Kerala will be analyzed. Deductive Content Analysis is the intended strategy for the study. A preliminary analysis provide a picture of strong presence of conservative modernization reflected through its orders and circulars. A judicious selection of orders and circulars will be done to arrive at the conclusions. At least five orders/circulars from each university will be selected for the analysis. It is believed that, the results of the study would bring in desirable inputs for policy implementations for the revamping of the university system.

INTRODUCTION

Conservatism is the conservation and transmission of patterns, customs and traditions which are already existing in the social system. Conservatism is not shown as it is, instead covering with new packages and outlooks of modernism. This new kind of

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conservatism has evolved and has taken major stage in many nations is best explained by Michael .W. Apple as "Conservative Modernization" (Apple, 1996, 2001, 2005). According to Apple (2002) "Conservative modernization has radically reshaped the common-sense of society. It has worked in every sphere – the economic, the political, and the cultural – to alter the basic categories we use to evaluate our institutions and our public and private lives. It has established new identities." Radical shift in the common sense set up a better platform for the neo liberals to grow, and vice versa the power web of the neo liberals and conservative modernists channeled the common sense of the entire society. The pattern for evaluations, its conditions and needs changed dramatically in every sphere of the society. The culture of ranking, its norms and preferences has changed in a manner which suites for the market based economy. The public and private lives established new identities. These identities are surrounding on a product oriented community and everything is quantifying into commodities. It is the result of a new alliance which works based on conservative modernism. According to Apple (1993), "This new alliance what is technically called a "new hegemonic bloc", has been so successful in part because it has been able to make major inroads in the battle over common sense. That is it has creatively stitched together different social tendencies and commitments and has organized them under its own general leadership in issues dealing with welfare, culture, economy and education. Its aim in educational and social policy might be best described as "conservative modernization". Hegemony is an alliance by which, one leading class presumes a position of leadership over other classes, in return guaranteeing them certain benefits, so as to be able to secure public political power over society as a whole. This hegemonic alliance may be intruding into the common sense of the society. The change is not sudden, instead it is the byproduct of different socio political invasions.

Apple (1993) states that "There has been a breakdown in the accord that guided a good deal of educational policy since World War II. Powerful groups within government and the economy, and within "authoritarian populist" social movements, have been able to redefine – often in very retrogressive ways – the terms of debate in education, social welfare, and other areas of the common good. What education is for is being transformed". This transformation in the nature of education leads to different changes in the society and vice versa. The transformation in its meaning changed the "common sense" of the society. The objectives and goals of education changed in accordance with the neo-liberal interests.

A new alliance which is formed has increasing power in educational and social policy (Apple, 1999). There are four major elements within this alliance: neoliberals, neoconservatives, authoritarian populists, and a particular fraction of the upwardly mobile professional and managerial new middle class (Apple, 2005).

The first group is neo-liberals. They are deeply devoted to markets and to freedom as "individual choice." The second group, neo-conservatives, has a vision of romanticized past and wants a return to discipline and traditional knowledge. The third, authoritarian populists – religious fundamentalists and conservative evangelicals who want a return to (their) God in all institutions. And finally, the members of a particular fraction of the managerial and professional new middle class (Apple, 2005).Neo-liberals are the most powerful element within the alliance supporting conservative modernization (Apple, 2005).In the context of India the presence of authoritarian populists are not existing predominantly. Apart from this group all the other three groups, Neo-liberals, Neo-conservatives and managerial and professional new middle class are predominant in India.

According to Apple (2002) "Neo-liberalism creates policies and practices that embody the enterprising and constantly strategizing entrepreneur out of the possessive individualism it establishes as the identity." Neo-liberals define freedom as individual choices but the problem here is that the individual choice driven from market economy is dictating to a social choice. This dictation is ruling over the deprived and minority section of the society. Here the individual choice of the new alliance is motivated by the market economy and individual benefit. The process of democracy shrined to consumption practices and citizenship moved to possessive individualism.

Apple (2002) states that "Neo conservatism creates imagined pasts as the framework for imagined and stable futures, futures in which identities are based on people knowing the knowledge and values that neo-conservatives themselves have decided" have stood the test of time." The knowledge and values are decided by the neo-conservatives themselves.

Apple (2002) explains that "managerialism establishes new identities for the professional and managerial middle class, identities that give new meaning to their lives and enable them to recapture their feelings of worthiness and efficacy". Managerialism focuses on international competitiveness, profit, and discipline as the major identity for the society. According to managerialism work efficiency leads to more profit and leads to higher success.

CONTEXT OF THE STUDY

In Indian context, conservative modernization is highly rampant in every domain of the society. Higher education sector is also not excluded from the webs of conservative modernization. There are deliberate and planned actions taking place in the universities to materialize conservative modernization. The actions might not be

always conscious, instead unconscious implementation and maintenance of conservative modernization takes place in the Indian context. The implementation is clear in the policy decisions taken by the dominant forces across India. Policy decisions are long standing implications of the university, in which the decisions are taken by the supreme body in the university. The supreme body is a closed group and it can be the executive body or syndicate. The decisions are valid for a long period of duration and the beneficiaries are forced to perform on the policy decisions. The beneficiaries include teachers, students and the society linked with the system in direct or indirect ways. The execution and sustenance of policy decisions can be in overt or covert form. By analyzing the policy decisions, its nature and inclination towards conservative modernization can be exposed out. The study is based on the socio-cultural context of Kerala.

PROCEDURE

The present study is carried out in the socio-cultural background of Kerala. To study the elements of conservative modernization in higher education three universities from Kerala were selected as the sample. Purposive sampling technique used in the selection procedure. The detailed analysis of the circulars and orders from three state universities in Kerala such as, Mahatma Gandhi University, Calicut University and Kerala University are taken for the study.

To conduct the study, orders generated within 6 month duration from each university was selected and analyzed. Content analysis method was used to analyze each order and to identify the elements of conservative modernization. Each order was analyzed and from that meaningful units of conservative modernization was taken out. From these meaningful units, certain themes were generated. Detailed analysis of themes formulated and described based on the meaningful units were taken out from the orders. By this manner contents were analyzed and the major findings are described below.

RESULTS AND DISCUSSION

The analysis of circulars and orders shows that the elements of conservative modernization are present among three state universities in Kerala. This include Calicut University, Kerala University and Mahatma Gandhi University.

The elements of conservative modernization revealed through the texts of orders and circulars can be categorised into three major domains. Curtailment of academic freedom, Quantification of quality and Standardization and unification are the three major areas in which the elements of conservative modernization is rampant.

CURTAILMENT OF ACADEMIC FREEDOM

Academic freedom implies not just freedom from constraint but also freedom for faculty and students to work within a scholarly community to develop the intellectual and personal qualities required for citizens in a vibrant democracy and participants in a vigorous economy. The 1964-66 Education Commission pointed out that the exercise of academic freedom by teachers is a crucial requirement for development of the intellectual climate of our country. Unless such a climate prevails, it is difficult to achieve excellence in our higher education system. The elements of curtailed academic freedom among autonomous universities are visible in the texts of orders and circulars generated by the parent university.

Mahatma Gandhi University generated an order that "autonomous colleges should follow the university academic calendar for all academic activities including the admission from the academic year 2017-2018 onwards". This order clearly indicates the curtailment of academic freedom in the autonomous institutions. Academic calendar acts like a pivot in the institutions. Academic calendar arranges and organizes the academic activity of the institution. It is the freedom of the institutions to create and arrange their own academic calendar accordingly. Institutions labelled under autonomous status, have the right to utilize their academic freedom. Highlighting the importance of autonomous colleges, the UGC document on the XI Plan profile of higher education in India clearly states that: "The only safe and better way to improve the quality of undergraduate education is to the link most of the colleges from the affiliating structure. Colleges with academic and operative freedom are doing better and have more credibility." On contrary to this, by controlling certain pivots in the institution, dimensions of academic freedom is restricting in different degrees. The 1964-66 Education Commission pointed out that the exercise of academic freedom by teachers is a crucial requirement for development of the intellectual climate of our country. Calicut University generated an order that teachers should submit their applications for duty leave along with prior information to the head of the department, duty certificates and brief report on duty performed in the university. This order reveals aspects of conservative modernization, through which it is restricting and scrutinizing the academic freedom of teachers.

QUANTIFICATION OF QUALITY

Quality as a concept has its origin in the business and industry in the 20th century. Quality is defined by different people in different ways. Human beings were always conscious of what quality was, and thus, the responsibility of quality remained with individual workers. In most of the instances

quality is explaining in a relative aspect. But with the emergence of mechanization came the issues of inspection, control and assurance of quality. There is an increased focus on the improvement of quantity under the label of quality improvement.

Calicut University generated an order that "Each College will submit a two year action plan with 6 monthly break up in respect of improvement of infrastructure, qualification of existing faculty and improvement of results." The major aspects through which the quality is trying to develop is through improvement of infrastructure, improvement of result and by the qualification of faculty. Quality and quantity are not equivalent terms .Berliner (2005) notes that "quality is an ineffable concept," thus defining it "always requires value judgments about which disagreements abound," and that "the language used to rally the politically faithful is kept purposely ambiguous, with the term highly qualified providing no concrete reference for anyone to understand what is so ardently being promoted". Effective test results are the major concern for the institution. This often force teachers to develop and/or teach curricula that are test-preparation focussed. It generates the perception that, whatever is auditing or testing are worthy. It produce an "audit culture" (Taubman, 2009) in which quality is shifting towards quantifying numbers.

STANDARDIZATION

Standardization, according to Peter Taubman (2009), "homogenize(s) diverse populations, locations, and situations, which, in fact masks the real differences among groups, individuals, schools and locations, differences in resources, societal treatment, histories, and power". This process of homogenization is a severe threat for Quality. The diverse aspects and dimensions of the individuals are pruning into a single stream. Heterogeneity is the nature of Universe. Removing this basic nature in the process of standardization there is a tendency for unification.

M.G. University issued an order (5680/ ACA3/2/2017) regarding unification of regular and private streams in U.G, P.G level exam conduction and result declaration. There are varying dimensions and differences among students who select regular or private streams for their study. The contextual differences among groups, individuals, locations, societal aspects are in varying dimensions by eliminating or omitting all the differences and variations and the one aspect is promoting, unifying every academic processes without considering the cultural and contextual differences of students. Maxine Greene (1988) calls standardization a "one-dimensional 'excellence' (p. 12) in which diversity is ignored or marginalized. The heterogeneity in different aspects of the society is

homogenizing. However the variations and diversities are excluding from the society. This homogenization and one dimensional excellence are the result of a neo-liberalism. It directs everything into a market based, commodity based society. However, those who are out of this common identity are excluding from the society. This one dimensional excellence increase the culture of competition and forcing individuals for a market based economy.

CONCLUSION

Conservative modernization is the process whereby education is being practised in a conservative manner, in certain domains, while following liberal and modern aspects in some other domains, which result in benefit to those who control the process of education. The study exposed different elements of conservative modernization practising in major three universities in Kerala. This can be a conscious or unconscious inclusion. This reveals a crucial and important issue inside autonomous institutions. These tendencies among institutions are an important threat for the present and future institutions in the society.

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PROFICIENCY IN ENGLISH AMONG STANDARD VIII STUDENTS WITH REGARD TO PERSONAL VARIABLES

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ABSTRACT

Language is a system of communication which consists of a set of sounds and written symbols which are used by the people of a particular country or region for speaking or writing. English language proficiency is the ability of students to use the English language to make communication meaningful in spoken and written context. Proficiency is frequently defined as the degree of competence or capability in given language by an individual. The major objective of the study is finding out the level of proficiency in English of standard VIII students. The sample of VIII standard students was selected randomly. The researchers employed survey method for this study. Data were analysed using percentage analysis and t-test. Result indicated that there is a significant difference in proficiency in English among standard VIII students with regard to certain personal variables.

INTRODUCTION

English is one of the most widely spoken languages in the world. Gaining English proficiency can be an important aspect of education in many fields from business to aviation. There are many accessible ways to improve English proficiency effectively without taking formal classes. One of the most important aspects of gaining proficiency in any language is speaking it regularly. Self study can also improve reading and comprehension skills, but interacting with other English speakers is essential for boosting real word comprehension and practical use of the English language. Watching or listening to media is also a way to improve English comprehension. The internet is full of resources that help to improve English proficiency. Reading news articles in English through website is a way to work on reading comprehension.

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SIGNIFICANCE OF THE STUDY

This study is beneficial to the participating school, the subject teacher and the subjects/students of the study. The participating school will benefit from the result that will be a guideline for the teachers to determine the specific difficulty encountered by the students in acquiring English language proficiency. The teacher can find ways to improve the teaching methods. The subject teachers will benefit because they are actively involved in the study. The teachers can discover some of the problems faced by the students and continue to rectify the problems faced by them. The students can gain a lot of benefits because cooperative learning approach give students the chance to develop positive and productive relationships. This relationship provides the opportunity to learn from one another rather than receive information from the teacher or text alone. It was also hoped that by discovering this relationship the students would benefit in terms of English language proficiency. Therefore this study could help to overcome the problems of students having low English proficiency in secondary schools. Bozorgian (2012) found that there is significant correlation between listening comprehension and overall language proficiency.

OBJECTIVES

1. To find out the level of proficiency in English among standard VIII students.
2. To find out the significant difference if any in proficiency in English with regard to personal variable namely gender.
3. To find out the significant difference, if any in proficiency in English with regard to personal variable namely age.

HYPOTHESES

1. There is no significant difference between proficiency in English with regard to personal variable namely gender.
2. There is no significant difference between proficiency in English with regard to personal variable namely age.

METHODOLOGY IN BRIEF

METHOD

The survey method was used to evaluate the proficiency in English among standard VIII students.

SAMPLE

The sample was selected by simple random sampling technique and included 250 students of Tirunelveli district.

TOOL USED

The tool used in this study was EsWi's scale on proficiency in English among standard VIII students developed by M.Esakkiammal and William Dharma Raja (2018). It is a two point scale consisted of 45 items.

STATISTICAL TECHNIQUES USED

Percentage analysis and t test

RESULTS AND DISCUSSION

Table 1

Level of Proficiency in English among VIII Standard Students with Regard to Personal Variables

PERSONAL variables	Gender	Low		Moderate		High	
		N	%	N	%	N	%
Proficiency in English	Male	45	29.4%	91	59.5%	17	11.1%
	Female	4	4.1%	78	80.4%	15	15.5%
PERSONAL Variables	Age	Low		Moderate		High	
		N	%	N	%	N	%
Proficiency in English	Below 13	14	23.3%	41	68.3%	5	8.3%
	Above 14	35	18.4%	128	67.4%	27	14.2%

From the table-1, it is understood that, more than half of the standard VIII male students have moderate level of proficiency in English and more than three fourth of the female students of standard VIII have moderate level of proficiency in English. From the said table, more than three- fifth of the standard VIII students below the age of 13 have moderate level of proficiency in English and more than three-fifth of the standard VIII students above the age of 14 have moderate level of proficiency in English.

Table 2

Proficiency in English among Standard VIII Students with Regard to Gender

Gender	N	Mean	SD	t- value	p- value	Remark
Male	153	33.31	10.045	5.318	.0005	S
Female	97	39.09	7.130			

From the table-2, it is clear that since the p-value (.000) is lesser than 0.01, the null hypothesis is not accepted at 1% level of significance. It shows that there is significant difference between male and female students of standard VIII with regard to the proficiency in English.

Table 3

Proficiency in English among Standard VIII Students with Regard to Age

Age	N	Mean	SD	t- value	p- value	Remark
Below 13	60	33.77	8.998	1.686	.093	NS
Above 14	190	36.12	9.533			

It is clear from the table-3 that the p-value (.093) is greater than 0.05. Hence the null hypothesis is accepted at 5% level of significance. It shows that there is no significant difference between the two age groups with regard to proficiency in English among standard VIII students.

FINDINGS

1. 15.5% of the standard VIII female students have high level of proficiency in English.
2. 14.2% of the standard VIII students of age above 14 students have high level of proficiency in English.
3. Significant difference is there between male and female standard VIII students in their proficiency in English language.
4. No significant difference exists in age groups of standard VIII students in their proficiency in English language.

CONCLUSION

From this study, it is concluded that the English language plays an important role in the process of learning. As far as gender is concerned, female students have high level of English language proficiency. Therefore, for the male students, efforts shall be taken to increase preficiency in English language through language games, debates and discussions.

RECOMMENDATIONS

1. A regional learning community should be created to share challenges, experiences, and best practices. This community could make important contributions to ongoing and future efforts to improve English proficiency throughout the region.
2. Proper guidance should be given to the students to improve their proficiency in English for all age groups.
3. Regular communication classes should be implemented for students to acquire English proficiency.
4. Several programmes related to the development of English language should be organized which develops the LSRW skills.

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DESCHOOLING TENDENCY AND TENDER MINDED - MIND STYLE OF HIGHER SECONDARY SCHOOL STUDENTS

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ABSTRACT

Freedom in education is the flexibility of the mind to meet new situations and it is also the capacity to learn and to adjust to relatively new and changing conditions. Freedom directly or indirectly create de-schooling tendency among teenagers. De-schooling tendency is a common phenomenon among teenagers and usually this tendency has different mode of expression as well as mind setting among them. The research question framed for the purpose of the present study– "Is there any significant relationship between and Deschooling Tendency and Tender Minded - Mind Style of Higher secondary school students?"; three objectives and its corresponding hypothesis were formulated, analyzed and findings had been interpreted. The sample for the study constitutes 100 students from Higher secondary schools of Kanyakumari District in Tamilnadu selected through stratified random sampling, with the representation given to Class and Type of School. The tool used for the present study is - "Deschooling Tendency Assessment Inventory" developed by Suneeth and Dr.Vinod. The investigator made meaningful and valid attempt to find out the relationship between De-schooling Tendency and Tender Minded - Mind Style of Higher secondary school students. The major finding was that there is significant relationship between De-schooling Tendency with the Tender Minded-Mind Style of the following subsamples of Higher Secondary School Students, a) Class XI and Class XII & b) Government and Self-Financing higher secondary school students.

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INTRODUCTION

"Whenever two people meet, there are really six people present. There is each man as he sees himself, each man as the other person sees him, and each man as he really is." - American Psychologist: William James (1842-1910).

Personhood is the status of being a person. A person is a being that has certain capacities or attributes such as reason, morality, consciousness or self-consciousness, and being a part of a culturally established form of social relations such as kinship, ownership of property, or legal responsibility. Person and Mind are the two sides of the same coin. The mind is a set of cognitive faculties including consciousness, perception, thinking, judgment, language and memory. It is usually defined as the faculty of an entity's thoughts and consciousness. It holds the power of imagination, recognition, and appreciation, and is responsible for processing feelings and emotions, resulting in attitudes and actions. Every individual possess different mind style.

Mind style is the linguistic representation of an individual's mental perception of the world. Mind style is the description of one's personal worldview. Worldview may differ between individuals; individual worldviews may be based on personal knowledge, how one process information, prejudices, beliefs, disabilities or challenges, personal preferences, and even the tendencies towards a particular mode of action. The teenagers can play out like a 'choose-your-own-adventure novel' where everyday temptations lead to tough decisions. Teenagers often find themselves trapped between their impulsive tendencies and their newfound ability to make well-informed and logical choices. Deschooling tendency is a common phenomenon among teens and usually this tendency have different mode of expression as well as mind setting among them.

NEED AND SIGNIFICANCE OF THE STUDY

Mind is the basic structure which governs and ultimately make human to rule the world and oneself. Education as the word means should draw out or lead out the nature of mind of human beings and its beauty towards the real unavoidable surroundings and situation of life for admiration, inspiration, creation, recreation, evaluation and regeneration. The mind is the instrument by which and through which an individual interact with the world. Tender minded-Mind style students tend to be isolated in their own ways and deeds. Human beings are not isolated phenomenon they are bonded to their environment through an intellectually oriented mind. Freedom is the flexibility of the mind to meet new situation and it is also the capacity to learn and to adjust to relatively new and changing conditions. Freedom directly or indirectly create de-schooling tendency among teenagers.

The social and psychological safety network and support system of the human being provided by the educational system has considerably weakened due to various social and economic reasons. The attitude of

educators along with individual mind style of educands is a cause for emotional disturbance due to the belief and action that the business of educational discourse is to complete the syllabus and curricular endeavours in the prescribed time limit and frame work. In this educational scenario, the lesson manuals and instructional approaches are more important than the feelings or emotions of the children. As a result, young teenagers find themselves not adequately prepared to handle these pressures and stress, and it manifests in various forms such as poor self awareness, low concentration, lack of motivation, little self-discipline, low self-esteem, poor communication, poor adjustment, inability to express feeling effectively, difficulty in resolving conflicts, juvenile delinquency, indulging in alcoholism, smoking, adolescent pregnancies, child suicide and many other anti-social activities, which make it real that something is lacking somewhere. In this context, the investigator believes that and the De-schooling Tendency and Tender Minded - Mind Style of Higher Secondary School Students should be analyzed. Hence the investigator made an attempt to find out the relationship between De-schooling Tendency and Tender Minded - Mind Style of Higher Secondary School Students.

The research question framed for the present study is:

> Are there any significant relationship between and Deschooling Tendency and Tender Minded - Mind Style of Higher Secondary School Students?

OBJECTIVES OF THE STUDY

1. To study the general nature of Deschooling Tendency and Tender Mind - Mind Style of Higher Secondary School Students.
2. To compare the Deschooling Tendency and Tender Mind - Mind Style of the following subsamples of Secondary School Students viz.,
    a) Class XI and Class XII
    b) Government and Self-Financing institutions.
3. To study the relationship between Deschooling Tendency and Tender Mind - Mind Style Higher Secondary School Students of :
    a) Class XI and Class XII
    b) Government and Self- Financing institutions.

HYPOTHESES OF THE STUDY

1. Majority of the Higher Secondary School Students have average Deschooling Tendency and Tender Mind - Mind Style.
2. There is no significant difference in the Deschooling Tendency and Tender Mind - Mind Style of the following subsamples of Higher Secondary School Students.
    a) Class XI and Class XII
    b) Government and Self- Financing institutions.

3. There is no significant relationship between Deschooling Tendency and Tender Minded - Mind Style of the following subsamples of Higher Secondary School Students.

    a) Class XI and Class XII

    b) Government and Self- Financing institutions.

METHODOLOGY IN BRIEF

METHOD

Normative Survey method was adopted for the present study.

SAMPLE

The sample for the study constitutes 100 students from Higher secondary schools of Kanyakumari District -Tamilnadu selected through stratified random sampling, with due representation to Classes and Type of Schools.

TOOL USED

The tool used for the study was De-schooling Tendency Assessment Inventory developed by Suneeth and Dr.Vinod.

RESULTS AND DISCUSSION

Table 1

Statistical indices relating to De-schooling Tendency and Tender Minded - Mind Style of Higher Secondary School Students

Variables	Statistical indices	Total Sample	Gender		Locale	
			Male	Female	Urban	Rural
Deschooling Tendency	Mean	128.55	133.45	126.63	129.35	131.63
	Standard Deviation	10.59	11.71	11.57	12.11	11.90
Tender Minded - Mind Style	Mean	42.12	41.83	42.42	41.52	41.22
	Standard Deviation	9.50	9.57	9.85	9.66	10.31

As it is found in Table 1, in Deschooling Tendency, the mean for the total sample is 128.55 and standard deviation is 10.59. In Tender Minded - Mind Style, it is 42.12 and 9.50. Based on the scores obtained on the Deschooling Tendency and Tender Minded - Mind Style, the total sample was classified into three i.e., students having high, average and low Deschooling Tendency and Tender Minded - Mind Style.

CLASSIFICATION OF H.S.S SCHOOL STUDENTS INTO THREE LEVELS BASED ON DESCHOOLING TENDENCY AND TENDER MINDED - MIND STYLE

Table 2

Classification of Higher Secondary School Students based on De-schooling Tendency and Tender Minded - Mind Style

Variables	High Group (No. & %)	Average Group (No. & %)	Low Group (No. & %)
Deschooling Tendency	16(16)	77(77)	7(7)
Tender Minded - Mind Style	18(18)	69(69)	13(13)

It is clear from Table 2, that only a lesser proportion of Higher Secondary School students possess high Deschooling Tendency (16%) and Tender Minded - Mind Style (18%), whereas most of them have average Deschooling Tendency (77%) and Tender Minded - Mind Style (69%) and remaining have low Deschooling Tendency (7%) and Tender Minded - Mind Style (13%). Hence the hypothesis-1 which is stated as: "Majority of Secondary School Students have average Deschooling Tendency and Tender Minded - Mind Style" is accepted.

Table 3

Comparison of De-schooling Tendency and Tender Minded - Mind Style among Higher Secondary School Students

Variables	Category	Mean	Standard Deviation	t
Deschooling Tendency	Class XI	133.45	11.71	0.005
	Class XII	126.63	11.57	
	Government	129.35	12.11	0.366
	Self-Financing	131.63	11.90	
Tender Minded - Mind Style	Class XI	41.83	9.57	0.075
	Class XII	42.42	9.85	
	Government	41.52	9.66	0.875
	Self-Financing	41.22	10.31	

It is evident from Table 3, the mean scores of De-schooling Tendency of Class XI and Class XII higher secondary school students are 133.45 and 126.63 respectively. The 't' value obtained is not significant statistically. So there was no significant difference between Class XI and Class XII higher secondary school students in De-schooling Tendency. The mean scores of Class XI are slightly higher than Class XII students but did not differ significantly. The mean scores of De-schooling Tendency for Government and Self-Financing higher secondary school students are 129.35 and 133.63 respectively. The 't' value is 0.366, which is not significant at any level of significance. So there was no significant difference between Government and Self-Financing higher school students in De-schooling Tendency. The mean scores of Self-Financing students were slightly higher than Government students, it did show significant difference.

In the case of Tender Minded - Mind Style, the mean scores for Class XI and Class XII higher secondary school students are 41.83 and 42.42 respectively. The 't' value is 0.075, which is not significant at any level of significance. So there is no significant difference between Class XI and Class XII higher secondary school students in Tender Minded - Mind Style. The mean scores of Class XII are slightly higher than Class XI students but do not differ significantly. The mean scores of Tender Minded - Mind Style for Government and Self-Financing higher secondary school students are 41.52 and 41.22 respectively. The't' value is 0.875, which is not significant at any level of significance. So there was no significant difference between Government and Self-Financing higher secondary school students in Tender Mind - Mind Style. The mean scores of Government school students are slightly higher than Self-Financing school students but it did not differ significantly. Hence the hypothesis that "there is no significant difference in the de-schooling tendency and Tender Minded - Mind Style of the following subsamples of higher Secondary School Students viz., a) Class XI and Class XII b) Government and Self-Financing higher secondary school students" is accepted.

Table 4

Relation between De-schooling Tendency and Tender Minded - Mind Style among Higher Secondary School Students

	Total Sample	**Class**		**Type of School**	
		Class XI	Class XII	Government	Self-Financing
r	0.434	0.377	0.287	0.279	0.374

It is observed from the Table 4, the coefficient of correlation between de-schooling Tendency and Tender Minded - Mind Style of higher Secondary School Students for the total sample was worked out to be 0.434. The obtained correlation is positive and significant beyond 0.01 level, and therefore the two variables are functionally related showing a high relationship between the two variables. In the case of sub samples also, the obtained correlation was positive and significant. Therefore, it can be concluded that in general, high de-schooling Tendency goes with high Tender Minded - Mind Style and vice versa. In the case of sub samples also a almost similar relationship was found. Therefore, one can conclude that the hypothesis-3 is rejected since there is significant correlation.

CONCLUSION

It is expected that the findings of the study may highlight the need for developing programmes for relating Mind Style with de-schooling tendency among students at all levels. It is also hoped that the results of the study will provide useful hints and serve as guidelines for planning, framing and transacting programmes for developing Psychological approach in educational arena and by that reducing, adjustment level of the students with the schooling system.

American Psychologist - William James (1842-1910) expresses that "The greatest revolution of a generation is the discovery that human beings by changing the inner attitudes of their minds, can change the outer aspects of their lives". The world is a much more radically individualist where fundamental responsibilities fall to the individual. In 21st century the possibilities of knowledge acquisition and implementation are unlimited hence deschooling tendency also increase among teenagers. Due to insecured life surroundings and social competitions to survive in the technological world, Tender Minded -Mind style students are increasing in our society and hence Deschooling tendency and Tender Minded-Mind Style have inevitable places in our schooling system.

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CONSTRUCTION OF AN ATTITUDE SCALE TO MEASURE TEACHERS' ATTITUDE TOWARDS INCLUSIVE EDUCATION OF TRANSGENDERS

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ABSTRACT

The researchers constructed and validated a tool as part of the Ph.D. work. One of the objectives determined for the research work was a unique one, to find out teachers' attitude towards inclusive education of transgenders. In the case where the objectives are unique, the problem of selection of exactly appropriate and useful tool may arise. Same is the case with present research work. In a research work of such kind, selection of appropriate tool or construction of an appropriate tool became very important aspect of the research design of the present study. Initially, the researchers searched and found some of the related foreign tools. Adaption of those tools to Indian scenario seemed worthless and impractical as well. Thus the researchers decided to make an Attitude Scale as a contribution in the field. The psychological features of the tool, the process and procedure involved in the construction and the validation of the Scale are presented in this article.

INTRODUCTION

The Prelude Even after the eight years of enactment of Right to Education (RTE) Act, 2009, the noble aim of zero rejection and zero dropouts are still at stake. There is a nationwide call for action to remove all forms of exclusionary school practices for universalization of education. There are many disadvantaged sections who remain out of schools. Transgender students are the smallest student population having the largest educational risks in India.

Inclusion is not merely providing access to previously excluded into the mainstream, not the cessation of unacceptable system of segregated setting, not a dumping process of all disadvantaged into the unchanging mainstream educational system,

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but a value to be followed to fulfill the constitutional mandate of fundamental right to education of all types of children. Teachers' knowledge and attitudes are the factors that determine the success or failure of inclusive education of transgender students. The attitude of teachers has a huge impact on educational culture, environment, development and policy. Here the point of concern is that whether the teachers have a right attitude towards inclusive education of transgenders without which the RTE Act will remain as a dream. So an in-depth examination of attitude has the potential to inform the design of effective interventions, and to reduce the negative attitudes and stereotyping of transgenders. For that, there should be tools to find out educational stakeholders' attitude towards the same. Hence the researcher decided to construct a "Scale on Teachers' Attitude towards Inclusive Education of Transgender" (STAIET).

STEPS IN THE CONSTRUCTION OF THE SCALE

The steps followed are discussed below.

1. PLANNING OF THE SCALE

The first step in the construction of any scale is the preparation of a plan. The plan may differ according to the type of the test that the researcher is preparing. In the present study, one of the objectives of the study was to construct an attitude scale to find out teachers' attitude towards inclusive education of transgenders. So the researcher planned the objective, content, population and procedure to be followed in the scale construction and its standardization.

2. FIXING THE DIMENSIONS OF THE SCALE

By reviewing many related studies done in the field of transgender education both in India and abroad, based on trans-documents, and from the discussion with experts, the researcher identified seven major dimensions for the proposed tool. The description of each of these dimensions is given below.

Dimension 1-Teachers' Perception on RTE Act 2009

A consistent perception of a given social stimulus may represent the affective or cognitive factor which plays a role in attitude formation (Bandura, 1999). Perception is the way in which something is regarded, understood, or interpreted (Makvana & Patel, 2014). Here, the concept perception means the sum total of teacher's inclinations and feelings, prejudices or bias, pre-conceived notions, ideas, fears and convictions about RTE Act 2009 with regard to inclusive education. How a teacher performs his or her duty as the backbone of inclusive system, to a great extent, depends upon his or her positive perception on the act and ready to respond accordingly.

Dimension 2 - Teachers' Knowledge on Transgenders

Petty & Krosnick (1995) have established a number of attitudinal properties

that determine the strength of an attitude. Of the attitudinal properties that have been investigated, one of the first to be discussed and extensively researched is the construct of attitude-relevant knowledge (Converse, 1970; Rosenberg & Abelson, 1960). The knowledge aspect of attitude strength covers how much a person knows about the attitude object. Generally, people who are more knowledgeable about a topic that interested them are likely to hold strong positive attitudes as a consequence.

Here, teachers' knowledge is referred to theoretical or practical understanding of transgenders. It is the familiarity, awareness or understanding of transgenders, such as facts, information, descriptions, and history which are acquired through experience or education by perceiving, discovering, or learning. It is the knowledge base of teachers that creates conditions in which the gender diversity of every child is accepted, valued and nourished in the school system. It is their sound knowledge that encourages teachers to include diversity of gender and to meet their professional responsibilities even when their personal beliefs seem in conflict with concepts of social justice.

Dimension 3 - Teachers' Belief on Transgender Inclusion

Rokeach (1969) defined belief as "any simple proposition, conscious or unconscious, inferred from what a person says or does" (p. 113). According to Hogg, & Vaughan (2005), attitude is "a relatively enduring organization of beliefs, feelings, and behavioural tendencies towards socially significant objects, groups, events or symbols" (p150). As attitudes often emanates from beliefs, beliefs are considered antecedent to attitudes. We filter information based on our beliefs and only absorb the information that matches with our belief system. This impacts our behaviour by making us biased towards what we believe in no matter how many proofs are provided.

Dimension 4 – Teachers' Inclination for Transgender Inclusion

Favourable or unfavourable evaluative reactions – whether exhibited in beliefs, feelings, or inclinations to act – define a person's attitude toward something (Olson & Zanna, 1993). An inclination will be either positive or negative. As positive, it is love of a thing, as negative, dislike. When teachers have a positive inclination to transgender inclusion, they yield to it, bend towards it and remain constant connection with it. The amount of intellect that a person provides to make an idea successful depended upon one's inclination towards it. Teachers' inclination to transgender inclusion forms a positive attitude towards the same, and they seek to join those who have the same interest and strive for with ultimate determination.

Dimension 5 - Teachers' Role Recognition for Transgender Inclusion

Role recognition builds off extrinsic and intrinsic motivation among teachers that sprout positive attitude and commitment. This

gives a rewarding experience to students in the school. Role recognition appears to be the key to building professional identity. The development of a clearer professional identity is essential if educational preparation is to be tailored more specifically to the needs of those undertaking a practice teacher role (Andrews, 2011). Teachers' role recognition in a context-based socially-tailored perspective and in the socio-cultural framework of education keeps them with a positive attitude that in turn motivates teachers to acquire competencies required to develop inclusive practices.

Dimension 6 - Teachers' Sense of Self-responsibility for Transgender Inclusion

Teachers' sense of self-responsibility is referred to teachers' insights towards their responsibilities and the situations under which they incline to admit personal responsibility for the likely outcomes (Lauermann, & Karabenick, 2013). Teachers' sense of self-responsibility can be considered as the antecedent to positive attitude towards inclusive education of transgenders. Teachers' personal sense of responsibility potentially influences their instructional practices, psychological well-being, and ultimately their students' learning and performance. Various conceptualizations of teacher responsibility have been linked to such outcomes as positive attitudes and professional dedication (Halvorsen, Lee, & Andrade, 2009), teachers' beliefs in their ability to influence students, and teachers' willingness to implement new instructional practices (Guskey, 1988).

Dimension 7 - Teachers' Readiness to welcome Transgenders

Readiness refers to the condition where teachers show enthusiasm to welcome transgender inclusion. The factor of determinant of the successful implementation of transgender inclusion is very much related to teacher readiness. When change occurs, the readiness towards that change is important because it correlates with three other factors, belief, attitude, and intention that then lend support to the change. Readiness has been investigated as a three-dimensional construct as cognitive readiness for change, emotional readiness for change and intentional readiness for change (Bouckenooghe, Devos, & Van Den Broeck, 2009).

3. COLLECTION AND SCREENING OF ITEMS

Initially 175 attitude items, 25 on each dimension were collected from diverse sources. Discussions and deliberations with teacher educators, measurement specialists, and experts in education, psychology, sociology and law were conducted and weak and unclear items were either dropped or modified. While selecting statements, the following types of statements were excluded;

a) statements which indicate the past rather than the present,

b) statements that are factual or capable of being interpreted as factual,

c) statements that may be interpreted in various ways,

d) statements that are not relevant to the theme under consideration,

e) statements that are likely to be endorsed by almost everyone or by almost none,

f) statements which lack coherence, directness and simplicity,

g) statements which include words that may not be understood by those who are to be given the completed scale, and

h) statements which are double negatives and statements which contain universals such as all, always, none and never and thus resulting in ambiguity.

The selected 140 statements were discussed with a panel of 6 experts. On the basis of experts' judgment and reasoning, some items were again dropped out due to language difficulty and ambiguity, and some new statements suggested by the panel were added. The phraseology, format, response categories and relevance of each item were scrutinized. Items which appeared to be overlapping were merged together. The items were checked for content and face validity. Finally 120 items were retained for inclusion. Thus the scale STAIET consisted of positively-stated 72 items (eg. A teacher who has genuine interest can gain knowledge about different aspects of transgender inclusion even in the absence of any organized training programme) and negatively-stated 48 statements (e.g. Home Schooling is the best option and educational method for parents of transgender students to shelter their child from harassment of their gender variance). A positively stated statement is one, the agreement for which indicates the possession of positive variable. A negatively stated statement is one, agreement for which shows the lack of possession of a positive variable.

4. DESIGNING RESPONSE FORMAT

It was decided to develop a Likert Scale with 5 responses to measure the extent of teachers' attitude towards inclusive education of transgenders. Generally attitude scales were constructed, based on either the Thurstone's method of equally-appearing intervals or Likert's method of summated ratings. Likert type scale has been constructed in this study and has been preferred for the following reasons. It is less laborious and less time-consuming than the Thurstone's technique. It is more reliable. Likert approach gets a five point judgment on each item rather than the mere rejection or acceptance in the Thurstone's scale. The Likert-type scale is easy to score as well (Kothari, 2009).

Against each statement, five alternative responses, namely, Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree

were given. Weights of 5, 4, 3, 2 and 1 were given for positively-stated statements in the order of their favourableness and for negatively-stated statements, the scoring system is reversed. Thus, if one chooses Strongly Agree response for a positively-stated statement, he or she gets a score of 5 and for the same response, if the statement is negatively-stated; one gets a score of 1. Only for the Undecided response, one gets always a score of 3, whether a statement is positively-stated or negatively-stated. An individual's score in this scale is the sum total of the scores for all the statements marked by the subject.

5. PRELIMINARY TRYOUT

The purpose of this tryout of the tool was to select the items for the final scale by testing empirically. The pilot study was conducted with a view to find out the reliability and validity of the tool and also to eliminate any ambiguity if any, so that teachers do not feel any difficulty in responding to the items in the scale STAIET. The pilot test was done on a sample of 100 teachers. Total score for each subject was calculated. The sum of the item credits represented the individual total score.

6. ITEM ANALYSIS

In the method of summated ratings, rejection or selection of statements is done on the basis of item analysis. For this, the frequency distribution of scores based upon the responses to all statements was considered. Then the 't' value of each item was found out by analyzing responses of the 27% of the subjects with the highest total scores and also the 27% of the subjects with the lowest scores. It was assumed that these two groups provide criterion groups in terms of which individual statements were evaluated. The 't' value for evaluating the responses of the high and low groups to the individual statements was found out. Items with 't' values less than 1.75 were rejected. As many as 51 items having the t-value greater than or equal to 1.75 (Edwards, 1957) have been chosen in order to include in the final scale.

7. FINALIZATION OF THE TOOL

Meeting the rationale of attitude scale construction, 51 statements were selected to constitute the final form of STAIET. Out of 51 items, 30 items are meant to assess attitude in positive direction and 21 in negative direction. Thus the positive-negative continuum adequately measured the aforesaid seven selected areas. Details of item numbers corresponding to seven dimensions of STAIET are given in Table 1.

Table 1

Details of the İtem Numbers Corresponding to each Dimension of Staiet

No	Dimensions	Item No	P/N	Total	Grand Total
1	Teachers' Perception on RTE Act 2009	2, 28, 35	P	3	6
		8, 14, 21	N	3	
2	Teachers' Knowledge on Transgenders	9, 29, 36	P	3	8
		15, 22, 31, 49, 50	N	5	
3	Teachers' Beliefs on Transgender Inclusion	3, 37, 44, 45, 46, 47	P	6	9
		10, 16, 23	N	3	
4	Teachers' Inclination for Transgender Inclusion	1, 11, 13, 24, 38	P	5	9
		4, 17, 42, 43	N	4	
5	Teachers' Role Recognition for Transgender Inclusion	5, 12, 25, 30, 32,39	P	6	8
		18, 48	N	2	
6	Teachers' Sense of Self-responsibility for Transgender Inclusion	6, 33, 40	P	3	5
		19, 26	N	2	
7	Teachers' Readiness to welcome Transgenders	7, 34, 41, 51	P	4	6
		20, 27	N	2	
Total					**51**

The scores in the final scale ranged from 51 to 255. An individual's score in STAIET is the sum total of the scores for all the statements by the subject (summated ratings). The higher the score in the scale, the greater will be the attitude. The scoring and the level of teachers' attitude towards inclusive education of transgenders have been given in Table 2.

Table 2

Levels of Attitude

Attitude Level	Score
Positive	Score > (Mean+S.D.)
Neutral	(Mean-S.D.) < Score < (Mean+S.D.)
Negative	Score < (Mean-S.D.)

VALIDATION OF THE TOOL

Validity of a tool means its truthfulness. It is that quality of a data gathering instrument or procedure that enables to measure what it is supposed to measure (Best & Kahn, 2012). If a test measures what it intends to measure, then it is said to be valid (Thatcher, 2010, p.125). Anastasi & Urbina (1997) stated that the validity of a test is concerned with what the test really measures and how well the test does so. The validity of STAIET is estimated as given below.

A. FACE VALIDITY

Normally, face validity of a tool is estimated by asking opinion from judges. In that way, the scale was given to 6 experts and they agreed that the items in the scale were relevant to the objectives of the study. So the face validity of STAIET demonstrated hundred percent agreements among the experts. Lowenthal (2001) stated that face validity can also be checked by one or more people from the same population that the researcher is going to ask to complete the measure. In the present study, face validity was estimated in the pre-tryout of preliminary draft stage of the preparation of scale.

B. CONTENT VALIDITY

STAIET has the universe of content as it included statements from all the selected dimensions of attitude towards inclusive education of transgenders. Content validity indicates that the instrument fairly and comprehensively covers the domain or items that it purports to cover (Cohen, Manion & Morrison, 2010). Anastasi (1982) stated that "Content validation involves essentially the systematic examination of the test content to determine whether it covers a representative sample of the behaviour domain to be measured". Special care was taken to include all the relevant areas in the preparation of the items and due weightage was given to all the dimensions while selecting items. The scale contained 51statements which represented the universe of content. Hence it can be reasonably assumed that STAIET possessed high content validity. In the present study content validity of the tool was estimated in item collection and screening stage of the preparation of the scale.

C. CONSTRUCT VALIDITY

Construct validity is concerned with what qualities does a test measure. STAIET has construct validity as items were selected having 't' values equal to or more than 1.75 (Edwards, 1975). Construct validity can be estimated by internal consistency. In the present study, internal consistency was established in the item analysis stage of tool preparation.

RELIABILITY

Reliability of the tool is its capacity to produce a steady result from one set of measures to another. Best and Kahn (2012) explained reliability as the degree of consistency that the instrument or procedure

demonstrates: whatever it is measuring, it does so consistently. An alternative calculation of reliability as internal consistency can be found in Cronbach's alpha, frequently referred to as the alpha coefficient of reliability. The Cronbach alpha provided a coefficient of inter item correlations, which is the correlation of each item with the sum of all the other items. This is a measure of the internal consistency among the items. It is the average correlation among all the items in question, and is used for multi-item scales.

The formula for alpha is (Cohen, Manion, and Morrison, 2010)

$$\alpha = nr_{ii/1}+(n-1)r_{ii}$$

Where n= number of items in the test or survey

r_{ii} = the average of all the inter-item correlations

The value of Cronbach's alpha was found to be 0.903 which suggests that the scale is highly reliable. The criteria are given in the Table 3.

Table 3

The Criteria for Reliability

Score	Reliability
> 0.90	Very highly reliable
0.80 – 0.90	Highly reliable
0.70 – 0.70	Reliable
0.60 – 0.69	Marginally/minimally reliable
<0.60	Unacceptably low reliability

UNACCEPTABLY LOW RELIABILITY

Reliability of the STAIET was estimated by the split half method also. The result was divided into two equal parts by odd-even method. In this method all odd numbered items constituted one part of the test and even numbered items constitute another part of the test. Each subject thus received two scores. The score of all odd numbered items constituted one score and the score of all even numbered items constituted another score for the same examinee. The reliability of the split half test is found to be 0.78 by the use of Spearman-Brown prophecy formula. The reliability of the whole test was found to be 0.88.

THE POSTLUDE

Allport (1935) rightly expressed that the concept of attitude is probably for most distinctive and indispensable concept in contemporary Social Psychology and no other

term appears more frequently in experimental and theoretical literature. It appeared relevant and urgent for the researchers to construct a dependable attitude scale to find out teachers' attitudinal allied aspects towards inclusive education of transgender students. The researchers believe that the newly developed Scale is a first of its kind in the country and is worthwhile for finding out the various aspects of teachers' attitude towards inclusive education of transgender students. It can be used not only for diagnostic purpose but also for the possibility in changing the attitude of teachers through its items which are carefully tailored with positive strokes and think-aloud protocols.

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EFFECT OF ENRICHMENT TRIAD MODEL IN ENHANCING PROBLEM SOLVING ABILITY AMONG UPPER PRIMARY SCHOOL STUDENTS

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ABSTRACT

The ability of problem solving has an important role in students' academic performance and their construction of the concepts. For children, learning how to solve effectively common day-to-day problems can mean the big difference between success and failure. For all human beings, solving problems is a necessary part of life. Lacking the ability to solve problems could become a great source of panic and anxiety in children. The main aim of this study is to identify the effect of enrichment triad model in enhancing problem solving ability among upper primary school students. Results indicated that the Enrichment Triad Model has significant positive effects on students problem solving ability. It also showed that not only their problem solving ability but also their confidence level increased and they felt satisfaction and capable of even applying the strategy for their future needs.

INTRODUCTION

The role of schools in developing a futuristic and knowledgeable society cannot be denied. As we intentionally create learning environments and expectations for today and tomorrow's students: technology and learning material must be thoroughly integrated into our learning environments. This can support efforts to engage students in critical thinking, research, collaboration, thinking interdependently, problem analysis, problem/ solution efforts, and much, much more. Educationalists in the 21st century should recognize that students who are arriving today's classroom are much different from those who have come before.

Teaching models prescribe tested steps and procedures to effectively generate desired outcomes. The number of developing models and the ones that have appeared is countless. Each emerging new model either discovers a

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new approach or attempts a modification of the conventional ones as to cater the uniqueness of individuals. Various studies such as "Effectiveness of concept attainment model with reference to educational achievement in the subject of Gujarati of standard nine" (Gajjar, 2015) , "Effectiveness of the Picture Word Inductive model In Learning English among Pupils of Standard Five" (Lavina, 2012) reveals the importance of different types of models of teaching. Most importantly, any teaching model should optimize learning experiences to the needs of each learner by carefully exploring the learning problems and contributing tailor-made support.

The ability of problem solving has an important role in students' academic performance and their construction of the concepts. In the highly achieving society of today, success has become an index of attaining position and respect. Therefore greater premium is laid on the academic achievement of students. A good academic achievement record of students is an index of an effective educational system. By developing problem solving skills students develop an interesting and enjoyable way to learn, produces positive attitudes, encourages cooperative skills and creativity. Studies such as "Problem-Based Learning"(Ann, 2004), "The problem based learning in mathematics in relation to formal thinking ability of secondary school students" have emphasized (Soumya, 2009) the importance of this essential skill. There are many factors which affect academic achievement are viz. intelligence, personality, motivation, school environment, heredity, home environment, learning, experiences at high school, interests, aptitudes, family background and socio economic status of the parents. Despite this, one of the major factors of education is the ability of problem solving that affect the academic achievement. Problem solving is the key to success and has been regarded as the most significant aspect of human behavior. The problem solving ability plays a significant role in the academic achievement of students and it is regarded as an important competency in modern societies. The children who possess the creative ability to face the problems with a challenge and solve them easily. Hence the important goal of education today is helping students learn how to think more productively while solving problems, by combining creative thinking (to generate ideas) and critical thinking (to evaluate ideas).

RESEARCH QUESTION

This study attempts to answer the following research question.

How can enrichment triad model develop students' problem solving ability better than in class-only teaching?

OBJECTIVES

1. To find out the effect of enrichment triad model in enhancing problem solving ability of upper primary school students
2. To test the effectiveness of enrichment triad model on problem solving ability of upper primary boys
3. To test the effectiveness of enrichment triad model on problem solving ability of upper primary girls

HYPOTHESES

1. Enrichment triad model is effective in enhancing problem solving ability among upper primary school students.

2. Enrichment triad model is effective in enhancing problem solving ability among upper primary boys.

3. Enrichment triad model is effective in enhancing problem solving ability among upper primary girls.

METHODOLOGY IN BRIEF

METHOD

The investigator adopted Experimental method for the present study.

SAMPLE

The sample comprised of 30 upper primary school students of Standard VI from Kudamallor Govt Higher Secondary School, Kudamallor , Kottayam, by stratified random sampling, out of which 17 are males and 13 are females.

VARIABLES

The following variables were identified for the study.

Independent Variable: Enrichment Triad Model

Dependent Variable: Problem Solving Ability

RESEARCH DESIGN

The present experimental study has been conducted utilizing "Single Group Pre-Test, Post-Test design."

INSTRUCTIONAL MATERIAL

In this study, students were taught using instructional material based on enrichment triad model. The researcher developed ETM based lessons which were parallel with the classroom lessons. The investigator adopted various collaborative independent activities and self-directed online activities. By making use of this, various activities were implemented for enhancing problem solving ability such as group discussion, role play etc.

RESEARCH INSTRUMENTS

In order to evaluate the effectiveness of the use of blended learning, the following research instruments were used:

1. Instruction materials prepared based on Enrichment Triad Model (ETM)

2. In order to assess the problem solving ability in upper primary students, a problem solving ability test was prepared and validated by the investigator.

It is pretested at the beginning of the course, implementing enrichment triad model, and then again posttested at the end of the study. It would seem that any differences between the pretest and posttest measures would be due to how the problem solving ability improvement(problem solving test) was based for components of problem solving such as identifying,interpreting,organizing and applying skill.

RESULTS AND DISCUSSION

Table 1

Significance of Difference between Mean of Pre-test and Post-test Scores

Experimental Group	N	Mean	S.D	df	t-value
Pre-Test	30	11.03	2.84	29	9.15*
Post-Test	30	16.89	2.11		

**Significant 0.01 level*

From the table-1 it is clear that the mean pre-test score of the experimental group is much less than those of the post-test mean score. The t- value is significant at 0.01 level. This indicates that enrichment triad model enhances the problem solving ability of students. In light of this, the null hypothesis is rejected.

Table 2

Significance of Difference between Mean of Pre-Test and Post-Test scores of boys

Experimental Group	N	Mean	S.D	df	t-value
Pre-Test	17	10.01	2.41	16	7.93*
Post-Test	17	16.04	2.01		

**Significant 0.01 level*

From Table-2, it is obvious that the mean pre-test score of the boys is much less than those of the post-test mean scores of girls. The t-value obtained is significant at 0.01 level. This indicates that enrichment triad model enhances the problem solving ability of boys.

Table 3

Significance of Difference between Mean of Pre-Test and Post-Test scores of girls

Experimental Group	N	Mean	S.D	df	t-value
Pre-Test	13	11.41	2.01	12	7.46*
Post-Test	13	17.01	1.81		

**Significant at 0.01 level of significance*

From Table-3, it is evident that the mean pre-test score of the girls is much less than those of the post-test mean score. The t-value is significant at 0.01 level. This indicates that enrichment triad model enhances the problem solving ability of girls to a great extent.

EDUCATIONAL IMPLICATIONS

1) Students are able to learn better when their learning preferences are being attended.
2) Students are able to connect their knowledge through their practical experience and theoretical knowledge.
3) Students also perceive information in their dominant modality, and so it is important that educators are aware of their students' modalities.
4) Educators need practical and useful information that serves as a basis for planning instruction around their students' learning preferences, multiple intelligence and modality strengths.

CONCLUSION

The analysis of the data obtained for assessing the effectiveness of the enrichment triad model on problem solving ability among upper primary school students shows a positive impact. The performance of the students after the intervention was found to be improved to a great deal. Not only their problem solving ability but also their confidence level increased and they felt satisfaction and capable of even applying the strategy for their future needs.

Problem solving ability is highly correlated with academic achievement, intelligence, creativeness, rational ability, numerical ability and mathematical ability. Therefore, it is necessary that we should develop the problem solving ability through proper education and training of our students. High level of problem solving ability will increase the decision making, coping with stress, critical and creative thinking abilities. It may be helpful in their future life. In this competitive world everyone is expected to have some ability to face some critical problem. In the present study, it was found that there is very much influence of problem solving ability on the academic achievement of students. Problem solving is an individualized process, which requires various strategies to tackle. The classroom teacher can develop a scientific approach to solve problems that the students are expected to face in social life.

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ATTITUDE OF HIGH SCHOOL TEACHERS TOWARDS IMPLEMENTATION OF YOGA IN SCHOOL CURRICULUM

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ABSTRACT

Yoga is considered as a divine science of life. Yoga education includes all major concepts and practices of yoga. Union of static realism liberates the spirit from all sense of separation. Yogic practices help to deal with delinquency and improved academic performance. The main causes of stress among adolescents are: examinations, heavy workload, worry over future, making choices about career, need to do well, imposed by other and self-imposed to do well. By yoga practice children learn how to control their energy so that they can focus and concentrate well. The present study is an attempt to find out the attitude of high school teachers towards the implementation of Yoga in school curriculum. The findings of the study revealed that there exists no significant difference in the attitude of high school teachers toward the implementation of yoga in school curriculum.

INTRODUCTION

The word yoga in Sanskrit (one of the ancient languages of the East) means to "yoke"or unite, the mind, body and spirit. Yoga includes physical exercise and also a lifestyle practice for which exercise is just one of the components. Training your mind, body and breath as well as connecting them with spirituality, are the main goals of the yoga lifestyle.Yoga is a way of life.The National Curriculum Framework (NCF)2005 has broad-based guidelines for physical education and yoga as a compulsory subject. Talking to Times of India (TOI)from New Delhi, SarojYadav, coordinator for health and physical education, National Council of Education Research and Training (NCERT) said that yoga will now be

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made an integral part of physical education. It should be implemented holistically from Class VI onwards.

It is predominantly concerned with maintaining a state of equanimity at all costs. All yoga schools of thought emphasize the importance of the mind remaining calm, because as the saying goes, only when the water is still, can one see through it. It is the result of human wisdom and insight on physiology, psychology, ethics and spirituality collected together and practiced over thousands of years for the well-being of humanity. Indeed, the goal of yoga is to uncouple oneself from the material world and to unite oneself with the God, commonly understood to be Brahman, the impersonal cosmic consciousness of the universe. Thus, yoga is the means by which the user's mind is merged into the universal mind. The relaxation program included yoga exercises guided imagery, role-playing, discussion, stories and mnemonics to encourage the ability to use the relaxation skills in other settings. In fact, the National Focus Group on Health and Physical Education recognizes yoga's importance in the school curriculum both for the physical, psychosocial and mental development of the person.

NEED AND SIGNIFICANCE OF THE STUDY

The main causes of stress among adolescents are: examinations, learning outcomes, beyond one's capacity, worry over future, making choices about career, studying too much for examinations and need to do well, imposed by others and self-imposed ones. Further high level family stress and high school related stresses could lead to high level adolescent problems. We also give undue importance to our physical health and the treatment of diseases. A large number of medicines treat only the symptoms of the disease and not the root causes. In fact, the cause of many chronic ailments are still being researched. The practice of yoga can help significantly to improve attention and memory in children with increase in confidence and creativity. RYE(Research on Yoga in Education)also encourages teachers to experience the benefits of yoga for themselves, both to familiarize themselves with the techniques which they will be teaching and to get a real firsthand taste of the spirit of the practice. The teacher training programmes run by RYE (Research on Yoga in Education) are therefore experiential and hands-on and trainees learn a wide range of practical methods which can enrich their own lives as well as those of their pupils. Muscle tightness and sprains are quickly relieved and both circulation and digestion also improved. Stress-related symptoms like poor sleep, fatigue, muscle spasms, anxiety and indigestion are greatly improved. Continued practice of yoga can have profound effect on the inner dimensions of life, by establishing deep calm, concentration, emotional stability and confidence. The purpose of this study is to find out the attitude of high school teachers

towards the implementation of yoga in school curriculum.

OBJECTIVES

1. To know the level of high school teachers toward implementation of Yoga in school curriculum with regard to background variables like gender, major subject specialization and marital status.
2. To find out, whether there is any significant difference in the attitude of high school teachers toward implementation of Yoga in school curriculum with regard to background variables like gender, major subject and marital status.

HYPOTHESES

1. There is no significant difference between Male and Female high school teachers in their attitude towards implementation of Yoga in school curriculum.
2. There is no significant difference between Married and Unmarried high school teachers in their attitude towards implementation of Yoga in school curriculum.
3. There is no significant difference between Arts and Science stream high school teachers in their attitude towards implementation of Yoga in school curriculum.

METHODOLOGY IN BRIEF

METHOD

In the present study, investigator has used survey method to study the problem.

SAMPLE

The sample for the present study consisted of 285 high school teachers working in different schools in Kanyakumari District.

TOOL USED

Yoga Attitude Scale (constructed and validated by the investigators).

STATISTICAL TECHNIQUES USED

The statistical techniques used were Mean, Standard deviation, t test.

RESULT AND DISCUSSION

Table 1
Level of High School Teachers' Attitude towards Implementation of Yoga in School Curriculum

N	Low		Average		High		Total	
	N	%	N	%	N	%	N	%
285	48	16.8	194	68.1	43	15.1	285	100.0

It is inferred from table-1 that 16.8% of high school teachers have low level of attitude towards implementation of Yoga in school curriculum, 68.1% of them have average level of attitude towards implementation of Yoga in school curriculum and 15.1% of them have high level of attitude towards implementation of yoga in school curriculum.

Table 2

Level of high school teachers' attitude towards implementation of Yoga in school Curriculum with respect to background variables

Variables	Low		Average		High	
	N	%	N	%	N	%
Male	16	23.5	38	55.9	14	20.6
Female	32	14.7	156	71.9	29	13.4
Science	27	15.9	116	68.2	27	15.9
Arts	21	18.3	78	67.8	16	13.9
Married	37	15.9	158	68.1	37	15.9
Unmarried	11	20.8	36	67.9	6	11.3

It is inferred from the table-2 that 23.5%high school male teachers have low level 55.9% of them have average level and 20.6%of them have high level of attitude towards implementation of Yoga in school curriculum. With respect to female high school teachers,14.7% of them have low level of 13.4%of them have high level and 71.9%of them have average level of attitude towards implementation of Yoga in school curriculum.

With regard to Science high school teachers 15.9% have low level 68.2% of them have average level and 15.9% of them have high level of attitude towards implementation of Yoga in school curriculum. With regard to high school arts teachers, 18.3% of them have low level 67.8% of them have average level and 13.9% of them have high level of attitude towards implementation of Yoga in school curriculum.

Based on marital status of high school married teachers15.9% have low level 68.1% of them have average level and 15.9%of them have high level of attitude towards implementation of Yoga in school curriculum. With respect to high school unmarried teachers.20.8% of them have low level 67.9%of them have average level and 11.3%of them have high level of attitude towards implementation of Yoga in school curriculum.

Table 3

Difference between Male and Female High School Teachers attitude towards implementation of Yoga in School Curriculum

Gender	N	Mean	S.D	t-value		Remarks (5%level of significance)
				Calculated value	Table value	
Male	68.00	80.10	7.47	0.86	1.97	NS
Female	217.00	79.23	6.89			

(NS - No Significant)

It is observed from the table-3, for the category gender the calculated t-value (0.86) is less than the table value(1.96)for df 283 at 5% level of significance. Hence the null hypothesis is accepted. It shows that there is no significant difference between male and female high school teachers attitude towards implementation of Yoga in school curriculum.

Table 4

Difference between Science and arts High School Teachers' attitude towards Implementation of Yoga in School Curriculum

Subject	N	Mean	S.D	t-value		Remarks (5%level of significance)
				Calculated value	Table value	
Science	170.00	79.60	7.09	0.47	1.97	NS
Arts	115.00	79.20	6.97			

(NS - No Significant)

It is noted from the table-4, for the category based on subject specialization, the calculated value(0.47)is less than the table value(1.96) for df 283 at 5% level of significance. Hence the null hypothesis framed is accepted. It shows that there is no significant difference between science teachers and arts stream high school teachers' attitude towards implementation of Yoga in School curriculum.

Table 5

Difference between Married and Unmarried High School Teachers' attitude towards Implementation of Yoga in School Curriculum

Marital Status	N	Mean	S.D	t-value		Remarks (5%level of significance)
				Calculated value	Table value	
Married	232.00	79.62	6.80	0.83	1.97	NS
Unmarried	53.00	78.64	7.99			

(NS - No Significant)

It is found from the table-5, for the category marital status, the calculated value (0.83) is less than the table value(1.96)for df 283 at 5%level of significance. Hence the null hypothesis framed is accepted. It shows that there is no significant difference between married and unmarried high school teachers' attitude towards implementation of Yoga in school curriculum.

FINDINGS OF THE STUDY

1. There is no significant difference between male and female high school teachers' attitude towards the implementation of yoga in school curriculum.
2. There is no significant difference between married and unmarried high school teachers' attitude towards the implementation of yoga in school curriculum.
3. There is no significant difference between arts and science high school teachers' attitude towards the implementation of yoga in school curriculum.

CONCLUSION

Scientists and doctors not only in India but also around the world are currently researching the effects of yoga similar to the present study in different dimensions. In the near future we hope to see an increased application of yoga practices in walks of life. The present study is a step in this direction, that is to enable high school teachers to achieve physical, mental and emotional balance. Unique mental training programmes consisting of mindfulness meditation and emotional intelligence practices can be implemented to strengthen the mind of teachers, so that they can take better decisions.

By means of health and wellness programmes, students can be empowered to improve their concentration, coordination and self-monitoring. Yoga appears to be more effective than traditional exercise or an educational book for improving body functions and pain. Yoga is a customized training to stress reduction and the development of emotional competence. Training programmes through workshops can be provided to high school teachers to overcome their own stresses, emotional incompetencies.

Now yoga is included in the curriculum as a compulsory subject for the harmonious development of all the students (mind, body and soul)_the ultimate aim of education. All the schools should appoint yoga instructors to provide effective practice sessions to increase significantly their mental and physical health.

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EFFECT OF SLOW AND FAST SURYANAMASKAR PRACTICES ON SELECT PSYCHOLOGICAL VARIABLES AMONG SCHOOL GIRLS

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ABSTRACT

The present study was designed to find out the effect of slow and fast suryanamaskar practices on select psychological variables among school girls. It was hypothesized that there would be significant differences in the psychological variables namely study skills among school girls due to the influences of slow and fast suryanamaskar practices. To achieve the purpose of the study, 45 school girls were selected from a Kendira Vidayalaya in Chennai. The Experimental group underwent slow and fast suryanamaskar practices for a period of 12 weeks of one hour duration in the morning. The control group was not exposed to any specific training, but they participated in the regular exercises and activities. The pretest and post test were conducted before and after the training for the groups. The data pertaining to the variable collected from the groups before and after the training period were statistically analyzed by using 'ANCOVA' test to determine the significant differences if an and tested it at 0.05 level of significance.

INTRODUCTION

Yoga has now become a veritable household word, even many of those practising it with regularity. Historically yoga was more than certain physical activities. It is a way of life, a culture and a lifestyle which encompass not just techniques, practices or ideas, but included eating habits, bathing habits, prayer, social interaction, and work.

Yoga included a vast body of 'attitudes toward being'. It is an ingrained sense of morality and ethic and was the bedrock of the personal, social, and cosmic order which is developed in that part of the earth known as

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India Preadolescents still suffer from tantrums even at the age of 13 which sometimes lead to rash decisions involving risky actions. Such decisions may in rare cases result in grave situations leading to death.

Some experts believe that Yoga and Meditation can be a valuable tool for treating addiction. Although few studies have been conducted on this topic, those that have been done provide favorable results for the use of Yoga and Meditation as a treatment tool. The practice of yogic postures, breathing and meditation can aid in recovery from many kinds of addictions. Addicts suffer a great day of physical, psychological and emotional toll because of their behaviors. The goal of Yoga is to create peace of the body, mind and spirit. Scientific studies have shown that the practice of Yoga can develop the psychological variables like memory, concentration and the skills related to the studies. That is why more and more professionals have started using yoga techniques for the benefit of students.

METHODOLOGY IN BRIEF

To achieve the purpose of the study, 45 school girls from Kendra vidhyalaya school Chennai were selected randomly are formed three groups of 15 subjects each.

The selected subjects were divided into two experimental groups I, and II and control group with 15 subjects each in a group. Experimental Group - I underwent slow suryanamaskar practices and Experimental Group - II underwent fast suryanamaskar practices for a period of 12 weeks for the maximum of an hour in the morning. The control group (CG) did not participate in any of the specific programme given to group are and two.

RESULT AND DISCUSSION

Table 1
Computation Of Analysis Of Covariance Of The Two Experimental Groups And Control Group On Study Skills
(Scores in marks)

Test	Exp. Gr. I	Exp. Gr. II	Con. Group	Source of variance	Sum of squares	Degree of freedom	Means squares	Obtained F value
Pre-test	27.27	28.00	27.40	between	4.58	2	2.289	0.12
				within	790.53	42	18.82	
Post test	35.00	34.87	27.53	between	547.73	2	273.87	16.93*
				within	679.47	42	16.18	
Adjusted Post test	34.97	34.91	27.52	between	550.39	2	275.19	16.76*
				within	673.054	41	16.42	
Mean gain	7.73	6.87	0.13					

*Significant at 0.05 level of confidence. * F(0.05) (2,42 and 2, 41) = 3.23.

Results of Study skills

The study skill was measured through questionnaire prepared by M.Kanchana. The pre and posttest means of the experimental groups and control group were statistically analyzed to findout the significance.

The table 1 shows that the pretest mean scores of study skills of slow and fast suryanamaskar practices groups and control group were 27.27, 28.00, and 27.40 respectively and the obtained 'F' value on pretest scores is 0.12 was less than the required table value of 3.23 to be significant at 0.05 level. This proved that there was no significant difference among the groups at initial stage and the randomized assignment of the subjects into three groups were successful.

The posttest mean scores of slow and fast suryanamaskar practices groups and control group were recorded as 35.00, 34.87, and 27.53 respectively, showed improvement over the pretest scores. The obtained F value on post test score was 16.93 which was greater than the required table value of 3.23. This proved that there was significant difference among the post test means of the subjects.

The adjusted posttest mean scores of slow and fast suryanamaskar practices groups and control group were recorded as 34.97, 34.91, and 27.52 respectively. The obtained F value of 16.76 of adjusted post test means was greater than the required table value of 3.23. This proved that there was significant difference among the mean scores due to twelve weeks training on slow and fast suryanamaskar practices.

Table 2

Scheffe's Post-Hoc Test For Study Skills

Exp. Gr. I	Exp. Gr. II	Control group	Mean difference	C.I
34.97	34.91	-	0.06	0.10
34.97	-	27.52	7.45*	0.10
-	34.91	27.52	7.39*	0.10

*Significant

Since significant improvements were recorded, the results were subjected to post hoc analysis using scheffe's post-hoc test. The results were presented in table II.

DISCUSSION ON THE FINDINGS OF STUDY SKILLS

Table II shows that the adjusted post-test mean scores difference in Study skills of EX.GR-I (slow suryanamaskar practices) and

CG and between EX.GR-II (fast suryanamaskar practices) and control group are 7.45 and 7.39 respectively, which were statistically significant at 0.05 level of confidence.

The adjusted post-test mean scores difference in Study skills between EX.GR-I (slow suryanamaskar practices) and EX.GR-II (fast suryanamaskar practices) was 0.06 which is statistically insignificant at 0.05 level of confidence.

The findings of the study on study skills reveal that the experimental groups namely EX.GR-I (slow suryanamaskar practices) and EX.GR-II (fast suryanamaskar practices) had significantly improved after the training. Besides, the results of the study indicated that there was no significant difference between the EX.GR-I (slow suryanamaskar practices) and EX.GR-II (fast suryanamaskar practices).

The pre test, post test and adjusted post test mean values of EX.GR-I (slow suryanamaskar practices), EX.GR-II (fast suryanamaskar practices) and control group on Study skills are graphically presented in Figure 1.

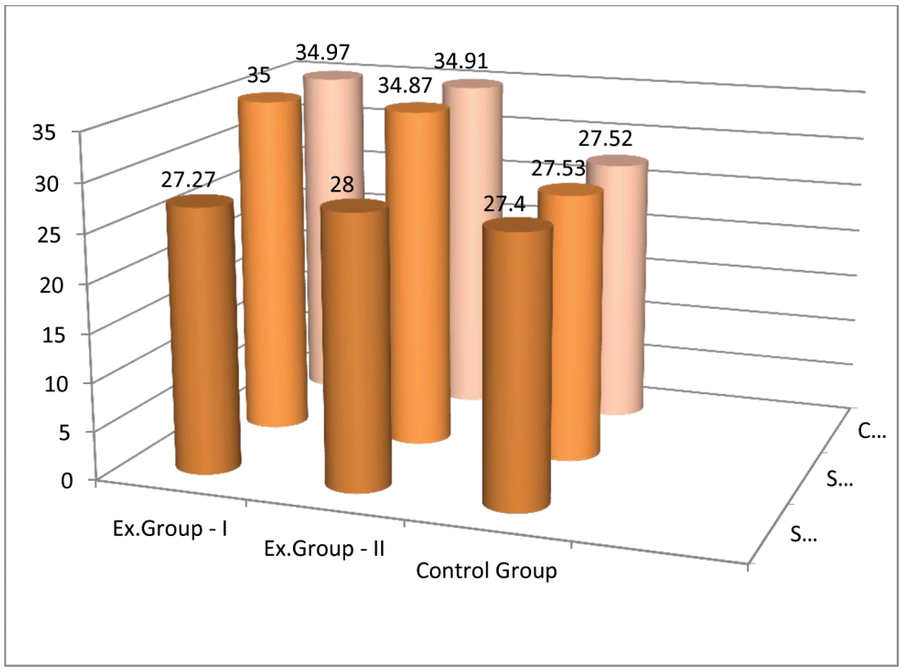

Figure 1
Bar Diagram Showing The Mean Difference Among Experimental Group I, Experimental Group Ii And Control Group Of Study Skills
(Scores in marks)

DISCUSSION ON FINDINGS

The results of the study indicated that when compared to control group the experimental group differed significantly on the selected dependent variables namely study skills.

The results of the study showed that study skills increased significantly as a result of slow and fast suryanamaskar practices. Hence, the hypothesis was accepted at 0.05 level of confidence. Systematic slow and fast suryanamaskar practices increased the study skills.

CONCLUSION

1. The experimental group exhibited a significant increase on study skills immediately after the practices than the control group.

2. The slow and fast suryanamaskar practices helped to increase the study skills among the school girls.

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EFFECT OF MIND MAPS ON ACHIEVEMENT IN HISTORY OF HIGHER SECONDARY SCHOOL STUDENTS

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ABSTRACT

Mind map is a visual technique for structuring and organizing thoughts and ideas. It can be applied to every aspects of life where improved learning and clear thinking enhance human performance. The present investigation studied the effects of mind maps on achievement in History of higher secondary school students by comparing the pre-test and post-test achievement scores of the experimental group and control group. The sample consisted of 89 students of XI Standard History group. The experimental group consisted of 44 students, treated with Mind Map Method and the control group consisted of 45 students, treated with Lecture Method. Mind maps were prepared by the investigator on the selected topics in XI standard History text book as instructional materials for teaching the experimental group. The findings of the study revealed that Mind Map Method is superior to Lecture Method in learning History in terms of post-test achievement scores. Mind Map Method helped to retain the learning capacity of the students. The findings of the study also indicated that mind maps are superior to lecture method in terms of achievement in History. Mind Maps also are capable of enhancing motivation to students to learn, by establishing relationship among concepts and problem solving skills and logical thinking which are essential factors for success in academic life.

INTRODUCTION

Education is a process of development of the latent and inherent capabilities of a child to the fullest extent. It can inculcate higher moral, social and spiritual values and meet the immediate needs of a child and also prepare him for the future. Education can also enhance various intellectual capabilities of children. Creating a stimulating learning environment can facilitate full development of intelligence and enhance the ability of learners to attain,

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retain and recall the information beyond one's walls of classroom. Brain research shows that the ability to learn is significantly influenced by coping behaviour environmental facility, skills of thinking and by using meta-cognition. Teachers therefore need to reinvent their teaching skills and schools need to change from traditional approach of innovative approaches utilizing the full capacity of brain.

Mapping is a skill that comes naturally to all children and is one of the most powerful tools that can be used to enrich and accelerate learning. Mind Mapping is a way of right and left brain based learning on the theory of Sperry, developed by Tony Buzan. Mind Mapping shows the way our brain think and the way it observes information. It is a graphic technique based on a few rules that allows to visualize, structure and organize a multiplicity of information in a meaningful way. It automatically inspires interest in students, making them more receptive and co-operative in the classroom. It has its application in many subject areas to represent group deliberation in a visual form. It can also be used to represent the critical attributes of concepts like brain-compatible classroom strategies for students to conceptualize their learning.

NEED AND SIGNIFICANCE OF THE STUDY

Teaching is one of the most important professions in our society and they are responsible for the nurturing most treasured resources namely, the human intellect. The responsibility of teachers is to make their teaching effective by promoting meaningful learning among students. A teacher can also influence the kinds of input students receive, but only students can make out meaning from incoming sensory information, and the meaning they make is based on their own prior experiences as encoded in networks of communicating neurons. Since learning is connected to the brain in some way, brain-based learning is in accordance with the way the brain is naturally designed to learn.

The connection between the thinking parts of the brain and the emotional or survival-oriented part of the brain is of particular importance to teachers. They have to differentiate between eustress, the positive feelings of enjoyment or excitement that an individual experiences when engaging in something new and different and distress, the negative feelings that may cause one to panic or revert to survival behaviours. For effective learning, stress needs to be kept within tolerable level, so that self-esteem and personal efficacy of the students remain intact. Strategies such as Co-operative learning and brain-based learning allow students to discuss their emotions, and are considered as effective tools for creating a conducive environment for learning. In classrooms, thinking skill of the students should be integrated with different instructional techniques.

Mind Mapping is a technique that can be used to encourage deep rather than surface learning. Marton and Slajo (1976), Biggs and Telfer (1987), conducted research into deep and surface learning where 'deep' learning is intrinsically motivated, where the students try

to understand the meaning of their work and understand the context of new ideas and concepts. 'Surface' learning tends to be externally motivated and leads to rote learning. A concept learnt through Mind Mapping with the help of visual aids would motivate and help the students to maintain interest in the subject. Mind Mapping helps teachers and students for lesson planning, identify teaching route, increases recall of subject matter and engage students in active learning. Hence, it is considered as a powerful cognitive tool to gather, interpret and communicate large quantities of complex information. Hence its mind mappling instructies have great significance in our educational system. But our teachers are not in a position to adopt the innovative method of teaching successfully in actual classroom situations, due to reasons such as lack of interest, lack of training and other practical difficulties. Therefore it is presumed that a study of this type would help to develop meaningful and effective learning among students which in highly brain based.

OBJECTIVES OF THE STUDY

1. To test the effectiveness of mind maps in learning History by comparing the pre-test and post-test achievement scores of the experimental group and control group for the total sample.

2. To test whether there is any significant difference in the immediate post-test achievement scores of the Mind Map group and the Lecture Method group, when the groups are exposed to experimental teaching for the total sample.

3. To test the effectiveness of mind maps in learning History by comparing the post-test achievement scores of the Experimental group for the sub-samples based on the following: Gender and (ii) Locality.

EXPERIMENTAL HYPOTHESES

The experimental hypotheses formulated for the study are the following:

1. When the treatment groups (Experimental group and Control group) are exposed to experimental teaching (based on total sample):

   There will be significant difference between the treatment groups with regard to immediate post-test post- test achievement scores in History.

2. When the experimental group is exposed to experimental teaching (based on sub-samples) there will be significance difference between:

   (i) Male and Female students

   (ii) Rural and Urban students

   with regard to immediate post-test achievement scores in History.

METHODOLOGY IN BRIEF

METHOD ADOPTED

The method adopted for the present study was experimental method.

Experimental Design and Procedure

Pre-test post-test non-equivalent parallel group design was used for the study.

SAMPLE

The sample for the study consisted of 89 students of Standard XI of History group, selected from a school in Kanyakumari district. Experimental group (N = 44) and Control group (N = 45).

STATISTICAL TECHNIQUES USED

i) Analysis of Variance - ANOVA

ii) Analysis of Co-variance – ANCOVA

RESULTS AND DISCUSSION

COMPARISON OF PRE-TEST AND POST-TEST ACHIEVEMENT SCORES OF MIND MAP GROUP AND LECTURE METHOD GROUP FOR THE TOTAL SAMPLE USING ANALYSIS OF VARIANCE (ANOVA)

Table 1
Summary of analysis of variance of pre-test and post-test Achievement scores of mind map group and lecture method group

Source of Variation	df	SSx	SSy	MSx	MSy
Among means	1	6.879	14447.905	6.879	14447.905
Within groups	87	2512.177	8234.972	28.876	94.655
Total	88	2519.056	22682.876		

Fx = 0.238
Fy= 152.638
From Table for df 1/87
F at 0.05 level = 3.95
F at 0.01 level = 6.92

The F- ratios for the pre-test and post-test scores are tested for significance. Fx value obtained is 0.238 (Fx = 0.238: $p > 0.05$) and is less than F at 0.05 level (i.e., 3.95). Therefore, it can be concluded that the treatment groups (Mind Map Group and Lecture Method Group) do not differ significantly with regard to pre-test achievement scores. The two groups are having more or less equal scores with respect to pre-test achievement scores in History.

Since the obtained value of Fy (Fy = 152.638: $p < 0.01$) is greater than F at 0.01

level(i.e., 6.92) it can be concluded that the Mind Map Group (MMG) and Lecture Method Group (LMG) differ significantly with regard to post-test achievement scores at 0.01 level of significance.

COMPARISON OF POST-TEST ACHIEVEMENT SCORES OF THE MIND MAP GROUP AND LECTURE METHOD GROUP FOR THE TOTAL SAMPLE USING ANALYSIS OF CO-VARIANCE (ANCOVA)

Table 2
Summary of analysis of co-variance of pre-test and post-test Achievement scores of mind map group and lecture method group

Source of Variation	df	SSx	SSy	SSxy	SSy.x	MSy.x	SDy.x
Among means	1	6.879	14447.905	315.255	13702.432	13702.432	
Within groups	86	2512.177	8234.972	2856.161	4987.727	57.997	7.616
Total	87	2519.056	22682.876	3171.416	18690.159		

Fy.x = 236.262
From Table for df 1/86
F at 0.05 level=3.95
F at 0.01 level =6.92

The obtained value of F is 236.262 and is greater than the table value at 0.01 level (i.e., 6.92) and hence is significant (Fyx = 236.262: $p < 0.01$). This shows that the final mean scores of treatment groups (MMG and LMG) differ significantly after they have been adjusted for difference in the pre-test achievement scores.

GMx =16.745
SED between adjusted means = 1.615
Calculated t value = 15.392
From Table t for df 86
t at 0.05 level = 1.99
t at 0.01 level = 2.63

Table 3
Data for adjusted means of post-test achievement scores of the Mind map group and lecture method group

Groups	N	Mx	My	My. x (Adjusted)
Mind map group	44	17.023	58.773	58.457
Lecture method group	45	16.467	33. 289	33.605
General means		16.745	46.031	

The adjusted Y means for the post-test scores were tested for significance at df 86. The calculated value of t is 15.392. The table value for significance at 0.01 level for df 86 is 2.63, so the obtained t value is significant at 0.01 level ($t = 15.392$: $p < 0.01$). The significant difference between the adjusted Y means indicate that the students of Mind Map Group and Lecture Method Group differ significantly on their achievement in the post-test. Since the adjusted mean of MMG is significantly greater than that of the LMG, the MMG is superior to the LMG on achievement in History. It may therefore be concluded that the students taught through Mind Map Method had better academic achievement than students taught through Lecture Method. From the analysis of the total scores of the students in the mind map and lecture method groups using the statistical technique analysis of co-variance, it is clear that teaching based on MM is more effective than LM with regard to achievement in History.

COMPARISON OF POST-TEST ACHIEVEMENT SCORES OF THE MIND MAP GROUP FOR THE SUB SAMPLES

Table 4
Test of significance for difference between the means of post-test achievement scores for the sub-sample: gender

Sub–Sample	Category	N	M	S D	t	L S
Gender	Male	27	59.556	10.156	0.807	N S
	Female	17	57.118	9.081		

It is evident from the Table that the critical ratio obtained for the sub-sample based on gender is not significant. Hence it can be concluded from the analysis that post-test achievement scores of the Mind Map Group was not influenced by the sek of persons.

Table 5
Test of significance for difference between the means of Post-test Achievement Scores for the Sub-sample: Locality

Sub - Sample	Category	N	M	S D	t	L S
Locality	Rural	23	59.435	10.449	0.076	N S
	Urban	21	59.667	9.229		

It is evident from the Table that the critical ratio obtained for the sub-sample locality is not significant at any level. Hence, it can be concluded from the analysis that post-test achievement scores of the Mind Map Group was not influenced by the Locality of in place of residence.

CONCLUSION

Since the study proved that mind maps can generate ideas in the process of teaching learning, it can be integrated into many subject areas for the purpose of instruction. As a classroom strategy mind mapping facilitate collaborative learning and brain storming, accommodate different learning styles, energize students and encourage classroom discussions. Therefore the teachers of different subjects should try to use the principles of mind mapping to design their teaching learning process. More over teachers can familiarize students with this strategy so that they can carily understand evem difficult concepts early and reflect will on their learning.

EDUCATIONAL IMPLICATIONS

1. Mind Maps prepared by the investigator for teaching history at higher secondary level can be of great help for both teacher and students.

2. The findings of the study indicated that Mind Maps are effective in enhancing the level of achievement in History. Hence this method can be used by all teachers to transact the curriculum materials meaningfully for students to learn the facts, concepts and principles effectively and meaningfully.

3. The outcomes of the study can be utilized to revamp the existing curriculum by giving due importance to innovative methods and techniques of teaching and learning.

4. The use of Mind Maps will be of great help in concept formation and retention of the acquired concepts.

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KAIZEN PHILOSOPHY AND TOTAL QUALITY MANAGEMENT (TQM)

* *Dr. Nimmi Maria Oommen*

ABSTRACT

In the decade of 1980, management techniques focusing on employee involvement, and empowerment through teamwork approach and interactive communications and on improving job design were common and the Japanese companies seemed to implement such techniques more effectively than others. The business lesson of the 1980's was that Japanese firms, in their quest for global competitiveness, demonstrated a greater commitment to the philosophy of continuous improvement than the Western companies. For this type of philosophy the Japanese used the term Kaizen. This conceptual paper is an educational analysis of Kaizen philosophy and its connection with Total Quality Management (TQM).

INTRODUCTION

Kaizen means continuous improvement involving everyone in the organization from top management, to managers then to supervisors, and to workers. In Japan, the concept of Kaizen is so deeply engrained in the minds of both managers, and workers that they often do not even realize that they are thinking Kaizen as a customer-driven strategy for improvement. This philosophy according to Imai is "our way of life – be it our working life, our social life or our home life – deserves to be constantly improved".

The essence of Kaizen is that the people who perform a certain task are the most knowledgeable beings in that task; consequently, by involving in the tasks showing confidence in their capabilities,

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ownership of the process is raised to its highest level. In addition, the team effort encourages innovation and change and by involving all layers of employees, the imaginary organizational walls disappear to make room for productive improvements. From such a perspective, Kaizen is not only an approach to manufacturing competitiveness but also everybody's business, because its premise is based on the concept that every person has an interest in improvement. The premise of a Kaizen workshop is to make people's jobs easier by taking them apart, studying them, and making improvements. The message is extended to everyone in the organization, and thus everyone is a contributor. Thus Kaizen for every individual could be an attitude for continuous improvement.

According to M. Imai, a guru in the management philosophies and practices, the three pillars of kaizen are summarized as follows:

1. Housekeeping
2. Waste Elimination
3. Standardization

He stresses that the management and employees must work together to fulfill the requirements for each category. To ensure success in activities on those three pillars the three factors are also to be taken into account.

1. Visual Management,
2. The role of the supervisor,
3. The importance of training and creating a learning organization.

Housekeeping: This is a process of managing the work place known as ''Gemba'' (workplace) in Japanese, for improvement purposes. Imai introduced the word "Gemba" which means "real place", where value is added to the products or services before passing them to next process where they are formed. For proper housekeeping a valuable tool or methodology is applied - the **5 *S*** methodology. The term 5 S is derived from the first letters of Japanese words which refers to five practices leading to a clean and manageable work area: seiri (organization), seiton (tidiness), seiso (purity), seiketsu (cleanliness), and shitsuke (discipline). The English words equivalent to the 5S's are sort, straighten, sweep, sanitize, and sustain. 5S evaluations provide measurable insight into the orderliness of a work area and there are checklists for manufacturing and nonmanufacturing areas that cover an array of other criteria viz. cleanliness, safety, and ergonomics. 5S evaluation contributes to how employees feel about product, company, and themselves and today it has become essential for any company, engaged in manufacturing, to practice the 5S's in order to be recognized as a manufacturer of world-class status.

Waste (Muda) Elimination: Muda in Japanese means waste. The resources at each process — people and machines — either add value or do not add value and therefore, any non-value adding activity is classified as muda in Japan. Work is a series of value-adding activities, from raw materials, ending to a final product. Muda is any non-value-added task.

In Kaizen philosophy, the aim is to eliminate the seven types of waste (7 deadly wastes) caused by overproduction, waiting, transportation, unnecessary stock, over processing, motion, and a defective part.

- ✓ Overproduction – Production is more than production schedule
- ✓ Inventory – Too much material ahead of process
- ✓ Defects – Materials and labor are wasted; capacity is lost at bottleneck
- ✓ Motion – Walking to get parts because of space taken by high WIP
- ✓ Processing – Protecting parts for transporting to another process
- ✓ Waiting – Poor balance of work; operator attention time
- ✓ Transportation – Long moves; re-stacking; pick up/put down

STANDARDIZATION

Standards are set by management, but they must be able to change when the environment changes. Companies can achieve dramatic improvements by reviewing the standards periodically, collecting and analysing data on defects, and encouraging teams to conduct problem-solving activities. Once the standards are in place and are being followed and then if there are deviations, the workers know that there is a problem. Then employees will review the standards and either correct the deviation or advise management on changing and improving the standard. It is a never-ending process and is better explained and presented by the PDCA cycle (plan-do-check-act), which is also known as Demming cycle.

Kaizen and Total Quality Management (TQM)

TQM is a journey, a movement centered on the improvement of managerial performance at all levels. It deals with:

- Quality Assurance
- Employee Involvement
- Cost reduction
- Safety
- Continuous Improvement
- Productivity improvement

Moreover, TQM journey deals with management concerns such as organizational development, cross-functional management, and quality deployment. In other words, management has been using TQM as a concept and as a tool for improving overall performance. TQM integrates fundamental management techniques, existing improvement efforts, and technical tools under a disciplined approach focusing by continuous process improvement. The activities are ultimately focused on increased customer-user satisfaction. The importance of people in the total process is emphasized on TQM journey. Considerations such as culture, incentives, teamwork, training, and work involvement are typical. The optimum effectiveness of TQM results from an appropriate mix of the social and technical systems. It is a common practice to emphasize the technical aspects of improvements such as machine or computer-related, with less emphasis on people and their

roles in the process. Improving quality and productivity to achieve competitiveness emphasize the need for an enterprise to capture the potential inherent in the workforce by enabling each employee to do his or her job. This requires the top management to demonstrate to all employees to be personally committed to continuously pursue efforts to improve quality. The organization must provide an environment in which all employees will voluntarily cooperate to achieve the organizational objectives. This requires that management accept the idea that employees can and want to contribute. Management thus flows down ideas and goals and encourages the flow of ideas upward. The TQM philosophy provides a comprehensive way to improve quality by examining the way work gets done from a systematic, integrated, consistent, organization-wide perspective.

In TQM journey the focus is to:

- Emphasize continuous improvement of processes (kaizen), and not compliance to standards
- Involve all functional units, not just the Quality Control/Assurance function.
- Motivate and involve employees to become the driving force behind improvement.
- Satisfy the internal and external customers.
- Understand the effects of variation on processes and their implications for process improvement.

Significance

The Kaizen philosophy is there defined as a style of continuous business improvement made in small increments, originated in Japan. The idea focuses on improving processes and products while using employees' creativity to help and define the way in which procedures and systems can be improved. Two of the overall advantages of the philosophy include increased productivity and maintaining quality of products and services.

Criticism

Many people just don't believe in such radical changes that can be created in such a short amount of time, with many Kaizen events which created substantial improvements within a short period of time.

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