A Study of Implementation of Basic Employability Skills amongst Secondary School Students With reference to Pimpri-Chinchwad (during 2012-13)

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By

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Declaration

I hereby declare the thesis entitled **"A Study of Implementation of 'Basic Employability Skills' amongst Secondary School Students with reference to Pimpri-Chinchwad during 2012-2013"** completed and written by me has not previously formed the basis for the award of any degree or other similar title upon me of this or any other Vidyapeeth or examining body.

Place : PUNE
Date : November, 2014

Anand Shridher Mehendale
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Certificate

This is to certify that the thesis entitled, **"A Study of Implementation of 'Basic Employability Skills' amongst Secondary School Students with reference to Pimpri-Chinchwad (2012-2013)"** which is being submitted to Tilak Maharashtra Vidhypeeth, Pune herewith for the award of the Degree of Doctor of Philosophy (Ph.D) in subject Management is the result of original research work completed by Shri. Anand Shridher Mehendale under my supervision and guidance.

To the best of my knowledge and belief the work incorporated in this thesis has not formed the basis for his award of any Degree or similar title of this or any other University or Examination body.

Place : PUNE
Date : November, 2014

Dr. Shriniwas S. Kulkarni
Research Guide

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Introduction

Role of Education for Human Resource Development

Education is the process of Human Resource Development. Human workforce is developed in many ways. Human workforces are also further developed on – the - job through systematic or informal training programmes. Many workers increase their productivity by acquiring new employability skills (technical and non-technical) and perfecting old one. Non technical skills involve basic employability skills. Basic employability skills refer to specific skills essential for employability which can be taught in the schools. If those basic skills of employability are taught in secondary schools effectively and efficiently, it may save costs which are incurred on training and development of entry level employees. Also it will be added value to secondary education. While Primary Education is a basic enabling factor for participation and freedom, for trading a life with dignity and overcoming basic deprivation, secondary education is the gateway for prosperity, for transforming the economy and establishing social justice in any country. It opens the world of work to the youth of the country and contributes to socio economic development of the Community. Secondary Education is a crucial stage in the educational hierarchy as it prepares the students for higher education and also the world of work. With the liberalization and globalization of the Indian economy, the rapid changes witnessed in scientific and technological world and the general need to improve the quality of life and to reduce poverty, it is essential that schools leavers acquire a higher level of knowledge and employability skills than what they are provided in the eight years of elementary education, particularly when the average earning of a secondary school certificate holder is significantly higher than that of a person who has studied only up to class VIII. The present research is focused to find the level of attainment of Basic Employability Skills (BES) among secondary schools students and to study the impact of demographic socio-economic factors like Gender of students, Type of Schools, Area of Schools and Medium of instruction of schools on basic employability skills among secondary school students.

Background of Problem

It is an established fact that, the skill level and educational attainment of the workforce determines the productivity as well as the ability to adapt to the changing industrial environment. A majority of Indian workforce does not possess employability skills which is an impediment in getting decent employment and improving their economic condition.

India, the world second most populous country is a rapidly growing economy with its own set of issues. While its population can become a competitive advantage, the country has to combat a large scale gap amongst its workforce. The Ministry of Human Resource Development (MHRD), in order to improve employability skills, is looking at mainstream vocational education as part of the formal, education system in the country. According to the MHRD report 2011, by 2025, India aims to skill 500 millon workforce. While 12.8 millon people enter the workforce every year, the current employability skills gap is that of around eight millon.[1]

India is confronted with the challenge of a growing workforce, with millions of youth entering the labour market every year. There are currently about 122 million young people in the 15-19 age group. Education enrolment and capacity have increased at all levels in recent years, with around 20 million secondary school places added between 2003 and 2008. However, evidence suggests that learning outcomes among many secondary school children are low and vocational and higher education graduates are often poorly prepared for the workforce. Large numbers of Indian youth still end up in low employability skilled, low-paid employment in the unorganized sector, where more than 90 per cent of all workers in India work.

On the supply side, prior to the new policy, the skills development capacity was fairly static at about 3.1 million a year, and thus not sufficient to respond to the growing demand. [2] In order to achieve high growth rates with a growing population, skill development has emerged as important aspects that needs strategic and planned policy cum intervention. While Primary Education is a basic enabling factor for participation and freedom, for trading a life with dignity and overcoming basic deprivation, secondary education is the gateway for prosperity, for transforming the economy and establishing social justice in any country. It opens the world of work to the youth of the country and contributes to socio economic development of the Community. Secondary Education is a crucial stage in the educational hierarchy as it prepares the students for higher education and also the world of work. With the liberalization and globalization of the Indian economy, the rapid changes witnessed in scientific and

technological world and the general need to improve the quality of life and to reduce poverty, it is essential that schools leavers acquire a higher level of knowledge and employability skills than what they are provided in the eight years of elementary education, particularly when the average earning of a secondary school certificate holder is significantly higher than that of a person who has studied only up to class VIII. The policy at present is to make secondary education of good quality available, accessible and affordable to all young persons in the age group of 14-18 years.[3]

Need for Research

Secondary Education School education plays a central role in the development of human resource and in turn socio-economic development. India is emerging as the fastest growing economy in the world. The success depends largely upon human resource development. We need to tune our secondary education to emerge as the single largest provider of workforce in all spheres of national productivity. Hence teaching and learning of basic employability skills at secondary schools is the need of time. By acquiring basic employability skills at secondary school level, the student can definitely become more empowered and enhanced in human resource qualities. Hence it is need for secondary schools to provide basic employability skills education to students to bridge the gap between skilled and unskilled workforce. There is also need to enhance the quality of secondary education by implementing basic employability skills at schools.

It is need to examine the attainment levels of basic employability skills at secondary schools. Also it is need to study the effect of demographic factors (Socio-economic) on attainment level of basic employability skills among secondary students.

Also the role of school teachers for teaching employability skills is needed to be studied.

This leads to following key questions such as;

- What is the level of attainment of basic employability skills among the secondary school students.
- What are the socio-economical factors (demographic), responsible for development of basic employability skills at secondary schools.
- What is the contribution of school teachers to teach and to develop basic employability skills among secondary school students.

Employability Skills

Employability skills are ability of individuals as per the requirement of the employers and the ability to perform the tasks thereby achieving organizational goals and objectives. Employability skills refer to specific skills essential for employment. They are composite skills (technical and non-technical). These are the critical tools and traits required to perform tasks at workplace. These skills are much sought after these days by employers. The needs of employability skills are different in different industries. As IT industry needs different skill and hotel industry needs different skill. However, certain skills qualities such as communication skills, interpersonal skills, truthfulness, right attitude, analytical skill, decision-making and team building skills are a few which are common and basic skills for every sector. Employability Skills help individual to identify, articulate and develop the skills they need to gain employment, remain employed and be successful in employment at any stage in their working life. The Basic Employability Skills in this research have been identified through U.S. department of Labour's secretary's commission on Achieving Necessary Skills (SCANS) in partnership with educators, business, industry representatives.

The employer consensus about employability skills

Diverse workplace requires different employability skills hence it is very difficult to define employability skills. Surprisingly applicant's academic capability may get less value that of non-academic skills like enthusiasm, discipline [4]. Cotton reported that many of employers would prefer that secondary and higher secondary schools takes a step beyond basic academics and incorporate the teaching of higher level affective skills their curricula[5]. Schug and Western stated that schools are always focusing only on academic goals[6].

Thus, it is extremely difficult to establish a consensus as to which specific employability skills are universally considered the most essential by today's employers. However, in reviewing surveys conducted by others as well as business and government-based studies, a general list is constructed. For example, Poole Identified 76 "critical employability skills" listed within nine categories and those skills focused solely upon one attribute - human relations[7]. Schwartz categorizes list of "job readiness skills" under three headings:

1) Academic Skills;

2) Vocational Skills;

3) Work-Related Habits and Attitudes[8].

SCANS Report

Employability Skills is a group of important skills instilled in each individual in order to produce productive workforce. This is parallel with individuals who have strong characteristics such as a high sense of smell, innovative, productive, skillful, competitive, a strong sense of determination and creative in facing the challenges of nation as Employability skill is crucial in all professions and in education.

Employment skills is in fact a skill required in employment. The preparation to acquire this skills begin when a person is still in the learning process. Thus a board by the name of (SCANS) reports prepared reports on ways of assisting educational institutes and school in producing younger generations who are willing to work. SCANS (1991) stated that the most graduates were yet to have good knowledge of basic skills of occupation[9]. In the beginning SCANS's report indentified seven skills related to a certain task. However after renewal of SCANS's (2000) report two groups of skills were formed[10]. They were general and efficiencies.

SCANS's approach is suitable for secondary school in their preparation of producing students to have employability skills to work in industry SCANS (2001) emphasized that skills and efficiencies are also a part of the measures taken to ensure students to master the criteria required by employers in order to produce high profile workers in various fields and careers. This is because SCANS mainly highlighted on students future and to ensure students in getting the right skills during school days.

The Secretary's Commission on Achieving Necessary Skills (SCANS) was "asked to define the know-how needed in the workplace" (SCANS, 1992; p. ix) and to "determine the skills that our young people need to succeed in the world of work" (p. xiii). Following a 1991 SCANS initial report entitled What Work Requires of Schools, the 1992 report established a list of foundation skills and workplace competencies using input from a broad-based consortium of employers. These skills and competencies, referred to as "workplace know-how", define the five competencies in the "workplace competencies" category as 1) resources, 2) interpersonal skills, 3) information; 4) systems, and 5) technology and the three skills defined in the "foundation skills" category as 1) basic skills, 2) thinking skills, and 3) personal qualities.

Some Employability skills studied in present research :

Effective Communication is the ability to express both verbally and non-verbally, in ways that are culturally acceptable. It also includes effective listening, speaking reading, writing, acting and gestures etc. Facial expressions and body language convey more than what is expressed through words.

Critical Thinking is the ability to analyse information and experiences in an objective manner and perceive the total situation with logic and reasons. Without being swayed by mis-information or false information, if one tries to seek reasons and tries to determine the accuracy and authenticity of each issue many a problems can be done away with.

Creative thinking enables us to explore available alternatives and various consequences of our actions and non-actions. The intuitive urge influences one to do things in a novel way with adequate originality, elaboration, fluency as well as flexibility.

Decision making is the ability to evaluate information and take informed decision by assessing the advantages and disadvantages of different options. It helps us to deal constructively with decisions about our lives. It involves goal setting, future planning, exploring new options and changing (if need be) decision to adopt to new situations.

Problem solving is the ability to identify the problems, their causes and assessing the impact of different solutions as well. This skill enables us to deal constructively with problems that arise in our lives, because significant problems, that are left unattained can caused mental stress and physical strain.

Workplace Competencies:

1) Resources: Knowing how to allocate time, money, materials and space.
2) Interpersonal Skills: Knowing how to work on teams, teach others, serve customers and work well with others of culturally diverse backgrounds.
3) Information: Knowing how to acquire data, maintain files, communicate, and use computers to process information.
4) Systems: Knowing social, organizational and technological systems and monitor and correct their own performance.
5) Technology: Knowing how to select equipment and tools, apply technology to specific tasks, and troubleshoot equipment.

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Basic Employability Skills (BES)

Definition : Group of some important basic or foundation skills / qualities which instilled in each individual to produce productive workforce in all profession

Advantages of Basic Employability Skills (BES)

- Enhance employability
- Basic occupational skills for all sectors of employment

Employee Focus for this research (sectors)

- Since Basic Employability Skills are work readiness skills, they are very important for employee having basic education (secondary or higher secondary) only

Also Basic Employability Skills are beneficial for entry level employee from sectors like **Marketing, Tourism, Agriculture** and **Construction**

Basic Employbilty Skills for this Research

This study was conducted to examine the attainment level of selected Basic Employability Skills as they apply to secondary schools students to prepare students for entry level positions in workforce. Basic Employability Skills are identified as Basic or foundation or thinking skills or personal qualities.

In 1988, the American society for training and development and the united states department of labor identified basic skills for the work.

In 1991 the secretary's commission on achieving necessary skills (SCANS, 1991) identified foundation skills and competencies common to all occupations which along with academic skills, were designated as potential indicators of successful entry to the work place.

The foundation skills included following skills.

i) **Basic skills** Reading, Writing, Mathematics, Listening, Speaking etc.

ii) **Thinking skills** Creative Thinking, Decision Making, Problem solving etc.

iii) **Personal qualities** Self-confidence, motivation, sociability etc.

For this research, the researcher decided to focus on ten skills which were selected from employability skills. These skills were grouped as basic employability skills

I) Academic Skills : Reading Skills Writing Skills Listening Skills

II) High Order Thinking Skills : [Analysis, Creativity, Evaluation]

Analysis Skills : To examine carefully

Creativity : Potential capacity by means of which an individual may produce something original to solve problem.

Evaluation : To study the facts and then form the opinion.

III) Personal Skills and Qualities : Ethics and Values
Motivation
Entrepreneurial Skills
Self Confidence

Basic Employability Skills for this Research in detail

I) Academic Skills

1) **Listening Skills :** It enables to understand meaning of words and sentences, oral communication, to interpret spontaneous response to etc.
2) **Writing Skills :** It enables to communicate thoughts, ideas, information and messages in writing and creates documents such as letters, directions, manuals, reports, graphs and flow charts etc.
3) **Reading Skills :** It enables to locate, understand and interpret written information in prose and in documents such as manuals, graphs and schedules etc.

II) High Order Thinking Skills

1) Analytical skills : It is the capacity to examine carefully. It is the ability to analyses information and experiences in an objective manner to perceive the total situation with logic and reasons.

2) Creativity Skills : It is the potential capacity to solve problems. It enables us to explore alternatives and various consequences of our actions and non actions.

3) **Evaluation Skills :** It is the capacity to study the facts and form the opinion. It is the ability to evaluate information and take informed decision by assessing the advantages and disadvantages of different option.

III) Personal Skills / Qualities

1) **Self confidence :** It enable to believes in own self worth and maintains a positive view of self.
2) **Ethics and Values :** It enables to develop integrity and honesty. It develops trust on values. It helps to understand the impact of violating social beliefs and codes of an organization, self and others and chooses an ethical course of action. It helps to develop beliefs and values that every employee need to be a good citizen in community or in working place.
3) **Motivation :** It is the drive which enable to get things done. It enables to start the activities, direct the activities and continued so that physical or psychological needs or wants are met.

IV) Entrepreneurial Skills

It is the ability of the individual possessing wide range of essential skills and attributes to create, cope with and enjoy change and make creative contribution in the word of work whether employment or self employment. It includes the proficiencies like creativity, self belief, energy, initiative and a displined and positive attitude towards work.

It starts early in the education journey of the learners and maintain over the entire education period.

Table I(a) Employability Skills and Job

Employability Skills	Nature of Job / Sector Suitable
1) Writing Skills	Media (Copy writer), Translators, Banking, Journalist
2) Listening Skills	Interpreter, Teacher
3) Reading Skills	Advt. Media, TV / Radio
4) Thinking Skills	Research Assistant, Scientist, Advertising
5) Motivation, Self Confidence, Ethics and Values	All occupations / Sectors
6) Entrepreneurial Skills	All occupations / Sectors

Basic Employability Skills is a group of important skills instilled in each individual in order to produce productive workforce. This is parallel with individuals who have strong characteristics such as innovative, productive, skillful, competitive, a strong sense of determination and creative in facing the challenges of nation as Employability skill is crucial in all professions and in education.

Literature Survey

By taking into account of a huge availability of literature, it was thought to refer exact material. It was resulted in proper information base.

The basic employability skills in this research have been identified through U.S. development of labour's secretary's commission on achieving necessary skills (SCANS) in partnership with educator, business, industry representation.

Also some references are considered from studies in India, which are as follows ;

- National policy on education, 1986
- Kothari Commission Report on Education, 1964
- National Curriculum Framework (NCERT) 2005 ; recommendations of focus group paper on work and education.
- Central Board of Secondary Education (CBSE) reports on entrepreneurships in secondary schools

Structure of Education System

The education n system in India generally follow the 8 + 2 + 2 + 3 pattern which provides 8 year for primary education, 2 years each for secondary and higher secondary schooling and 3 years of university education.

Elementary education aims to develop literacy and numeracy, acquaintance with the social and physical environment, creative expansion and healthy living. Secondary Education aims to develop the intellectual, social and moral qualities essential for democratic citizenship and to prepare young people for entry into the world[11]. While Primary Education is a basic enabling factor for participation and freedom for trading a life with dignity and overcoming basic deprivation, Secondary Education is the gateway for prosperity, for transforming the economy and establishing social justice in any country. It opens the world of work to the youth economic development of the community.

Parents are now prepared to invest more and more on the early education of their children with an eye on their children's possible entry into the emerging job market. While publicly funded state sector of school education has not been able to adequately respond to the new

learning needs of the younger generation, the non-governmental sector has been making visible impact in the scene by responding to their new knowledge, skill and language needs. The rapid increase in English medium schools and computer education centres, not only in the urban areas but also in the semi-urban and rural areas, is symptomatic of this trend.

Today's labour market has changed dramatically over the past decades. In the past, employees did not require advanced academic or social competencies. Advanced academic proficiency was not necessarily essential for production line employees. Basic reading and writing skills were sufficient Simple mathematical skills were required.

There in the past generation, secondary schools and high schools not only met but typically surpassed the employability skills needed by the employees. Most of the advanced countries are shifting from a "production driven' economy to a 'service driven economy'. This shift now required more advanced employability skills. In the past, most of workers were often isolated from the customer, more and more jobs today require considerable social interaction with the customer.

After graduation many students find themselves on the road of life with little direction, their career path developments limited by lack of exposure to a solid career education program. In today's world students need specific skills that may business leaders and community members feel are lacking in today's graduated students. The assessment of these skills – the BES is the subject of this study which focus on Marathi Medium Secondary Students in Pimpri-Chinchwad area.

The Need of Employability skills

Our countries economic strength, vitality, productivity and international competitiveness depend upon our capacity to build and maintain a quality workforce. The foundation of quality workforce rests with ability of our countries schools system to provide basic reading, writing and mathematical skills as well as appreciation for work ethics.

The objectives of present work were framed based on above background to study the attainment level of basic employability skills among secondary students. Also, the present work intended to study the effect of socio-economical factors such as Gender, Area of Schools, Type of Schools and Medium of Schools on attainment level of basic employability skills.

Schools in Maharashtra

The education system in Maharashtra has undergone a massive change over the last decade. The courses and curriculum are made student-friendly and economical for students hailing from all backgrounds. In the year 2010, the criterion for selecting candidates for admission

into colleges was decided to be 'Best of 5′ by the Maharashtra State Board of Secondary Education. This means, a student appearing in 6 subjects can choose marks of any 5 subjects in which he has scored the highest and apply for admission into colleges. However, the students cannot leave out the marks obtained for compulsory subjects like Marathi or English. Maharashtra is well known for its educational facilities available in the primary and secondary school level. Pune in Maharashtra is a major academic hub of the region. It is often regarded as the "Oxford of the east". Apart from Pune, other cities like Nagpur, Kolhapur, Mumbai, Aurangabad, Ahmednagar are also best known for their quality educational system. As per 2001 census report, Maharashtra had a literacy rate of 76.88% which includes male and female literacy rate of 85.97% and 67.03% respectively. In the state of Maharashtra, schooling starts from the age of five years. All the schools in the state are either managed by the municipal corporation or by private organizations.

Several government as well as private schools operates here in Maharashtra. The schools offering primary and secondary education are affiliated to either Maharashtra State Secondary School Certificate (SSC) board or Central Board of Secondary Education (CBSE) boards. Some of the schools are also affiliated to the Indian School Certificate Examination (ICSE) board.

Some of the schools in Maharashtra use Marathi as their medium of instruction. However, most of the ICSE and CBSE schools in the state use English for imparting education to their students. Hindi and Marathi are also treated as second languages in most of the schools in Maharashtra.

School is the only resource for teaching and learning basic employability skills effectively and efficiently to secondary students. But due to some reason like non-interactive lecture, lack of stimulating materials and organization skills, it is difficult for schools to teach and develop basic employability skills. It is observed that private Marathi medium schools from developed (e.g. Chinchwadgaon) are lagging behind than that of underdeveloped area (e.g. Bhosari) in skill development of students. It may be due to

- Effective and efficient school teachers
- Attention of school authority
- Role of parents

Management of Secondary Education

India's secondary school sub-sector comprises approximately 150,000 schools, of which about 100,000 are secondary schools (Grades 9-10) and 50,000 are higher secondary schools

(Grades 11-12). Secondary education is largely a state-level issue, with relatively limited involvement by central, Panthayat Raj Institutions, or community level authorities, compared to elementary education. Management is defined here to cover the administrative aspects of secondary schooling, including the ownership and financing of schools, recruitment and deployment of teachers, regulation of schools, and information-gathering and processing.

Central government manages slightly less than 1,000 Kendriya Vidyalaya (KV) schools (serving about 1 million children of central government employees who are frequently transferred), and 550 Navodaya Vidyalaya (NV) schools (serving 2,00,000 academically gifted children from rural areas). In addition, it runs the National Institute of Open Schooling (NIOS), operating in 11 regional centers and 1,943 accredited institutions, serving 1.4 million students who did not complete formal secondary education. Given this relatively small number of centrally-managed schools (accounting for less than ten percent of total enrollment), this study focuses on state recognized schools which enroll more than 90 percent of all secondary students. India has a long history of multiple management models at the secondary level, which provides opportunities for further experimentation and reform, particularly with respect to public-private partnership models. There is great diversity at the state level in the mix of government, private aided, and private unaided schools for secondary education. Some states (e.g. Bihar, Jharkhand, Punjab and Himachal Pradesh) have large government school systems, while others (e.g. West Bengal, Maharashtra, Gujarat) have predominantly private aided systems, and others (e.g. Uttar Pradesh, Tamil Nadu, Rajasthan) rely mainly on private unaided schools. Analysis of relative cost-effectiveness and equity of different school management types leads to mixed conclusions, with no model unambiguously better, although private schools tend to do better on Board examinations, even after correcting for student selectivity bias, and have lower cost structures because teacher salaries are generally lower. More research is needed which compares learning outcomes to the locus of decision making authority. In summary, no single, “one size fits all” model will suffice for all states.

Students

Most of students under survey are belonging from socially, economically and educationally lower and backward communities. But present research shows that student from both communities i.e. forward and backward communities possess same level i.e. moderate level of basic employability skills.

It may be due to

- Common text book, curriculum, exams
- Govt. policies
- Positive role of teachers and school management (rural and urban schools)
- Role of parents from rural and urban area

Still some problems are seen in the under survey

- Only few students were found to be interested and responsible for studies.
- Most of students looked bored and many would talk or play with class mates. They are less interested to ask the questions and interact with teachers.
- Some qualities or abilities were not seen like cognitive abilities, higher level skills such as organizing or sequencing information gathered.

Many research studies state that students from backward communities are having less caliber and intelligence than students from forward communities. But during this survey it was seen that rural and semi-urban students were found to be more confident, creative and resourceful than that of from urban area. They look more responsible, commutative and interactive. They are better in thinking and personal skills.

It may be due to

i) Teachers in Rural and semi-urban school may be forced to work harder to make the students learn better.
ii) Parents from this background are paying more attention towards their pupils for overall development of than that of parents from urban background.
iii) Though parents from backward communities are not well educated. But they may take keen interest on educating their wards.

This shows that parental education and parental annual income are not influencing the presence of basic employability skills among secondary students.

Education plays an important role in achieving both rapid and sustainable economic development[12], as also in sustainable human development. Sustainable development requires sustainable educational development. Only a strong and vibrant education system can contribute to sustainable development. Recognizing this, India has made during the post-independence period constant efforts to develop education. As a result India has one of the largest education networks in the world. It has helped in achieving self-sufficiency in manpower. All this has contributed to social, economic and technological development [13].

Education is an essential tool for achieving a sustainable future. This has been well recognised by independent India. As a result, during the post independence period, there has been an educational explosion in terms of number of schools, colleges, universities, number of "students, teachers and public expenditures on education. The overall literacy rate has jumped fourfold during the post-independence period from 16.7 per cent in 1951 to 65.4 percent in 2001. The number of students is above 200 million in 2000-01, compared to about 25 million in 1951 [14]. India has one of the largest networks of education institutions in the world, with more than 250 universities, 12,000 colleges and nearly a million schools (126 thousand secondary schools, 206 thousand upper primary schools and 640 thousand primary schools). More than three-fourths of the children of the eligible age-group are enrolled in primary and upper primary schools. Higher education has also expanded, and in the recent years and it has been able to produce the third largest reservoir of scientific and technical manpower in, the world. However, much remains to be achieved. One third of the population is still Illiterate; elementary education is still far from being universal, vocationalisation of secondary education has not progressed at the pace the country wanted and needed; and hardly ten percent of the youth (of the eligible age group for higher education) are in higher education institutions. Dropout rates are high in school education. Quality of secondary and higher education needs substantial improvement. Efforts are needed to reach the unreached.[15]

As cited by DeRidder, the school reform most needed to encourage student learning and retention is curricular reform which emphasizes the integration of academic concepts with real world problems and job related tasks, using flexible teaching methods. [16] All instruction should emphasize those learning processes and values which sustain life and work skills: cooperation, team problem solving, communication, decision making, commitment, and confidence in abilities sufficient to express one's own ideas and approaches. [16]

Educational reform is taking place. Efforts have been made to reduce truancy and dropout rates, introduce computer literacy and foreign languages in the early years, establish after-school programs, require more basic academic courses for a high school diploma, extend the school year, and enhance job-readiness programs with collaborative partnerships between business and industry. Today's schools must determine new standards, curricula, teaching methods, and materials. Teachers and schools must begin early to help students see the relationships between what they study and its applications in real-world contexts. It is not true that everything we need to know in life we learned in kindergarten; it is true, however, that we can begin very early to learn what life requires. If they are taught employability skills,

students in the schools of tomorrow will find the content more relevant and challenging. Teachers will find their classes to be more attentive and interested. Employers and college officials will be delighted with the results because the curriculum will be tied to real things in the real world. By teaching employability skills, our schools will soon become schools of tomorrow.

The objectives of present work

i) To study the attainment level of basic employability skills among secondary students.

ii) To study the effect of socio-economical factors such as Gender, Area of Schools, Type of Schools and Medium of Schools on attainment level of basic employability skills.

iii) To study the role of school teachers to teach basic employability skills.

Hypothesis

On the basis of above objects and interactions with large number of concerned people following hypotheses are put forward

H-1) Secondary School Students (Std. IX and X) from Marathi and Semi-English Medium Schools possess moderate level of basic employability skills (BES)

H-2) There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools (boys and girls) on basic employability skills (BES). (Gender of students)

H-3) There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools from Urban, Semi-urban and Rural areas on basic employability skills (BES) (Area of School)

H-4) Marathi Medium Secondary School Students (Std. IX and X) from Private Marathi Medium Schools and from Pimpri-Chinchwad Corporation Schools have same attainment level of basic employability skills. (Type of Schools)

H-5) There is no difference between students from Semi-English Medium Schools and Marathi Medium Schools on basic employability skills (BES) (Medium of instruction)

Research Methodology

Type of Research : It was an empirical research as it was based on teaching experiences (22 years) of researcher from his own coaching institute for secondary students.

Variables such as Gender of student's, Types and Areas of school were affecting other variables. i.e. Basic Employability Skills (Reading, Motivation, etc.) These variables were identified and verified, which were measureable of interest to find the relation between them.

Nature of Research : It was applied research. The problem is skill gap was identified and defined. Efforts were undertaken by researcher to find probable solution or actions to solve the problem.

Some of the variables were qualitative (for teacher) and quantitative (for student) in nature and strictly demanded in-depth analysis of events which were based on experiences of researcher.

Hence nature of this research was mixed mode of descriptive, qualitative and quantitative in nature.

Type of analysis : It was qualitative and quantitative research analysis.

The variables like basic employability skills (Reading, Listening, Motivation etc.) are quantitatively analyzed and the school teacher opinions were qualitatively analyzed.

1(a) Collection of primary data and questionnaire

By using three types questionnaire (structured, closed and descriptive), the primary data was collected from 15 selected schools

- The special class room sessions were conducted under supervision of respective school teachers
- Questionnaire was made by taking into account of level of perception and understanding of secondary students (IX and X Std.) by framing questions in three levels (Low, Moderate, Higher)

1(b) Procedure for Data Collection

The authority of a few Marathi Medium Schools from Pimpri-Chinchwad area was contacted. The concerned people were briefed about the survey and its purpose. Confidentiality of scores was assured. Assurance was also given that the students were to be contacted only to know about the abilities/skills they possess and the investigator would not interfere in any of school administrative part. The permission for data collection was thus taken from the schools authority. The Class IX and X students were randomly selected from these schools. The purpose of the study was explained to them. The participants found the research interesting and they volunteered for this project. The tests were administered in accuracy and with proper care. Instructions were given ensuring the participants have understood what they were supposed to do. Doubts were cleared. The investigator personally collected the data and saw

that the respondents have answered the questionnaire completely. The data was then given for statistical analysis.

Total Time Duration for questionnaires

For Academic and HOT Skills - 1 hr 40 min. = 100 min.

For Personal Skills and Qualities - 1 hr. 15 min. = 75 min.

1(c) Construction of Tools (Questionnaire)

The employability skills in the research have been identified through U.S. development of labour's secretary's commission on achieving necessary skills (SCANS).

For this research, the selection of exact attributes and skills was a complex and difficult task. But the SCANS 1992 report entitled "What Work Requires of Schools", established a base for basic employability skills.

By reviewing literature, discussing with experts from education and management field, the investigator decided to focus on following skills as basic employability skills for his research.

1) Academic and Higher Order Thinking Skills (Reading / Writing / Listening)
2) Personal Skills and Qualities
   (Ethics and Values, Motivation, Entrepreneurial Skills, Self confidence)

For each of skill i.e. Reading, Writing and Listening, investigator has constructed own tools. The investigator wanted to have precise tool for measurement which would not be too lengthy but appropriately measure Reading, Writing and Listening skills. Taking into account the purpose of the study nature of sample and student's time no standardized tool was available. Hence the investigator decided to construct tools measuring Reading, Writing and Listening skills.

In this study, personal qualities namely Ethics and Values, Motivation, Entrepreneurial Skills and Self confidence have been explored among secondary school students. Standardized tools measuring Ethic and Values, Motivation, Entrepreneurial skills and Self confidence were available.

However, there were too lengthy and some of items were not applicable to school children. So, it necessitated for the investigator to construct tools appropriate for the sample.

Questionnaire for Survey

A) To measure Academic Skills : For framing questionnaire, the teachers manual for English subject (Marathi Medium Std. X) published by State Board of Maharashtra was considered as valid and reliable source.

B) To measure Higher Thinking Skills (HOTS) : To assess the analytical ability, evaluation capacity and creativity, a questionnaire was formed and conducted. It was based on Std. IX and X Science, Algebra and Geometry Syllabus of State Board of Maharashtra. It was also a valid and reliable source.

C) To measure Personal Skills and Qualities : The standardized tests on Motivation (Mukherjee, 2000) and on Self Confidence (Basavanna, 1975) were adopted. The researcher reviewed the existing literature on Ethics and Values as well as on Entrepreneurial Skills. The items were constricted in simple English and translated to Marathi. Items were given for content validation to the experts and basic quantitative analysis (such as reliability, mean, variability etc.) on pilot sample gave favourable results regarding the usage of tools.

2) To Measure Attainment Level of Basic Employability Skills

Researcher intended to assess the presence of basic employability skills level among secondary students. To examine the basic employability skills, three types of questionnaire based on difficulty level were constructed.

Table I (a)

Levels of Attainment of Basic Employability Skills

Attainment Levels of Difficulty	Type of Questionnaire
1) Lower Level	Simple
2) Moderate Level	Difficult
3) Higher Level	More Difficult

Table I (b)

Table showing scores with levels of attainment

Basic Employability Skills	Total Score	Attainment Level & Score		
		Low Level	Moderate Level	High Level
Reading Skills	10	0 – 4	5 – 7	8 – 10
Writing Skills	10	0 – 4	5 – 7	8 – 10
Listening Skills	6	0 – 2	3 – 4	5 – 6
HOT Skills	20	0 – 6	7 – 13	14 – 20
Ethics and Values	40	10 – 20	21 – 30	31 – 40
Self-Motivation	30	10 – 16	17 – 23	24 – 30
Entrepreneurial Skills	148	37 – 74	75 – 110	111 – 148
Self Confidence	20	10 – 13	14 – 17	18 – 20

The **Environmental Factors** i.e. Social, Economical, Political and Cultural and **Demographical Factors** such that gender, religion and geographical area are plying crucial role for human development process. Hence for this research gender base, area of school, type of school and medium of school were considered as demographic factors which are affecting level of attainment of basic employability skills among secondary students.

3) Scope

1) This research includes 15 Corporation and Private Marathi and Semi-English Medium Secondary Schools from Pimpri-Chinchwad Area.
2) This research includes 20-30 students from Std. IX and X each, from selected 15 schools for survey.
3) The study intends to assess the presence of basic employability skills among Marathi Medium Secondary Students(867 Nos.) from selected 15 schools from Pimpri-Chinchwad Area during 2012-13.

4) Population and sampling (For schools and students)

Sample size determination : In consultation with the guide, experts in educational and management field and earlier studies. The sample size for secondary schools, teachers and students was decided.

It was based on principles of stratification and proportion.

The sample size for schools was based on stratified sampling since school was not a homogenous group.

The population i.e. total schools was stratified based on strata like area of schools, types of school.

The sample size of students was based on simple random sampling on selection by school authority.

Sampling procedure : The proportional and incidental sampling techniques have been implemented to decide the sample.

The students i.e. samples were selected as instructed by the respective school authority.

4 (i) For schools

Population

All 99 secondary Marathi Medium Schools from Pimpri-Chinchwad Corporation Area

The population of the present study consists of all secondary schools of Standard IX and X from 16 Pimpri Chinchwad Corporation Schools and 83 Private granted and non-granted Marathi Medium Secondary Schools in Pimpri Chinchwad Area.

Table I (c)

Pimpri Chinchwad Area

Marathi Medium Secondary Schools (2011-12)

	Total Schools	Schools selected for survey	%
Pimpri Chinchwad Municipal Corporation Schools (PCMC Schools)	16	7	44 %
Private Marathi Medium Secondary Schools (Granted / Non-granted)	83	8	10 %
	99	15	15 %

Sampling and basis of selection of 15 schools.

Justification of selection of 15 schools

Pimpri-chinchwad municipal corporation area is politically divided into wards. e.g. Bhosari, Nigdi, Pimpri, Akurdi, Chinchwad. Researcher intended to cover sample representation from

each ward consisting some specific backgrounds. Hence the15 schools out of 99 schools were stratified on the basis of backgrounds like Gender of students (Boys and Girls), Area of School (Urban, Semi-Urban and Rural), Type of school (Corporation and Private) and Medium of instructions (Semi-English and Marathi Medium). (Map is enclosed)

4 (ii) For student

Population of students (IX and X Std.) from 15 schools

All secondary students (4176 No.) from 15 schools

	Total Population (IX and X Std.)	Sample selection	Sampling %
10th Std.	1929	442	-
9th Std.	2247	425	-
Total	**4176**	**867**	**20.76 %**

Sampling and basis of selection of students

Total samples of students are 867 No.

After fixing 15 schools, average 25 - 30 secondary students, from Std. IX and X from each school were randomly chosen by school authority to form the sample of the study.

Sampling % for students : 20.76 %

5) Pilot Study

A pilot survey for 96 students was conducted. It was use for **testing validity** and **reliability** of questionnaire prepared. The results were satisfactory.

6) Variables

Dependent Variable : Basic Employability Skills

Independent Variable : Gender of students, Types and Ares of Schools, Medium of Instructions.

7) Rational of the Tool

By reviewing the literature, considering the SCANS report, discussing with experts from education and management field and guide, the researcher had decided to focus on basic employability skills for his research

For academic and thinking skills

- Due to non availability of standardized tools researcher had prepared his own research tools with the help of experts.

- It was based on curriculum of Std. IX and X std of SSC board of Maharashtra (English, Geometry, Algebra, Science subjects)

For personal skills and qualities.

- For ethics and values, motivation, Entrepreneurial skills and self confidence, Standardized tools were used.

One Example

Ethics and Values

Minimum score = 10, Maximum score = 40

a) Lower Level Sore

35 % cut off $\Rightarrow$ low level

$\therefore$ For $100 \rightarrow 35$ $\quad \therefore x = \frac{40 \times 35}{100} = 14$

$40 \rightarrow x$

$\therefore$ Range of lower level $= 10 - 14$

Lower level score :- 10 to 14

b) Higher Level Score

75 % cut off $\Rightarrow$ higher level

$\therefore$ For $100 \rightarrow 75$ $\quad \therefore y = \frac{40 \times 75}{100} = 30$

$40 \rightarrow y$

$\therefore$ Range of higher level $= 30 - 40$

Higher level score :- 30 to 40

c) Moderate Level Score :- 15 - 29

Levels of Attainment of Basic Employability Skills

Based on Total Scores, Levels are assigned

	Ethics and Values	**Motivation**	**Entrepreneurial Skills**	**Self-confidence**
Levels				
Low	10 – 14	10 – 11	37 – 52	0 – 7
Moderate	15 – 29	12 – 22	53 – 110	8 – 14
High	30 - 40	23 – 30	111 – 148	15 – 20

8 (a) Research Tools and Analysis

The researcher constructed research tools with the help of his research guide and experts. The details of the research tools are given below.

Tools for testing basic employability skills

Skills	Pattern of Questions	Duration for Testing	No.of Questions
1) Reading Skills	Descriptive	20 min.	2
2) Writing Skills	Descriptive	25 min.	2
3) Listening Skills	Descriptive	10 min.	2
4) High Order Thinking Skills	Making Preference	35 min.	20
5) Ethics and Values, Motivation, Self Confidence	Making Preference	12 min. each	10 Q. each
6) Entrepreneurial Skills	Making Preference	25 min.	37

Detailed Analysis (Question wise)

I) Academic Skills

The following assessment functions for Reading, Writing and Listening skills were framed and applied.

a) For reading skills

Two descriptive questions were framed. The power of skimming, scanning and understanding the concept and grammar, comprehension ability etc. were tested.

b) For writing skills

Two descriptive questions were framed. The power of expression, how to extract information and present in a diagrammatic form, understanding of content etc. were tested.

c) For listening skills

The power of understanding of words, sentences and phrases and to write them correctly etc.

Illustration (For reading skills)

The measured value of mean for reading skills was 5.9370 which were lying between 5 – 7, hence the attainment level of reading skill was moderate.

II) High order thinking skills (HOT skills)

To assess the analytical ability, evaluation capacity and creativity, a questionnaire was framed and applied.

For Higher Order Thinking Skills

Total Questions were asked = 20 Questions

Total Marks = 20 marks (20 Q x 1)

Level of Attainment (Score)

Low Level	Moderate Level	High Level
0 – 6	7 – 13	14 – 20

Since the mean values of HOT Skills was 8.544 which was lying between 7 – 13. The result was moderate level.

III) Entrepreneurial skills

The concept of entrepreneurial skills includes proficiencies live creativity, planning, decision making, leadership, negotiation skills, imitativeness, team work, confidence, marketing, social attitude etc.

By framing 37 questions, researcher tried to assess most of the proficiencies of entrepreneurial skills present in secondary students.

Some examples

Questionnaire for Entrepreneurial skills I(h)

Sr. No.	Q. No.	To Test Proficiency for Entrepreneurial
1	Q. 4	Confidence
2	Q. 6	Initiativeness
3	Q. 19	Social Attitude
4	Q. 36	Negotiation Skills

For Entrepreneurial Skills

Total Questions = 37 Questions

Total Marks = 148 marks (37 Q x 4)

a) Minimum Score = 37

Maximum Score = 148

b) Lower Level of Attainment

For $100 \rightarrow 35$ $\therefore \frac{100}{148} = \frac{35}{x}$ $\therefore x = 51.80$

$148 \rightarrow x$ $\therefore x = 52$

∴ Lower Level is 37 – 52

c) Higher Level of Attainment

For $100 \rightarrow 75$ $\therefore \frac{100}{148} = \frac{75}{y}$ $\therefore y = 111.00$

$148 \rightarrow y$ $\therefore y = 111$

∴ Higher Level is 111 – 148

d) Moderate Level of attainment 53 - 110

Since the mean values of entrepreneurial skills was 106.4233 which was lying between 53 – 110, the level of attainment for entrepreneurial skills was moderate.

Similarly for all other remaining skills, the result was moderate level.

IV) For other skills

To assess the level of attainment of Ethics and Values, Self motivation and Self confidence, similar procedure was adopted. The results was moderate level of attainment.

9) Reliability

The items for testing academic and higher order thinking skills have been adapted from curriculum and text books published by SSC Board of Maharashtra. After confirmation from experts, the items were finalised.

The tests on personal skills and qualities were administered to pilot sample of 97 students. Cronbach Alpha reliability coefficient was computed. The result was satisfactory.

10) Statistical Analysis

In the present study following statistical analysis are implemented.

1) Descriptive Statistics

Summarizing and presenting the data is called descriptive statistics. Descriptive statistics are used to describe the basic features of the data in a study. Mean and standard deviations or standard error are good indicators of descriptive statistics. In the present study first hypothesis is tested on Mean Scores.

2) Test of Normality : As the scores are not normally distributed in this study, the non-parametric tests have been used.

Mann Whitney U test is very useful for non-parametric alternative to the t test. It is used for assessing the difference between two independent samples especially in the circumstances when the assumption of normality which is required for applying the t test is not met. Kruskal Wallis test in non parametric alternative to one way ANOVA for assessing the difference between more than two independent samples.

3) Mann Whitney U Test

Mann Whitney U Test is used when two different groups of participants are compared on the given measures. In the present study, Mann Whitney U Test has been used to examine differences between the groups as follows :

- Gender difference on measured variables [H-2] (Hypothesis - 2)
- Difference between Marathi Medium Students and students from Semi English Medium on the measured variables. [H-5] (Hypothesis - 5)
- Differences between students from private schools and students from corporation schools on measured variables. [H-4] (Hypothesis - 4)

4) Kruskal Walls H Test

Kruskal Walls H Test is used when more than two groups of participants are to be compared on the given measures. Kruskal Walls H Test is used when the data is not normally distributed. In Kruskal Walls H Test the groups are compared with the ranks

given to them. The chi-square value for the Kruskal Walls H Test indicates whether the difference between the groups is statistically significant or not. In the present study, Kruskal Walls H Test has been used to compare responses of students from urban areas, suburban areas and rural areas on the measured variables. Since the data of present research is not normally distributed the researcher selected Kruskal Walls H Test for comparison between study groups made on basis of the area of their schools.

5) Cronbach Alpha Reliability Analysis

Cronbach Alpha Reliability Analysis is based on the consistency of responses to all items in the tests. In the present research, Cronbach Alpha coefficient has been computed to examine the reliability of following tools.

- Internal consistency of statements measuring ethics and values.
- Internal consistency of statements measuring motivation.
- Entrepreneurship skills
- Self confidence

Cronbach Alpha Reliability Analysis was done even for the pilot sample of the measuring tools, namely, ethics and values, motivation, entrepreneurship skills as well as self confidence.

11) Limitation of Study

The Pimpri Chinchwad city is the industrial city. The Pimpri Chinchwad Corporation is one of the Richest Municipal Corporation in India. The parents are economically better and socially advanced. The presence of Basic Employability Skills may be influenced by demographic socio-economical factors.

Therefore, the results derived from the study may not be applicable to the subjects (students) of other states and districts who are likely to differ in background.

Thus the study cannot present all the factors influencing the presence of Basic Employability Skills.

12) Statistical Tools and Testing of Hypothesis with results

H-1- Hypothesis

Secondary School Students (Std. IX and X) from Marathi and Semi-English Medium Schools possess moderate level of basic employability skills (BES)

For testing this hypothesis, using **descriptive statistics method** (SPSS software) the values of means score for all 867 students were found.

To find the level of attainment of basic employability skills (BES), the range of levels and mean value score for each skills were compared.

Illustrations

A – For Higher Order Thinking Skills

Total Questions were asked = 20 Questions

Total Marks = 20 marks (20 Q x 1)

Level of Attainment (Score)

Low Level	Moderate Level	High Level
0 – 6	7 – 13	14 – 20

Since the mean values of HOT Skills was 8.544 which was lying between 7 – 13. The result was moderate level.

B – For Entrepreneurial Skills

Total Questions = 37 Questions

Total Marks = 148 marks (37 Q x 4)

e) Minimum Score = 37

Maximum Score = 148

f) Lower Level of Attainment

For $100 \rightarrow 35$ $\therefore \frac{100}{148} = \frac{35}{x}$ $\therefore x = 51.80$

$148 \rightarrow x$ $\therefore x = 52$

∴ Lower Level is 37 – 52

g) Higher Level of Attainment

For $100 \rightarrow 75$ $\therefore \frac{100}{148} = \frac{75}{y}$ $\therefore y = 111.00$

$148 \rightarrow y$ $\therefore y = 111$

∴ Higher Level is 111 – 148

h) Moderate Level of attainment 53 - 110

Since the mean values of entrepreneurial skills was 106.4233 which was lying between 53 – 110, the level of attainment for entrepreneurial skills was moderate.

Similarly for all other remaining skills, the result was moderate level.

Result : H – 1 hypothesis is accepted.

Hence secondary school students (Std. IX and X) possess moderate level of basic employability skills. (BES)

H-2 – Hypothesis

There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools (boys and girls) on basic employability skills (BES). (Gender of students)

For testing this hypothesis **Mann Whitney U Test** was used. To compare two groups of variances, this test is applied.

According to Mann Whitney U Tests for gender difference, No significant difference exists in the basic employability skills between boys and girls.

Illustrations

	Skills	Gender	Mean Rank
1)	Reading	Boys	426.88
		Girls	439.82
2)	Self Confidence	Boys	413.47
		Girls	414.52

The mean ranks are found using Mann Whitney U Test.

Result : H-2 hypothesis is accepted.

Hence there is no difference between Boy's and Girl's students (Std. IX and X) from Pimpri-Chinchwad in their basic employability skills (BES)

H-3 – Hypothesis

There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools from Urban, Semi-urban and Rural areas on basic employability skills (BES) (Area of School)

For testing this hypothesis, **Kruskal Walls H tests** has been used to compare responses of students from urban, sub-urban and urban areas on the measured variable.

For the reading and listening skills, the urban students were found better and for the remaining skills the rural students were found better.

Result : H-3 hypothesis is rejected.

Hence there is difference between secondary students from Urban, Semi-urban and Rural areas on basic employability skills (BES) (Area of School)

For H-4 and H-5 Hypothesis

H-4 – Hypothesis

Marathi Medium Secondary School Students (Std. IX and X) from Private Marathi Medium Schools and from Pimpri-Chinchwad Corporation Schools have same attainment level of basic employability skills. (Type of Schools)

H-5 – Hypothesis

There is no difference between students from Semi-English Medium Schools and Marathi Medium Schools on basic employability skills (BES) (Medium of instruction)

Mann Whitney U Tests were used to find mean ranks.

Private schools students were found better in Basic Employability Skills than corporation school students.

The semi-English medium students have better Basic Employability Skills than that of Marathi Medium Students.

Result : Both hypothesis H-4 and H-5 are rejected.

Hence marathi medium secondary schools students (Std. IX and X) from Private Marathi Medium Schools and from Pimpri-Chinchwad Corporation Schools have different attainment level of basic employability skills.

Also there is difference between Secondary Schools Students (Std. IX and X) from Semi English and Marathi Mediums Schools from Pimpri-Chinchwad Area on their basic employability skills (BES)

14) Findings

Findings related to Hypothesis-1 (H-1)

The level of attainment of Understudy Secondary School Students (Std. IX and X) from Pimpri Chinchwad Area in Basic Employability Skills was moderate.

i.e. 50 % to 70 % of the samples falls under this category.

Findings related to Hypothesis-2 (H-2)

1) The Boys and girls of Understudy Secondary School Students (Std. IX and X) from Pimpri Chinchwad Area were moderate in Basic Employability Skills.
   i.e. is 50 % to 70 % of the sample falls under the category.
2) Basic Employability Skills of students (standard IX and X) are not found to be influenced by gender. Both Boys and Girls have scored similar results.

Findings related to Hypothesis-3 (H-3)

1) Standard IX and X student's skills of Basic Employability was found to be influenced by Area of Schools.

2) Skills of Reading and Listening of Standard IX and X students are influenced by the Area of schools. Students from Urban Area scores better than others. (Semi Urban and Rural) in reading and listening skills.
3) Skills of writing, High Order Thinking, Entrepreneurial Skills and Personal Qualities like Ethics and Values, Motivation and Self Confidence are influenced by the Area of schools. Students from Rural Area score better than others (Urban and Semi Urban Area) in writing and thinking skills and in personal qualities.

Findings related to Hypothesis-4 (H-4)

1) Standard IX and X student's skills of Basic Employability is found to be influenced by type of schools.
2) Students from Private Marathi Medium Secondary Schools Scores better than students from Pimpri Chinchwad Corporation Schools.

Findings related to Hypothesis-5 (H-5)

1) Standard IX and X student's skills of Basic Employability is found to be influenced by medium of schools.
2) Students from Semi-English Medium Secondary Schools Scores better than those from Marathi Medium Secondary Schools from Pimpri Chinchwad.

Teachers Survey

Researcher intended to assess the perception of secondary school teachers about teaching of basic employability skills among secondary school students.

No. of Teachers Selected for Survey (Samples) I(i)

	Pimpri-Chinchwad Corporation School (PCMC School)	Private Marathi Medium Schools	Total
No. of Schools Selected for Research	7	8	15
No. of Secondary School Teachers Selected for Survey	31	36	67

In the first section multiple type questionnaire contains 10 questions pertaining to the various aspects of overall development of school students (like thinking skills, knowledge about management science etc.) Percentage analysis was conducted for it.

In second section of survey personal views of teachers regarding overall development of school students were collected and assessed.

Objectives for Teachers Survey

1) To study the perception of secondary school teachers towards basic employability skills development among secondary students.
2) To compare the perception of secondary school teachers from corporation and private Marathi medium secondary schools towards employability skill development.

Findings (Teachers Survey)

1) Only 18 % teachers are aware about higher order thinking skills, which is part of curriculum (IX and X Std.)
2) Only 25 % teacher are able to explain 4 p's of marketing, which is part of curriculum (IX and X Std.)
3) About 66 % teachers reported that they are teaching the subject personality development subjects to 9^{th} and 10^{th} Std.
4) Only 7.5 % teachers reported that acquiring employability skills is the most important for students for his / her future successful career.
5) 94 % teachers agreed that there is co-relation between study skills and personality development skills.

6) 60 % teachers are having teaching experience more than 15 years.
7) It was observed that, there was less percentage of secondary school teachers under survey who participated in various innovative projects.

Recommendations from Teacher's Survey

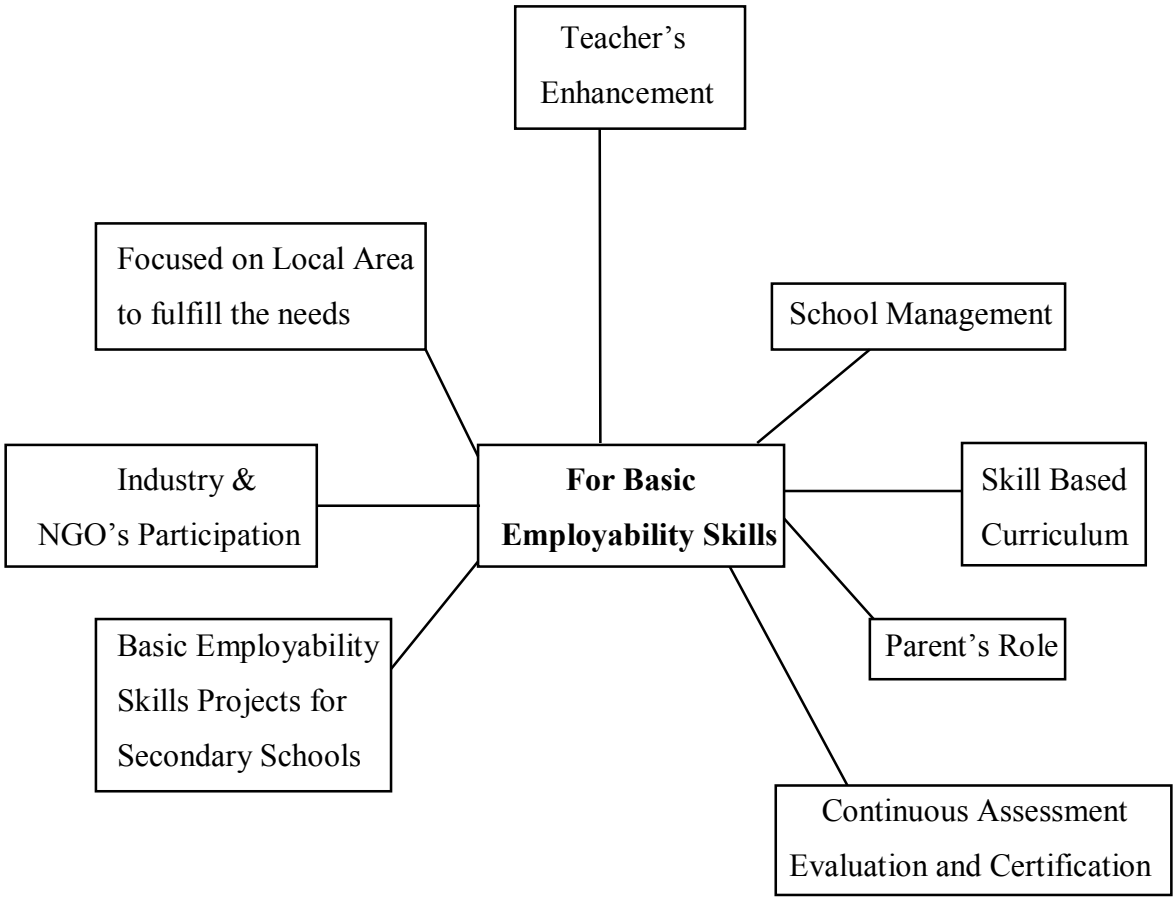
School teachers need orientation as well as training to teach and develop basic employability skills among secondary school students. There should be collaboration between school management and teachers training college to initiate the process of teaching of Basic Employ ability Skills. The wide gap of understanding between teachers and students must be reduce

Conclusions

1. Some skills are difficult to learn at school. The social background is also important factors which develop these skills. Home environment, quality family life and parents education are some important major social factors which contribute a major role to acquire these skills. For urban background, all these factors are present substantially than that rural and semi-urban background. Hence secondary students from urban schools are more prominent in the reading and listening skills.
2. Secondary students from rural area scores high level of attainment of writing, high order thinking skills and personal qualities and skills.
3. Major students from rural area are belonging to lower middle and socially and economically backward area. Most of Parents are working in small scale industries.
4. Situation are changing. Parents from rural area are keen on the educating their wards to the level possible to provide a better future for them. Due to measures taken by government they are being brought into the main stream of life. Also teachers from rural schools are working hard to make the students learn better. The general criticism is that students from rural schools are poor in academic skills. When compared to the students in urban and semi-urban areas naturally, one may presuppose the presence of positive attitude towards basic employability skills in urban and semi-urban students.
5. The present study shows that students in Rural areas are better in writing skills, higher order thinking skills and personal skills. It may be because of the pull of certain other intellectual, social, emotional and linguistic factors found in them.
6. Though the most of parents of rural students are either uneducated or lower educated, the attainment level of basic employability skills is not influenced by parental education.

Recommendation

Following framework of strategic recommendation may be initiated to implement the identification, teaching, development, assessment, certification and evaluation of basic employability skills at secondary schools.



Future scope for research

The following studies may be undertaken to answer many of problems raised on the basis of the findings of present study.

1. A critical study on teaching and learning of academic skills in secondary classes.
2. To study basic employability skills developed by students of primary and higher secondary students in Maharashtra.
3. An investigation of basic employability skills developed by students of secondary English Medium and Higher secondary students on the basis of different communities like Open, OBC, SC/ST, NT etc. categories.
4. A study of personal and environmental factors influencing basic employability skills at primary, secondary and higher secondary educational level.
5. Preparation and validation of materials for developing basic employability skills for students of different classes.
6. Evolving strategies for developing interest and fostering positive attitude towards basic employability skills in students of different classes.
7. Developing strategic model for effective teaching, learning and developing of basic employability skills among the students of Marathi and English Mediums schools of all levels.

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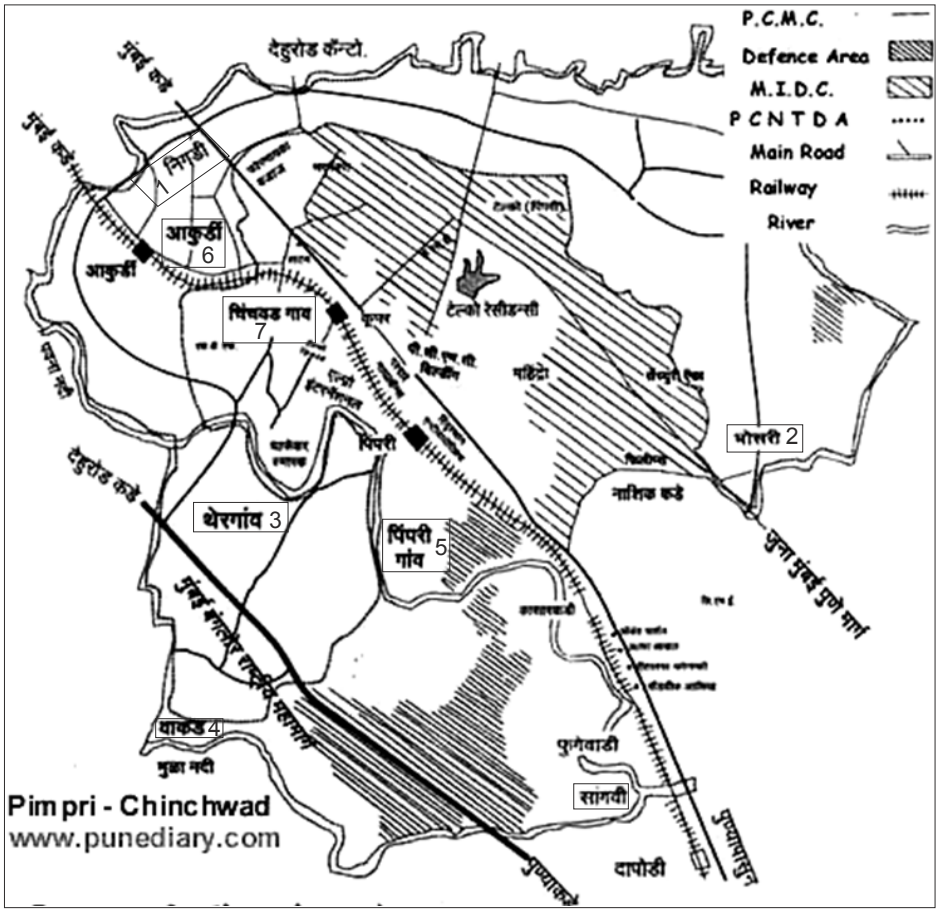
Geographical Map for Pimpri Chinchwad Corporation Area



Sr. No.	Area	No. of Schools
1	Nigdi-Pradhikaran	2
2	Bhosari	2
3	Thergaon	1
4	Wakad	1
5	Pimpri	1
6	Akurdi	1
7	Chinchwad	2
8 to 15	Pimpale-Gurav, Pimple-Saudagar, Sant Tukaramnagar, Dange Chowk, Bijalinagar	5
	No. of Schools	**15**

Chapter II

Review of Literature

This chapter provided a synthesis of recent and past research on the themes of employability skills, secondary education, skill gap etc. It does not aim to provide a comprehensive literature review, as the relevant literature in this area is vast and wide ranging. For the present study, the researcher collected information related to his work from various sources. Many studies and research abstracts were collected regarding Employability skills, Secondary Education and skill gap etc.

Background

There is a wide range of terms used to describe employability skills as 'non-technical skills', 'generic skills', 'essential skills', 'soft skills', transferable skills', 'enterprise skills', key competencies etc.

Many of the frameworks used in the world to describe these non-technical skills include not only skills relevant to employment, but also broader capabilities relating to participation in society.

The notion of Employability Skills has been part of education for many years.

The concept of employment related skills gained traction in the world in the early 1990 **USA (SCANS Report), Australia (Mayars committee Report), U.K.(NCVQ Core Skills), Canada (Employability Skills)** etc. There are still concerns about how well these skills are being developed and demonstrated in the workplace.

A review of literature highlights following reasons for the lack of correct approaches to developing Basic Employability Skills including.

- Different definitions, interpretations and approaches used across industry sectors which create confusion about expectations.
- Failure to recognise the context dependent nature of Employability Skills and impact of the context upon these skills
- Incorrect assumptions that competence is automatically transferable.
- Insufficient capacities / confidence of teachers and trainers to address skills
- The difficulty of measuring assessing and reporting on Employability Skills.

Employability Skills

Employability Skills help individual to identify, articulate and develop the skills they need to gain employment, remain employed and be successful in employment at any stage in their working life.The Basic Employability Skills in this research have been identified through U.S. development of Labour's secretary's commission on Achieving Necessary Skills (SCANS) in partnership with educators, business, industry representatives.

Importance of Employability Skills

- First, raising employability skills has emerged as an area for attention to improve the transition from full-time education into employment, including school leavers as well as those leaving college and university.
- Second, employability skills have been identified as a key element to ensuring that the employment and skills system is demand-led.
- Third, as part of the continuing integration of employment and skills policy there has been recognition that employers are looking for a broader set of generic employability skills and therefore to move unemployed people into sustainable work an approach that looks beyond vocational and technical skills alone is required.
- Fourth, employability skills have arisen as a theme in debates about promoting career advancement once in employment and tackling the barriers to social mobility.

The Need of Industry

Employers continue to focus on adaptation, cost reduction, increased productivity and new markets and new products and services. In this environment, there is an increasing requirement for employees be stable to support increased competitiveness, innovation, flexibility and customer focus. They are increasingly seeking a more highly skilled workforce where the generic and transferable skills are broadly distributed across the organisation.

There have been broad agreement that all young people need a set of personal attributes and skills that will prepare them of both employment and further learning. Also on going employability of individuals is dependent on them having a set of relevant skills as well as a capacity to learn how to learn new things. However what has been clear is whether there attributes and skills should be in be the context of challenges facing Industry.

Research in this area is the complex-Factors contributing to this complexity include the lack of clarity in language and definitions, the capacity of employers to predict their future of the changing the nature of the workplace.

The rational of the problem

Today's assembly line jobs require the ability to read complex manuals, analyses data, organize information and make judgments.

For examples, in 1965 a car mechanic needed to understand 5000 pages of service manuals to fix any automobile on the road. Today, with the advent of high tech electronics, the same mechanic must be able to decipher 465,000 pages of technical text [1].Educators must be reminded that the majority of population will never earn a college level degrees. This "neglected majority" should be the target of school to work initiatives. This group of students who will not continue post secondary education opportunities and will directly enter in the workforce (Hull and Parneel)

Gray and Hery [2] supported the claim that today's secondary educational systems does not focus enough upon "Neglected majority".

The Employer Consensus about employability skills

For service business interpersonal communication skills is vital and for production business technological ability is demanded hence diverse workplace requires different employability skills hence it is very difficult to define employability skills. Surprisingly applicant's academic capability may get less value that of non-academic skills like enthusiasm, discipline[3]. Cotton[4] reported that many of employers would prefer that secondary and higher secondary schools takes a step beyond basic academics and incorporate the teaching of higher level affective skills their curricula. Schug and Western[5] stated that schools are always focusing only on academic goals. Hull and Parneel (1991) believed that it is essential that our school maintain a balance in regard to academic and non-academic goals.

Thus, it is extremely difficult to establish a consensus as to which specific employability skills are universally considered the most essential by today's employers. However, in reviewing surveys conducted by others as well as business and government-based studies, a general list is constructed. For example, Poole[6] Identified 76 "critical employability skills" listed within nine categories and those skills focused solely upon one attribute - human relations. However, other researchers tend to narrow their lists to a more manageable number and generally group employability skills into three or four separate categories.

Schwartz[7] categorizes list of "job readiness skills" under three headings: 1) Academic Skills; which focus upon an employee's ability to learn quickly and willingly; to have a knowledge of standard English for speaking, writing and understanding; and to have the

ability to do basic calculations, use numerical formulas and charts, and estimate quantities. 2) Vocational Skills; which focus upon the ability to solve problems; to communicate clear instructions and explanations and to understand what supervisors want from them; and to have the ability to be able to do manual tasks, to construct and assemble materials, and use job-related equipment. 3) Work-Related Habits and Attitudes; to have a general understanding of the workplace and the world of business; to be dependable and punctual; to be willing to ask questions and accept correction; to be trustworthy and honest; to have a respectful and positive attitude; to be patient and cooperative in working on projects until completion; and to be appropriate in regard to appearance, hygiene and dress[8]. Hill & Petty focused solely upon the "occupational work ethic" in their study and determined that the employers they surveyed considered an employee's interpersonal skills, personal initiative and dependability paramount in regard to workplace readiness[9]. Carson, Huelskamp & Woodall (1993) narrowed their list the significantly in reviewing studies. In finding that employers are looking primarily for four basic attributes: punctuality, respect for others, the ability to follow directions, and honesty. Surprisingly, they discovered that these studies further revealed that basic academic skills were considered among the least important of employability skills.

Bottom, Person and Johnson (1992) reinforced the argument that academics are of importance to employers. In their study, these researchers contend that employers tend to seek entry-level employees "who can read a technical manual, write a report, communicate effectively with supervisors and coworkers and make wise decisions" . Hull & Parnell (1991) found in their study that the employers they surveyed tend to seek the best of both the academic and non-academic worlds in regard to employability skills. Their study revealed that employers seek candidates who have a sound academic base in regard to speaking, writing and calculation but also prefer that those candidates possess the ability to learn new technologies, can use computers as informational systems, are adept at interpersonal skills, and have the ability to do independent problem solving .

Thus, as the review of the literature indicates, there is no true consensus among our very diverse employer base as to specifically which employability attributes are considered essential in an entry-level candidate.

The Secretary's Commission on Achieving Necessary Skills (SCANS) was "asked to define the know-how needed in the workplace" (SCANS, 1992; p. ix) and to "determine the

skills that our young people need to succeed in the world of work" (p. xiii). Following a 1991 SCANS initial report entitled What Work Requires of Schools, the 1992 report established a list of foundation skills and workplace competencies using input from a broad-based consortium of employers. These skills and competencies, referred to as "workplace know-how", define the five competencies in the "workplace competencies" category as 1) resources, 2) interpersonal skills, 3) information; 4) systems, and 5) technology and the three skills defined in the "foundation skills" category as 1) basic skills, 2) thinking skills, and 3) personal qualities (p. xiv). For the purpose of specificity related to the survey that this paper is to construct, each of the five competencies and three skills are defined as follows:

Workplace Competencies:

1) Resources: Knowing how to allocate time, money, materials and space.
2) Interpersonal Skills: Knowing how to work on teams, teach others, serve customers and work well with others of culturally diverse backgrounds.
3) Information: Knowing how to acquire data, maintain files, communicate, and use computers to process information.
4) Systems: Knowing social, organizational and technological systems and monitor and correct their own performance.
5) Technology: Knowing how to select equipment and tools, apply technology to specific tasks, and troubleshoot equipment.

Basic Employability Skills

Basic Employability Skills is a group of important skills instilled in each individual in order to produce productive workforce. This is parallel with individuals who have strong characteristics such as a high sense of smell, innovative, productive, skillful, competitive, a strong sense of determination and creative in facing the challenges of nation as Employability skill is crucial in all professions and in education[10]

The current working environment differs from previous one. This is because with global competitions, cultural diversity, latent technologies and process of new management required workers to have critical thinking, able to solve problems besides excel in communication skills. Curriculum that could fulfill the criteria as required in the job market could assist and make it easier for the students to face challenges and to secure a place for themselves in employment. A few researches had been carried out to determine the basic employability skill among students.

(a) One of the research was done by De Leons Borchers[11] who studied on the skills required by Texas students to serve production industries. Both used employers on research respondents. This research emphasized on a few skills such as reading, writing, listening, calculating, communicating, critical thinking, interaction in a groups, self development, leaderships etc.

This study found that three most important skills required by employers are interaction in groups, employability and self development.

(b) The study done by Smith[12] regarding the involvement of school children in the occupation found that the employers for opting new employee, laid importance on two main factors displayed attitude and employability skills required for development of career path

(c) Employment skills is in fact a skill required in employment. The preparation to acquire this skills begin when a person is still in the learning process. Thus a board by the name of (SCANS) reports prepared reports on ways of assisting educational institutes and school in producing younger generations who are willing to work. SCANS (1991)[13] stated that the most graduates were yet to have good knowledge of basic skills of occupation. In the beginning SCANS's report indentified seven skills related to a certain task. However after renewal of SCANS's (2000) report[13] two groups of skills were formed. They were general and efficiencies.

SCANS's approach is suitable for secondary school in their preparation of producing students to have employability skills to work in industry SCANS (2001) emphasized that skills and efficiencies are also a part of the measures taken to ensure students to master the criteria required by employers in order to produce high profile workers in various fields and careers.

This is because SCANS mainly highlighted on students future and to ensure students in getting the right skills during school days[14].

SCANS Foundational Skills

Basic Skills: Reads, writes, performs arithmetic and mathematical operations; listens and speaks

A. Reading :- locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules

B. Writing :- communicates thoughts, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts

C. Arithmetic / Mathematics :- performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques

D. Listening :- receives, attends to, interprets, and responds to verbal messages and other cues

E. Speaking :- organizes ideas and communicates orally

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

A. Creative Thinking :- generates new ideas

B. Decision Making :- specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative

C. Problem Solving :- recognizes problems and devises and implements plan of action

D. Seeing Things in the Mind's Eye :- organizes, and processes symbols, pictures, graphs, objects, and other information

E. Knowing How to Learn :- uses efficient learning techniques to acquire and apply new knowledge and skills

F. Reasoning :- discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

A. Responsibility :- exerts a high level of effort & perseveres towards goal attainment

B. Self-Esteem :- believes in own self-worth and maintains a positive view of self

C. Sociability :- demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings

D. Self-Management :- assesses self accurately, sets personal goals, monitors progress, and exhibits self-control

E. Integrity / Honesty :- chooses ethical courses of action

The Foundation

Basic Skills

Reading :- Locates, understands, and interprets written information in prose and documents-including manuals, graphs, and schedules-to perform tasks; learns from text by determining the main idea or essential message; identifies relevant details, facts, and specifications; infers or locates the meaning of unknown or technical vocabulary; and judges the accuracy, appropriateness, style, and plausibility of reports, proposals, or theories of other writers.

Writing :- Communicates thoughts, ideas, information, and messages in writing; records information completely and accurately; composes and creates documents such as letters, directions, manuals, reports, proposals, graphs, flow charts; uses language, style, organization, and format appropriate to the subject matter, purpose, and audience. Includes supporting documentation and attends to level of detail; checks, edits, and revises for correct information, appropriate emphasis, form, grammar, spelling, and punctuation.

Arithmetic :- Performs basic computations; uses basic numerical concepts such as whole numbers and percentages in practical situations; makes reasonable estimates of arithmetic results without a calculator; and uses tables, graphs, diagrams, and charts to obtain or convey quantitative information.

Mathematics :- Approaches practical problems by choosing appropriately from a variety of mathematical techniques; uses quantitative data to construct logical explanations for real world situations; expresses mathematical ideas and concepts orally and in writing; and understands the role of chance in the occurrence and prediction of events.

Listening-Receives, attends to, interprets, and responds to verbal messages and other cues such as body language in ways that are appropriate to the purpose; for example, to comprehend; to learn; to critically evaluate; to appreciate; or to support the speaker.

Speaking :- Organizes ideas and communicates oral messages appropriate to listeners and situations; participates in conversation, discussion, and group presentations; selects an appropriate medium for conveying a message; uses verbal language and other cues such as body language appropriate in style, tone, and level of complexity to the audience and the occasion; speaks clearly and communicates a message; understands and responds to listener feedback; and asks questions when needed.

Thinking Skills

Creative Thinking :- Uses imagination freely, combines ideas or information in new ways, makes connections between seemingly unrelated ideas, and reshapes goals in ways that reveal new possibilities.

Decision Making :- Specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternatives.

Problem Solving :- Recognizes that a problem exists (i.e., there is a discrepancy between what is and what should or could be), identifies possible reasons for the discrepancy, and devises and implements a plan of action to resolve it. Evaluates and monitors progress, and revises plan as indicated by findings.

Seeing Things in the Mind's Eye :- Organizes and processes symbols, pictures, graphs, objects or other information; for example, sees a building from a blueprint, a system's operation from schematics, the flow of work activities from narrative descriptions, or the taste of food from reading a recipe.

Knowing How to Learn :- Recognizes and can use learning techniques to apply and adapt new knowledge and skills in both familiar and changing situations. Involves being aware of learning tools such as personal learning styles (visual, aural, etc.), formal learning strategies (note taking or clustering items that share some characteristics), and information learning strategies (awareness of unidentified false assumptions that may lead to faulty conclusions).

Reasoning :- Discovers a rule or principle underlying the relationship between two or more objects and applies it in solving a problem. For example, uses logic to draw conclusions from available information, extracts rules or principles from a set of objects or written text; applies rules and principles to a new situation, or determines which conclusions are correct when given a set of facts and a set of conclusions.

Personal Qualities

Responsibility :- Exerts a high level of effort and perseverance towards goal attainment. Works hard to become excellent at doing tasks by setting high standards, paying attention to details, working well, and displaying a high level of concentration even when assigned an unpleasant task. Displays high standards of attendance, punctuality, enthusiasm, vitality, and optimism in approaching and completing tasks.

Self-Esteem :- Believes in own self-worth and maintains a positive view of self; demonstrates knowledge of own skills and abilities; is aware of impact on others; and knows own emotional capacity and needs and how to address them.

Sociability :- Demonstrates understanding, friendliness, adaptability, empathy, and politeness in new and ongoing group settings. Asserts self in familiar and unfamiliar social situations; relates well to others; responds appropriately as the situation requires; and takes an interest in what others say and do.

Self-Management :- Assesses own knowledge, skills, and abilities accurately; sets well-defined and realistic personal goals; monitors progress toward goal attainment and motivates self through goal achievement; exhibits self-control and responds to feedback unemotionally and non-defensively; is a "self-starter."

Integrity / Honesty :- Can be trusted. Recognizes when faced with making a decision or exhibiting behavior that may break with commonly-held personal or societal values; understands the impact of violating these beliefs and codes on an organization, self, and others; and chooses an ethical course of action.

Based on this information, researcher had selected some basic skills of employability which can be taught at secondary schools. This skills are named as basic employability skills.

IX Std. English Course Book (Marathi / Semi English Medium)

This course book is based on the recommendations of National Curriculum framework (NCF) 2005. The matter and methodology used throughout the course book in full of interactive mode.

Objectives

- To consolidate and extend the language abilities already acquired.
- To develop a conceptual understanding (cognition) of the idioms of English.
- To learn to make effective use of English in real life contexts (application)

Skill wise Specific Objectives

Writing Skill

To student to able to

1. Master the mechanics of writing including the use of punctuation marks, capital letters and spellings.
2. Write correctly, neatly and legibly with a reasonable speed.
3. Write grammatically acceptable and situationally appropriate forms of English.
4. Write answers to questions on textual / non-textual reading material.
5. Frame statements, questions, commands and requests for their appropriate use in different contexts.
6. Develop a paragraph on a given theme considering coherence, logical sequence and connective devices.
7. Write formal and informal letters with the help of given points.
8. Develop a story with the help of given outline / points.
9. Write short imaginary write – ups e.g. personal essays, compositions with the help of guidelines.
10. Write a short reports based on interviews, events and talks.
11. Write a short conversation with the help of given guidelines.

12. Transfer the information from nonverbal to verbal forms such as from tables, charts and maps to write-ups.
13. Fill in a variety of forms in given formats such as admission form and bio-data form.

Reading Skill

To student to able to

1. Read aloud effectively with correct pronunciation, stress and intonation.
2. Read aloud with appropriate pace and pauses showing awareness of punctuation.
3. Read loud poems with appropriate rhythm.
4. Read silently with reasonable speed, depending on the type of text.
5. Read silently textual and non-textual material for overall / global understanding (skimming), for finding specific information (scanning), for detailed understanding (intensive)
6. Guess / predict appropriately while reading.
7. Deduce the meaning of words, phrases with the help of context.
8. Read informative material such as notices, advertisements, road, sigs and news headlines.
9. Learn to chunk or group sentences into appropriate sense groups / grammatical groups.
10. Learn to use a dictionary and such other reference material.
11. Read to understand themes, ideas, emotions, expressed in the text and to respond appropriately.
12. Understand logical sequence of sentences in the text.
13. Read for pleasure extensively the texts within the range of his / her imagination.

Listening Skill

To student to able to

1. Enjoy and appreciate various types of poems read in context.
2. Understand meanings of words, phrases and sentences in context.
3. Guess meanings of new words and phrases.
4. Understand statements, questions, commands, requests and other such sentences.
5. Understand and respond appropriately to directive language, e.g. instructions, advice, requests and warnings.
6. Maintain his / her attention for a reasonable length of time.
7. Listen for a global understanding so as to be able to give main points.

8. Follow simple narrative, descriptive and other such prose texts read aloud, so as to answer questions set on them.
9. Enjoy and appreciate stories, short plays and short narrations read out in the class.
10. Take dictation keeping pace with the speed of the speaker.
11. Understand and interpret spontaneous spoken discourse in familiar social situations.
12. Listen with understanding news, commentaries, short speeches and such other programmes on Radio / TV / Tapes / CDs, etc.
13. Listen with understanding to telephonic conversation.
14. Understand nuances conveyed through stress and intonation.
15. Infer a speaker's attitude / intention and the message given in his speech.

1) Written Communication

- Thinking through in advance what you want to say
- Report Writing Skills
- Gathering, analyzing and arranging data in a logical sequence
- Developing your argument in a logical way
- Briefly summarising the content
- Adopting your writing style for different audiences
- Avoiding jargon
- See written communication skills

2) Negotiating and Persuading

- Developing a line of reasoned argument
- Emphasising the positive aspects of your argument
- Understanding the needs of the person you are dealing with
- Using tact and diplomacy
- Handling objections to your arguments
- Making concessions to reach agreement
- Challenging the points of view expressed by others
- See persuading and negotiating skills

3) Verbal Communication

- Accurately hearing what people are saying
- Able to clarify and summarise what they are communicating
- Being sensitive to their values and feelings
- Not interrupting

- Helping others to define their problems
- Telephone skills (thinking through in advance what you want to say. Keeping business calls to the point
- Making a speech in front of an audience (thinking way to put across your message, structuring your presentation, using audio-visual aids effectively, successfully building a rapport with your audience)
- Making effective use of body language, dress, conduct, speech
- See communication skills

4) Co-operating (Group work)

- Contributing your own ideas effectively in a group
- Taking a share of the responsibility in a group
- Being assertive – rather than passive or aggressive
- Accepting and learning from constructive criticism and giving positive, constructive feedback to others
- Concentrating that can be improved
- Identifying your strengths and weaknesses
- See team working skills

5) Investigating and Analysing

- Clarifying the nature of a problem before deciding what action to take
- Collecting, collating, classifying and summarizing data
- Being able to use results effectively using text / graphs / tables / pictures
- Finding where the required information is available
- Gathering information systematically
- Formulating questions
- Being able to condense information / produce summary notes
- See decision-making

6) Leadership

- Setting objectives
- Organising and motivating others
- Taking the initiative
- Persevering when things are not working out
- Taking a positive

- Accepting responsibility for mistakes / wrong decisions
- Being flexible – prepared to adapt goals in the light of changing situations
- See leadership skills

7) Planning and Organising

- Managing your time effectively / using action planning skills
- Prioritising tasks effectively
- Setting objectives which are achievable and measurable
- Identifying the steps needed to achieve goals
- Using lists
- Being able to work effectively under pressure / managing stress
- Completing work to a deadline
- See time management

8) Numeracy being able to

- Use simple statistics
- Calculate percentages
- Multiply and divide accurately
- Read and interpret graphs and tables
- Use a calculator
- Managing a limited budget try our numeracy test

Table for Basic Employability Skills

Which Jobs will Suit Basic Employability Skills

	Speaking	**Writing**	**Analysing**	**Planning & Organising**	**Leading**
Writing	Journalist	Copy writer, Translator Publishing Editor	Solicitor, Market Research	Publishing Editor	Youth Worker, Police
Analysing	All Traffic Controller, Speech Therapist	University Research Assistant	Research Scientist	Museums Officer Librarian	Marketing Manager
Planning	Personnel, Careers Adviser	Event Organiser	Advertising Account Planner	Logistics Manager	Armed Forces Officer, Retall Manager
Persuading and Negotiating	Estate Agent, Recrultment Consultant	Public Relations	Strategic Consultant	Hotel Manager Retail Buyer	Marketing
Co-operating	Counselor, Nurse, Speech Therapist	Copy Editor, Civil Service	Computer Consultant IT Project Manager	Arts Admin	Training Manager
Scientific / Technical	Clinical Trials	Regulatory Affairs Patent Attorney	Scientific Research	Project Manager	Production Manager
Creative	Radio Station Assistant	Journalist Copywriter	Advertising Account Planner	Teacher Arts Admin	Editor Web Project Manager
Languages	Interpreter	Translator	Internate-ional Banker	Buyer	Language Teacher
Practical	Police, Youth Worker	TV/Radio Station Assistant	Engineer	Armed Forces	Production Manager

Higher Order Thinking Skills

There is no well established taxonomy or typology to define thinking skills reasoning etc[15]. No single theory adequately explain "how all learning takes place" [16]. But educators, administrators and evaluators have expressed agreement about value of teaching it [17,18,19]. Complex 'real-life problems often demand complex solutions, which are obtained through Higher Order Thinking Skills processes. Teaching Higher Order Thinking Skills, then provides students with relevant life skills and offer them an added benefit of helping them improve their content knowledge, lower order thinking and self-esteem[20, 21].

According to report of Florida Department of Education (DOE)[22]

Theories related to learning HIGHER ORDER THINKING SKILLS

Dewey described process of thinking as a sequenced chaining of events[23].

Process of Thinking

Reflection → inquiry → critical thought → lead to conclusion

It can clear obscurities, resolve confusion, unity disparities, answer questions, define problems, reach goals, support decisions and end controversies.

a) **Piaget Theory for HIGHER ORDER THINKING SKILLS :** The developmental stages (School age → adolescent → adulthood) are the key to cognitive development. The process starts from operational thinking to abstract concepts, scientific reasoning and hypothesis testing.

b) **Bruner :** According to him stages of cognitive development are not linear and they may occur simultaneously the focus on active learning, active inquiry and discovery, inductive reasoning.

c) **Bloom[24] :** Lower levels provide a base for higher order levels of learning and thinking According to him, HIGHER ORDER THINKING SKILLS include analysis, synthesis and creativity and evaluation and require mastery of previous lower order levels.

d) **Haladyna[25] :** He expressed the complexity of thinking and learning dimensions by classifying four levels of mental processes (understanding, problem solving, critical thinking and creativity)

e) **Gardner[26] :** According to him, multiply intelligences form a major part of an individual's dispositions and abilities. Intelligence has seven dimensions like verbal, logical, musical, spatial etc.

Higher Order Thinking Skills are grounded in lower order skills such as discriminations, simple application and analysis, and cognitive strategies and linked to prior knowledge of subject matter content (vocabulary, procedural knowledge, and reasoning patterns). Appropriate teaching strategies and learning environments facilitate the growth of higher order thinking ability as do student persistence, self-monitoring, and open-minded, flexible attitudes.

Assessment of HIGHER ORDER THINKING SKILLS

HIGHER ORDER THINKING SKILLS include critical thinking, problem solving, decision making and creative thinking[27]. These skills are also well defined in Bloom's Taxonomy of Educational Objectives [28,29,30] propounded the hierarchy of learning capabilities.

HIGHER ORDER THINKING SKILLS can be assessed by methods like multiple choice items, constructed response items, performance tests etc.

Validity : It is an evaluative judgment of the degree to which empirical evidence and theoretical rationales support the adequacy and appropriateness of interpretations and action based on test scores or other modes of assessments[31]

HIGHER ORDER THINKING SKILLS can be measured by a variety of item and test formats

According the Sugrue [32] there are three response formats for measuring HIGHER ORDER THINKING SKILLS.

1) Selection (Multiple – choice, matching)
2) Generation (Short answer, essay etc.)
3) Explanation (giving reasons for selection of a response)

Multiple choice items could be used for assessing micro dimensional thinking skills[33] constructed multiple choice and response items to measure knowledge, comprehension, application and analysis skills.

Assessment Model

Sugrue[34] developed a problem solving model containing three major interacting components.

a) Knowledge structure b) Cognitive functions c) Beliefs about oneself

a) **Knowledge structures** are well organized, concepts and principles are integrated and linked to applications by conditions and procedures.
b) **Cognitive function** are planning and Monitoring. Planning consists of laying out the steps to be followed in solving the problem Monitoring refers to being aware of

different parts of one's performance, including time spent, time available, progress and changes.

c) Three beliefs about oneself and the task are important in problem solving assessment. It consists student's

i) abilities to solve the problems.

ii) belief about the difficulty of the task

iii) interest and motivation in completing the task

Samples of Assessment

1) Deduction Thinking[35]

Students are given two statements A and B which are accepted as true. Considering the relation in these two statements, examine the four inferences given and choose the correct alternative [Refer Q.13, Q.14 of Questionnaire] (Refer Annexure)

2) Thinking Skills

Based on curriculum designed by, Florida Department of Education.

3) Killoran [36]

a) Developing standard multiple choice questions test which are specialized for knowledge and skills.

i) **Facts or Opinion [**Refer Q.13, Q.14 of Questionnaire] (Refer Annexure)

ii) **Use of reference books**

b) **Developing Database Questions**

a. Comprehension questions b) Explanatory questions

c. Conclusions d) Predictions

4) Assessment of Concept (Sugreu (1994, 1995)

[Refer Q.2 (9^{th} std), Q.4 (10^{th} Std. of Questionnaire] (Refer Annexure)

5) Assessment of Principles

[Refer Q.6 (9^{th} std), Q.5 (10^{th} Std. of Questionnaire] (Refer Annexure)

6) Using insight to solve mathematical and logical problems

[Refer Q.18, 19 of HIGHER ORDER THINKING SKILLS of Questionnaire]

Entrepreneurial Skills

The ability of the individual possessing wide range of essential skills and attributes to create, cope with and enjoy change and make creative contribution in the world of work whether employment or self employment.

The world is changing fast. Technology is revolutionizing everything. Many of the most sought-after job positions in 10 years probably do not exist today. Yet school prepares our children the same way it did about 40 years ago.

The workplace will be very different for our children from what we experienced. In a global economy, completely and always connected, our children will face competition not only from their local peers, but from students. from faraway places. They will fight for an increasing number of delocalised jobs with well-educated, hard-working and less expensive workers from emerging countries. The best way for our students to remain competitive and maintain their standard of living will be to continuously generate value through new ideas and often to create their own job.

School teaches basic skills, a sense of cultural belonging and some values. Obviously these are important and will hardly change. However school should also .introduce new dimensions to prepare our children to the new realities. A greater focus on creativity, entrepreneurism and communication, comes to mind.

There is no more safe way to success (study well = strong career). We need to empower and challenge our kids to take calculated risks and not wait for the. state or an employer to 'take care' of them. We need to teach them the skills necessary to follow their passion, be pragmatic enough to turn them into new ideas / projects, and to move these forward. These are typical entrepreneurial skills.

Need for Enterprise Education

1) Today's society is demanding all type of entrepreneurial behavior.
2) The younger generation is most likely to find themselves working in a organization closer to entrepreneurial mode.
3) Problems of rising unemployment and underemployment.
4) Planning commission report strongly recommended self-employment youth a way out for teeming unemployed youth.
5) The Globes Monitor Report (2002) research finding show that India has emerged as the second most entrepreneurial active nation.

   But the education system in India is not capable of creating entrepreneurial orientation among people and stressed a need to create a strong link between the spirit of entrepreneurial ship and education.

Cultivating Entrepreneurial Abilities

Piaget (1952) shaped our understanding of the thought process of children.

Noll (1993) called the nineties as the decade of entrepreneurship and emphasized carefully planned, up-to-date entrepreneurship education at secondary level. Gutner (1994) found the entrepreneurial traits emerge at early age having qualities such as Creativity Problem Solving and internal motivation to succeed.

Characteristics of Entrepreneur

- Passionate about own goals
- A spirit of adventure
- A strong need to achieve
- Self-confident and self-reliant
- Goal-oriented
- Innovative, creative and versatile
- Persistent, don't give up easily
- Hardworking and energetic
- A positive thinker
- Willing to take initiative
- Able and willing to commit yourself

Skill Levels of Entrepreneurs

Entrepreneurs tend to start ventures that build on specific skills they have already developed and knowledge they have already acquired in a certain occupation or industry, for example, auto repair. But all entrepreneurs tend to share other, more general, skills such as communication, team-building and creative-thinking skills.

- Skill
- Creative thinking
- Planning and research
- Decision making
- Organization
- Communication (oral)
- Communication (writing)
- Team building
- Marketing (selling)
- Financial management
- Record keeping
- Goal setting
- Business management

Aims of Secondary Education

Structure and Goals of the Education System

The education n system in India generally follow the 8 + 2 + 2 + 3 pattern which provides 8 year for primary education, 2 years each for secondary and higher secondary schooling and 3 years of university education.

Elementary education aims to develop literacy and numeracy, acquaintance with the social and physical environment, creative expansion and healthy living. Secondary Education aims to develop the intellectual, social and moral qualities essential for democratic citizenship and to prepare young people for entry into the world [37].

Contribution of secondary education to economic growth in India

- In India technological innovation, openness to world trade and rapid economic growth have fuelled the demand for skilled workers Most of the employment growth over the past ten years has taken placed in skilled services (I.T., Financial Services, Tourisms etc.) and skill intensive manufacturing, all of which require at a minimum a secondary education degree.
- Even in rural areas job prospectus are better for secondary level that of more qualified level.
- "India's Employment challenges creating job, helping workers [38].
- The federation of India chambers of commerce and industry (FICCI) conducted a survey of Indian Industry in July, 2007, whose results clearly showed that the shortage of skilled and semiskilled workers has emerged as critical factors imparting the competitiveness of Indian Industry". The basic education is again secondary level.
- From industries perspective, a more skilled workforce means worker with at least secondary education.
- Quantitative economic analysis supports the condusion that marginal private returns to additional education are the highest in secondary education.

Importance of Secondary Education in India

1) Its contribution to economic growth and poverty reduction.
2) Basic qualification for skill workforce
3) Increase in rate of return in Secondary Education than that of higher secondary (FICCI, 2007)

4) It makes an important contribution to democratic citizenship and social cohesion which are extremely important principles in India.
5) There can be no major expansion or improvement of higher education in India without first improving and expanding the secondary education level.

Studies in India

In India, No systematic efforts have been made to conceptualise this concept into school education.

However some work has to report

(1) The recommendation of focus group paper on work and education, national curriculum framework, 2005 (NCERT)
(2) Summer camps organised by Entrepreneurship Development Institute Ahmadabad to foster entrepreneurship spirit among children.
(3) An NGO DHRIITI started a project to impart entrepreneurship in the schools.
(4) The Central Board of Secondary Education (CBSE) has started on add-on course in entrepreneurship at the secondary stage in India.

Conceptual Framework about entrepreneurial skills

This concept of entrepreneurial culture in education, though noted to be a new phenomenon in Indian education discourse, however, it would be argued that some aspects has always visible like.

i) Guardian proposal of Nai-Talim (in 1937) emphasizing the need to place productive work at the heart of education.
ii) Work centered education

Historical Overview of employability skills

1) National Education conference held at Wardha, 1937 deliberated upon Gandhijis proposals on Basic Education (Buniyadi Shilesha)
2) The education commission (1964-66) recommended that work experience should be introduced on an integral post of all education.
3) The Ishwarbhai Patel Committee Report (1977) recommended the combination of working and learning.
4) The National Police on Education, 1986 more concerned about student's entry into workforce.
5) The National Curriculum Framework (NCERT) 2005 Stated that work will be interwoven in the curriculum for the purpose of integrating productive work in the core curriculum as a pedagogic medium for acquiring knowledge building values, skills formation, promoting critical thinking, creativity and other generic competencies.

Secondary Education & Youth At The Crossroads

According to Arom, Meechai In order to solve the process of learning and organizing education, the State and the public must work together by improving the educational methodology. The 3CAPS model which combines the theories of Learning Happily, Participative Learning, improving the process of Thinking, and improving Aesthetic Learning, works successfully, and treats the learners as human beings. It can remedy the problems of learning, the problems of the economy, the problems of society and the problems of politics. Thus secondary education is a fundamental of life, especially for the youth.

Chantana et al. noted that Secondary education is fundamental education for all, in accordance with the 1992 National Education Plan of Thailand. It has already been expanded to every rural community now. The major principles are: the all-round development of human resources, the preservation of nature and the environment, the balance between external technology-know-how and traditional wisdom, and the balance between being self-supported and being interdependent.

Zhenxing observed that in the basic education of China, a major problem which has to be settled urgently is to abandon the traditional examination-directed pattern of education and to establish a new pattern - quality-enhancing education. The traditional pattern aims at the college-entry examination, causing overburden to the students. The new pattern, however, can succeed in making students capable of meeting the challenges of the 21st century.

Paul in his research observed that Papua New Guinea (PNG) thrives on its rich natural resources and cultural diversity accounting for more than 85 per cent of the population which continue to depend on rural subsistence economy. As a resource rich country with tremendous potential for economic growth, PNG however continues to suffer from converting its wealth to useful assets for the benefit of future generations ‘unless it gives priority to the health and education of its people within a well defined Strategy for sustainable development’(UNICEF 1998).

Denise noted that the Knowledge Era is at hand, moving us beyond the Industrial and Information Ages. The twentieth century model of education, Platonic in style and reminiscent of the Agricultural Age from which it emerged, will not meet the needs of the twenty first century. The new era is already challenging the value and concept of classic and traditional schooling, as learning in concept takes on new definitions and in delivery has new and different purveyors.

A new school client with special competencies not limited by specific skills training, employment programme strategies or degree-based qualifications, is the charter for education in the new millennium. This new client will operate in a world of work and lifestyle options outside of the past and present-day paradigm of 'the job'. A learning value chain exists which is about lifelong learning – a learning which by its very nature is not limited to the domain of the compulsory schooling mechanism. Accordingly, secondary schooling, must make its niche in the education market place. New and various forces compete with compulsory education in the skills and knowledge arena and so secondary schooling must redefine itself in the new millennium. The focus for the new learning paradigm must be the client and not scores; on learning not curriculum; and on the holistic dimension of life preparation to include attitudes, and not just measurable skills and knowledge.

Redefining the 'c' in secondary education: the challenges of the 21st century client, competencies and curriculum, will consider:

- the relevance of secondary education- pedagogy, curriculum, teacher education, flexibility in delivery;
- employment versus employability in the guest for sustainable futures for youth; and
- innovative learning experience and opportunities.

Various business and learning examples will be cited and the presentation will include examples of business and student interaction, and partnership in a dynamic visual format.

Munkhjargal study indicated that "The Mongolian human resource development and education reform Master Plan" is one of the central to educational development policy Six major education and human resource activity areas are identified in the Master Plan namely, preservation and enhancement of basic and generals secondary education for both rural and urban populations, reforming higher education to serve national development needs more effectively, rationalization of systems of providing vocational skills, providing appropriate learning opportunities for out-of-school youth and adults.; meeting the needs for improved educational management; increasing the efficiency of the MOE (Ministry of Education) structures and operations.

Pornchulee et al purpose of this research is to study the future scenarios of Thailand and the world in the 21st Century so as to propose an educational model for equilibrium in the context of 21st Century in Thailand. The methodology employed was the future scanning process wherein approximately 200 documents, comprising texts, research results, articles and seminar proceedings were scanned and 30 experts contributed in scrutinizing the draft model according to the Connoiseurship Model procedures of naturalistic inquiry.

The results from the scanning process revealed both the Thai and the World contexts, which were presented in a paradigm and five dendograms, namely, (1) Thai context towards the future; (2) Thai economic context; (3) Thai social and cultural context; (4) Thai political context; (5) Thai educational context, upon which the proposed model are based. The final draft of the model was presented as a paradigm and a table comparing scenarios of the 21"' Century Thai education with and without the reform proposed by the model, encompassing the following attributes: (1) A Composite Profile; (2) Morality, Ethics and Values; (3) Curriculum; (4) Instruction; (5) Disciplines; (6) Evaluation; (7) Directions and Resources; and (8) Administration.

The paper by Sapra attempts to analyse the problem of youth arising out of changes in social, political, economic, technological and cultural domains in India since independence. The analysis reveals that the impact of such changes as the breakup of the joint family system, increasing divorce rates, environmental degradation, population explosion, criminalisation of politics, increasing incidence of unemployment, breathtaking technological advancements (particularly information technology revolution, cable TV, etc.), and the erosion of values on the psyche of Indian Youth, have been so great that it has rendered the youth virtually directionless and totally confused.

The paper also traces in historical perspective the process of secondary education reform in India in terms of its quantitative expansion and qualitative improvement during the period 1947-l997. Keeping in view the equity principle, quantitative expansion throws light on achievements in providing secondary education facilities for the underprivileged segments of population, such as girls, scheduled castes, scheduled tribes and minorities. Qualitative improvement covers such areas as structure, facilities, curriculum, teaching methods, instructional materials, teacher education, evaluation, supervision, etc. The paper also examines how secondary education reform has impacted the problems of youth.

The paper concludes that the reconstruction of secondary education attempted in the last fifty years has been merely cosmetic in nature. It also argues that, because of excessive emphasis on rote memorisation, addition of more subjects in the name of 'curriculum enrichment' and virtual neglect of noncognitive aspects, the secondary education reform has failed to address the core problem of the increasing tension among students, this pushing some of them into -drugs, sub-social activities and, in some cases, even to committing suicide. The paper, inter alia, suggests that secondary education in India in the new millennium will have to be revamped by placing equal emphasis on the development of EQ (Emotional Quotient) as that of IQ, and training students in stress management.

The work by Strangward indicated that for at least three decades there has been concern in the developed countries about the pessimistic attitudes shown by young people. They may be worried at the personal level about opportunities for their future employment; many feel overwhelmed by the changes in the world and the responsibilities they feel for sustaining the ecology of our planet, protecting its resources, facing and solving global crises. As educators, we must help our young people face their concerns with optimism and confidence. A key step is to prepare them for making important decisions about their future tertiary courses and/or employment. The Future Problem Solving Programme trains students to explore issues, think critically, futuristically and positively, work independently and in teams. With the explosion of information available on the Internet, educators cannot give students all the content they will need for their futures. They must learn research skills to discriminate so that they select relevant material. They must learn thinking. Skills to use burgeoning technology. They must learn to think creatively about employment. Although, as its name implies, FPS has its main thrust in the future, this paper will demonstrate how the FPS process may be used for decision-making and community problem solving in the present. This training will help prepare students to become an ethical workforce in the future.

The Australian programme has shown the flexibility of the components of the FPS programme : its adaptability for general classroom use so that all students may experience success with him proved skills in communication, problem solving and an increased optimism towards their own ability to contend with issues emerging in the future.

The work by **Winter** greatly discussed The UNESCO Delors Report ('Learning: The Treasure Within') presents a vision for education in the next century in which great importance is placed on 'learning to be'; broadly entailing the development of personality, and specifically involving the enhancement of abilities to act autonomously, to exercise judgment and to accept personal responsibility. Further, the Delors Report discusses the many tensions to which people are subjected in today's complex world. In view of these tensions, it is particularly important that schools develop students' abilities for purposeful and positive social problem solving.

This paper describes one approach to the development of these faculties. The "Thought Power" programme aims to cultivate students' ability to harness helpful thoughts and suppress harmful thoughts in solving their personal and interpersonal problems. A version of the programme was used in a secondary school in Hong Kong. The programme focused on topics such as (i) identifying unpleasant feelings, (ii) becoming aware of the role of thoughts in generating feelings, (iii) identifying harmful thoughts that prompt unpleasant

feelings, (iv) identifying automatic harmful thoughts, (v) replacing harmful thoughts with helpful thoughts that generate positive feelings, and (vi) making helpful thoughts thoroughly automatic. Data suggest that the programme can lead to reduced levels of harmful thinking and increased levels of helpful thinking, with consequent reduced stress levels, increased happiness and, importantly increased perceptions of control by students over their own lives.This, and other, research offers support the case for incorporating programmes designed to foster positive thinking patterns in secondary schools of the 21st century.

Xian in his study indicated that China, as a developing country with rich human resources, attaches great importance to its manpower system reform. Secondary education plays an important and far-reaching role in this project. (By secondary education, we mean the level between the junior middle school and the university.) The junior middle school graduates are too young and inexperienced, so they must receive further training. Today, we need skilled workers and technicians as well as scientists, and there are far more skilled workers than scientists in China. Some measures taken to promote secondary education include: general education and job-training courses to be merged; private school to be supported; and the employment of more graduates from the secondary education schools.

By reviewing above papers abstracts, following points were considered for this research.

i) Secondary Education can play a major role for Human Resource Development.
ii) Secondary Education in India will have to be revamped, restructured by placing equal emphasis on the development of basic employability skill.

Studies in Overseas

Employability skills are not unique and are of growing importance in the international context. Canada and Singapore have their own systems, referred to as employability skills, while the US (SCANS Competencies) and the UK (Key Skills) address a similar set of generic or soft skills. Each of these systems is similar in that that they are not specifically designed for the higher education sector. With the exception of Key Skills in the UK, which is primarily directed at secondary students, all of these systems were developed for vocational education systems.

A scan of international literature in this area shows that there is no agreed definition of the term 'employability'. Some argue that employment rates following graduation, is a sufficient measure of employability. Others go beyond this and emphasise the importance of performance in those job roles. Little describes employability as : a set of achievements, understanding and personal attributes that make individuals more likely to gain employment

and be successful in their chosen occupations. (Sirca defined employability as : a set of achievements - skills, understanding and personal characteristics - which help graduates to become employable and successful in a chosen career.

In Canada and the US, work based learning, either as voluntary experience or paid work, and individual student portfolios are the preferred methods for developing and recording employability skills[39] (Little, 2003). In Hong Kong, the University Grants Committee surveys approximately 2000 employers each year to determine their satisfaction with graduates from the local universities, and results are fed back to the universities.

The higher education sector, throughout Europe in particular, has increasingly focused on the importance of the concept of employability. In Europe the changes to higher education brought about by the Bologna Process have given it a particular emphasis, as seen in the introduction of separate study cycles; firstly an undergraduate level, which is linked to the labour market, and a postgraduate level, which leads to Master's or PhD level qualifications [40] (Sirca et al. 2006). A number of supporting European projects have occurred which address employability outcomes and have also begun the work of articulating the differences that exist across disciplines and national boundaries.

There is a wide variety of approaches taken in different countries. England, Scotland and Wales appear to be the only countries that have national approaches to employability skills in the higher education sector (as distinct from institutional practices, or practices that are designed primarily for school students, or adults with little or no formal qualifications).

Baxter and Young report the results of a survey of manufacturing, services, public, wholesale, and retail employers to determine what skills and attitudes are of greatest importance on the job, which skills and attitudes require more emphasis in the schools, and how they determine whether workers possess desired skills and attitudes.

Beach research on the employability skills desired by employers describes development and piloting of a training program, the Affective Competency Workshops, intended to help employees identify employability skill areas in need of improvement and to address these systematically. Evaluations of the pilot effort were positive.

The Commission on the Skills of the American Workforce Discuses the problem of low productivity in the American economy, skill needs of prospective employees as expressed by business and industry representatives and recommendations for improving skills and school-to-work transitions of American school children.

Painter in his research reports the results of a literature review and a study concerning the kinds of communications skills needed by students in technical career preparation programs and contrasts these with findings about the types of communications skills these students are typically taught.

Poole cites the human relations capabilities employers identify as the most important for prospective employees to have and argues that work experience programs are the best means of inculcating these capabilities in students.

The following is a summary review of SCAN report; (1992, 2000)

Restates findings from other SCANS investigations as a context for making recommendations for fundamental restructuring of education to equip students with skills for the employment market of the future.

Identifies the job-relevant skills identified by the SCANS group and gives examples of how they are applied in a variety of jobs. Also focuses on specific occupations and shows how each makes use of the SCANS skills. Provides suggestions for the use of the resource by people in different professional roles.

Offers educators ideas for teaching the SCANS competencies by providing examples of activities to use with students, organized by traditional curricular areas and by specific jobs. Describes real-world projects that have been undertaken to teach the SCANS skills. Includes sections on ESL students, computer literacy and assessment.

Identifies and discusses the ways that the workplace has changed in this century and introduces and describes the components that make up the SCANS "Workplace Know-How." Describes five scenarios-from the manufacturing, health services, retail trade, accommodations and food services, and office services sectors of the economy-to illustrate how this know-how is applied in actual work situations. Offers recommendations.

The critical employability skills identified by SCANS report considerably revealed those that were cited most frequently and arranged in three categories of basic skills, high order thinking skills and affective or personal skills. The results of this survey confirms that specific occupational skills are less crucial for and employees than that of high level of literacy, ability to communicate etc. Employers place quartet importance on employee attitude, basic skills, thinking skills etc. Employers find for too many employees deficient in employability skills and want the schools to place more emphasis on developing these skills.

The SCANS report offers educators ideas for teaching SCANS skills / competencies by providing examples of activities to use with students.

Packer identifies generic skills and competencies in the SCANS report as basic to all employment and discusses the need for educators and business people to collaborate to assure to develop skills.

Lankard indicated that In the schools setting employability skills are best taught and learned when class rooms replicate the key features of real work place.

Stasz et al. investigated the instructional and class room practices to determine generic employability skills they seek to teach of how these skills are imparted in students.Lankard Summarizes research on the generic employability skills employers desire in job applicants in addition to basic and job-specific skills. Cites approaches indicated by research as effective in fostering the development of these skills in secondary students.

Rand in his research presents the results of a study aimed at identifying the essential features of classes which were successful in imparting to students generic work skills and work related attitudes.

A more complete report of this research may be found in Stasz, et al. (1993), as follows: the research indicates that the Manpower Demonstration Research Corporation to identify the features of school-to-work transition programs that have been successful at moving disadvantaged young people into productive postsecondary employment or additional education. Cites 10 key elements.

Stasz et al investigate the instructional and classroom management practices of four successful vocational educators to determine what kinds of generic employability skills they seek to teach and how these skills are imparted to students. Classroom observation, surveys, and interviews were used to gather information.

Bhaerman and Spill presents the research- and experience-based views of two experts in the vocational education field, including convictions about what constitute employability skills, what practices are most effective in developing these skills in students and employees, and what kinds of assessments enable teachers and employers to know whether and to what degree students possess employability skills.

Byrne research indicated that the "more or less do-it-yourself system for making the transition from school to work" prevalent in the U.S., contrasts this haphazard approach with the systematic approach taken in other countries, and identifies components of the "overall systemic change" advocated by the authors.

Charner Explains the concept of employability credentials-documentation of a young person's development of employability skills-and discusses the Career Passport program, a specific approach to documenting and displaying the employability skills students have acquired.

Herr and Johnson identified employability skills within the three categories of general, occupational, and firm-specific, and discusses activities that can be undertaken by guidance and counseling personnel to help students develop general employability skills.

Kazis and Barton criticizes the haphazard manner in which school-to-work transitions occur in the U.S., and contrasts this with the efficient and systematic transition systems in Japan and several European countries. Identifies promising practices and makes recommendations for federal initiatives.

The research by Poole contains classroom activities intended to integrate employability skills into Wisconsin's K-12 curriculum. For each of nine skills, activities are provided for lower elementary, upper elementary, middle/junior high, and high school students. Employability skills curriculum content was derived from extensive research on skill needs and deficiencies of entry-level workers.

Human capital theory by Schultz (1963) According to Schultz, Human capital theory which displayed the role of investment in education in order to boost economic and social achievements Education is a process to create potential and talent. It is also intended to train, discipline and reveal one's ability. This means education and the increase of productive workers among students is a form of human investment [41].

Human capital is also regarded as a labour input for a country's economic growth and development. Also investment in education is very useful for increasing worker's productivity and a nations economy. It is the economical gain towards the nation.

Becker believed that height of workforce production have positive relationship with educational and training form. He also explained that education through knowledge delivery and useful skill presentation would be able to increase employee's productivity and at the same time lead to increase of incomes which would improve employer's life. That income becomes motivation to work hard and aspiration in a career [42].

Education and training (skills development) are lifelong learning process and functions as the key to produce qualified and skilled human capital.

According to Lange and Topel a person with great skills will be able to increase employers or the workplace productivity[43]. Buck and Barick state that employability skills are non technical skills. The characteristics of employability skills are reading, arithmetic, problem solving, decision making[44]. According to Robinson employability skills are the basic of skills needed for one to get job and enable him or her to carry out duties well[45].

From the above review it was concluded that;

A) Employers want entry level employees to possess an array of Basic, Higher Order and affective employability skills.
B) The demand for Basic (Academic), Higher Order Thinking and affective (personal) employability skills reflects profound changes in the workplace.
C) Employability skills are best learned when they are included among instructional goals and explicitly taught in secondary schools.
D) In the secondary schools setting employability skills are best taught and learned when class rooms replicate the key features of real work place.

Based on above conclusions and research about basic employability skills researcher under guidance of his guide and experts advice decided to focus following basic employability skills for this research.

1) Reading skills
2) Writing skills
3) Listening skills
4) High Order Thinking Skills
5) Ethics and Values
6) Motivation
7) Entrepreneurial Skills
8) Self Confidence

Table : Definitions of soft employability skills and attributes

Skills / attributes	Definition
(Self) confidence	Belief in oneself or one's abilities
Self-esteem	A positive or negative orientation toward oneself ; an overall evaluation of one's worth or value
Motivation	Interest / engagement, effort and persistence / work ethic
Self-efficacy	Belief in one's ability to succeed in a particular situation
Social / Interpersonal skills	Ability to interact appropriately with other people, without undue conflict or discomfort
Communication skills	Ability to convey information effectively so that it is received and understood ; appropriate verbal / nonverbal communication with colleagues, managers and customers / others
Teamwork	Ability to work cooperatively with others
Assertiveness	Ability to confidently express views or needs without either aggression / dominance / undue submissiveness towards others
Self-control	Ability to control own emotions and behavior, particularly in difficult situations or under stress
Reliability	Attendance, time-keeping, consistent standards
Positive attitude	Keen to work, learn, accept feedback and take responsibility
Presentation	Consistently clean, tidy and appropriately dressed, with a polite and professional manner
Planning	Ability to plan tasks and monitor progress
Problem-solving	Ability to identify problems and devise solutions
Prioritising	Ability to identify and focus on priority tasks

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Chapter III

Tool Construction

The present study primarily focused on investing basic employability skills (BES) of secondary school children. It necessitated having good / proper tools measuring basic employability skills (BES) of secondary school children. In this present study, basic employability skills are measured on the basic of academic (Reading skill, Writing skill, Listening skill) and higher order thinking skills (Analysis, Creativity, Evaluation) and personal skills (Ethics & Values, Motivation, Entrepreneurial skills and Self confidence).The tools measuring basic employability skills (BES) have been constructed by the researcher this chapter begins with explanation of rationale of constructing the tools. As the investigator has constructed the tools, this chapter explains the nature of items of each tool. The reliability and validity of tools has also been stated in this chapter.

Employability Skills

Definition of employability skills : Abilities of employee required by employers to perform the tasks of organization and to achieve goals.

Employability skills

- Composite skills : Technical and non-technical skills
- Natures are different for different jobs
- However certain skills / personal qualities are basic and common for all types of jobs / occupation
- Examples : Communication Skills, Interpersonal Skills, Analytical Skills etc.

Basic Employability Skills (BES)

Definition : Group of some important basic or foundation skills / qualities which instilled in each individual to produce productive workforce in all profession

Advantages of Basic Employability Skills (BES)

- Enhance employability
- Occupational skills for all sectors

Employee Focus for this research (sectors)

- Since Basic Employability Skills are work readiness skills, they are very important for employee having basic education (secondary or higher secondary)
- Also Basic Employability Skills are beneficial for entry level employee from sectors like **Marketing, Tourism, Agriculture** and **Construction**

Basic Employability Skills for this Research

I) Academic Skills

1) **Listening Skills :** It enables to understand meaning of words and sentences, oral communication, to interpret spontaneous response to etc.
2) **Writing Skills :** It enables to communicate thoughts, ideas, information and messages in writing and creates documents such as letters, directions, manuals, reports, graphs and flow charts etc.
3) **Reading Skills :** It enables to locate, understand and interpret written information in prose and in documents such as manuals, graphs and schedules etc.

II) High Order Thinking Skills

1) **Analytical skills :** It is the capacity to examine carefully. It is the ability to analyses information and experiences in an objective manner to perceive the total situation with logic and reasons.
2) **Creativity Skills :** It is the potential capacity to solve problems. It enables us to explore alternatives and various consequences of our actions and non actions.
3) **Evaluation Skills :** It is the capacity to study the facts and form the opinion. It is the ability to evaluate information and take informed decision by assessing the advantages and disadvantages of different option.

III) Personal Skills / Qualities

1) **Self confidence :** It enable to believes in own self worth and maintains a positive view of self.
2) **Ethics and Values :** It enables to develop integrity and honesty. It develops trust on values. It helps to understand the impact of violating social beliefs and codes of an organization, self and others and chooses an ethical course of action. It helps to develop beliefs and values that every employee need to be a good citizen in community or in working place.
3) **Motivation :** It is the drive which enable to get things done. It enables to start the activities, direct the activities and continued so that physical or psychological needs or wants are met.

4) Entrepreneurial Skills

It is the ability of the individual possessing wide range of essential skills and attributes to create, cope with and enjoy change and make creative contribution in the word of work whether employment or self employment. It includes the proficiencies like creativity, self belief, energy, initiative and a displined and positive attitude towards work.

It starts early in the education journey of the learners and maintain over the entire education period.

Employability Skills	Nature of Job / Sector Suitable
1) Writing Skills	Media (Copy writer), Translators, Banking, Journalist
2) Listening Skills	Interpreter, Teacher
3) Reading Skills	Advt. Media, TV / Radio
4) Thinking Skills	Research Assistant, Scientist, Advertising
5) Motivation, Self Confidence, Ethics and Values	All occupations / Sectors
6) Entrepreneurial Skills	All occupations / Sectors

Research Tools

The researcher constructed research tools with the help of his research guide and experts. The details of the research tools are given below.

Tools for testing basic employability skills

Skills	Pattern of Questions	Duration for Testing	No.of Questions
1) Reading Skills	Descriptive	20 min.	2
2) Writing Skills	Descriptive	25 min.	2
3) Listening Skills	Descriptive	10 min.	2
4) High Order Thinking Skills	Making Preference	35 min.	20
5) Ethics and Values, Motivation, Self Confidence	Making Preference	12 min. each	10 Q. each
6) Entrepreneurial Skills	Making Preference	25 min.	37

Construction of Tools (Questionnaire)

The employability skills in the research have been identified through U.S. development of labour's secretary's commission on achieving necessary skills (SCANS).

For this research, the selection of exact attributes and skills was a complex and difficult task. But the SCANS 1992 report entitled "What Work Requires of Schools", established a base for basic employability skills.

By reviewing literature, discussing with experts from education and management field, the investigator decided to focus on following skills as basic employability skills for his research.

1) Academic and Higher Order Thinking Skills
   (Reading / Writing / Listening)
2) Personal Skills and Qualities
   (Ethics and Values, Motivation, Entrepreneurial Skills, Self confidence)

For each of skill i.e. Reading, Writing and Listening, investigator has constructed own tools. The investigator wanted to have precise tool for measurement which would not be too lengthy but appropriately measure Reading, Writing and Listening skills. Taking into account the purpose of the study nature of sample and student's time no standardized tool was available. Hence the investigator decided to construct tools measuring Reading, Writing and Listening skills.

In this study, personal qualities namely Ethics and Values, Motivation, Entrepreneurial Skills and Self confidence have been explored among secondary school students. Standardized tools measuring Ethic and Values, Motivation, Entrepreneurial skills and Self confidence were available.

However, there were too lengthy and some of items were not applicable to school children. So, it necessitated for the investigator to construct tools appropriate for the sample.

Questionnaire for Survey

A) To measure Academic Skills : For framing questionnaire, the teachers manual for English subject (Marathi Medium Std. X) published by State Board of Maharashtra was considered as valid and reliable source.

B) To measure Higher Thinking Skills (HOTS) : To assess the analytical ability, evaluation capacity and creativity, a questionnaire was formed and conducted. It was based on Std. IX and X Science, Algebra and Geometry Syllabus of State Board of Maharashtra. It was also a valid and reliable source.

C) To measure Personal Skills and Qualities : The standardized tests on Motivation (Mukherjee, 2000) and on Self Confidence (Basavanna, 1975) were adopted. The researcher reviewed the existing literature on Ethics and Values as well as on Entrepreneurial Skills. The items were constricted in simple English and translated to Marathi. Items were given for content validation to the experts and basic quantitative analysis (such as reliability, mean, variability etc.) on pilot sample gave favourable results regarding the usage of tools.

Rational of the Tool

By reviewing the literature, considering the SCANS report, discussing with experts from education and management field and guide, the researcher had decided to focus on basic employability skills for his research

For academic and thinking skills

- Due to non availability of standardized tools researcher had prepared his own research tools with the help of experts.
- It was based on curriculum of Std. IX and X std of SSC board of Maharashtra (English, Geometry, Algebra, Science subjects)

For personal skills and qualities.

For ethics and values, motivation, Entrepreneurial skills and self confidence, Standardized tools were used.

Detailed Analysis (Question wise)

I) Academic Skills

The following assessment functions for Reading, Writing and Listening skills were framed and applied.

a) For reading skills

Two descriptive questions were framed. The power of skimming, scanning and understanding the concept and grammar, comprehension ability etc. were tested.

b) For writing skills

Two descriptive questions were framed. The power of expression, how to extract information and present in a diagrammatic form, understanding of content etc. were tested.

c) For listening skills

The power of understanding of words, sentences and phrases and to write them correctly etc.

Illustration (For reading skills)

The measured value of mean for reading skills was 5.9370 which were lying between 5 – 7, hence the attainment level of reading skill was moderate.

II) High order thinking skills (HOT skills)

To assess the analytical ability, evaluation capacity and creativity, a questionnaire was framed and applied.

For Higher Order Thinking Skills

Total Questions were asked	=	20 Questions
Total Marks	=	20 marks (20 Q x 1)

Level of Attainment (Score)

Low Level	Moderate Level	High Level
0 – 6	7 – 13	14 – 20

Since the mean values of HOT Skills was 8.544 which was lying between 7 – 13. The result was moderate level.

III) Entrepreneurial skills

The concept of entrepreneurial skills includes proficiencies live creativity, planning, decision making, leadership, negotiation skills, imitativeness, team work, confidence, marketing, social attitude etc.

By framing 37 questions, researcher tried to assess most of the proficiencies of entrepreneurial skills present in secondary students.

Some examples

Questionnaire for Entrepreneurial skills

Sr. No.	Q. No.	To Test Proficiency for Entrepreneurial
1	Q. 4	Confidence
2	Q. 6	Initiativeness
3	Q. 19	Social Attitude
4	Q. 36	Negotiation Skills

For Entrepreneurial Skills

Total Questions = 37 Questions

Total Marks = 148 marks (37 Q x 4)

a) Minimum Score = 37

Maximum Score = 148

b) Lower Level of Attainment

For $100 \rightarrow 35$ $\therefore \frac{100}{148} = \frac{35}{x}$ $\therefore x = 51.80$

$148 \rightarrow x$ $\therefore x = 52$

∴ Lower Level is 37 – 52

c) Higher Level of Attainment

For $100 \rightarrow 75$ $\therefore \frac{100}{148} = \frac{75}{y}$ $\therefore y = 111.00$

$148 \rightarrow y$ $\therefore y = 111$

∴ Higher Level is 111 – 148

d) Moderate Level of attainment 53 - 110

Since the mean values of entrepreneurial skills was 106.4233 which was lying between 53 – 110, the level of attainment for entrepreneurial skills was moderate.

Similarly for all other remaining skills, the result was moderate level.

IV) For other skills

To assess the level of attainment of Ethics and Values, Self motivation and Self confidence, similar procedure was adopted. The results was moderate level of attainment.

Sample Items of Questionnaire

A – Reading Skills

Sample Question (A passage)

Two unseen extracts or paragraphs (5 marks each - total 10 marks) were selected from comprehension exercise book based on curriculum of Std. IX and X Std. of SSC Board of Maharashtra. In each passage, out of three, two factual question (3 marks) were asked for which answers could be easily found or located from text. One word, one phrase answers were admissible. Third question was based on personal response for which answers would be related to student's own ideas and interests in relation to the topic or to the authors point of view. The assessment functions were testing of skimming and scanning, understanding the grammar, concept etc.

Sample Question (A passage)

The following is the passage selected for the purpose of survey.

Read the passage & answer the questions given below : Total Marks 5

Sinhagad, formerly known as Kondana, was one of the most impregnable forts in western India. The fort changed hands many times; from Mohammed Tughlak in 1340 A.D. to the British in 1918 A.D. Shivaji conquered the fort in 1670 but lost his ablest commander, Tanaji Malusare. When Shivaji learnt the sad news of Tanaji's death after a gallant fight in the battle for the fort, he exclaimed, "I won the fort but lost the lion."

Thence the name of the fort was changed to Sinhagad, meaning lion-fort, in memory of Tanaji Malusare.

How to go:

Air : The nearest airport is Pune-24 km.

Rail : The nearest railhead is Pune - 24 km on Central Railway;
Mumbai-Pune : 192 km.

Road : Mumbai-Sinhagad : 194 km.

Pune-Sinhagad : 24 km

S.T. buses ply from Pune, Mumbai to Sinhagad.

a) What was Sinhagad formerly known as ? **1**

_____

_____

b) How did Sinhagad get its name ? **2**

_____

_____

c) Write the names of any four places in Maharashtra you have visited or would like to visit. **2**

_____

_____

B – Writing Skills

Sample Question (A report)

(Two sub questions, A report writing and a information transfer skills carrying 5 marks each total 10 marks) were taken from writing skills exercise book based on IX and X std. syllabus.

In a report writing skill question, students were asked to prepare a report based on the events with help of given points: In a information transfer question (from Non-verbal to verbal) the students were asked to write a paragraph on information presented in simple diagram. The assessment factors were : to test power of expression, how to extract information and present in a diagrammatic form, how to describe people, events, places, interpretation skills, understanding of content, vocabulary range, background knowledge etc.

The following is the report writing selected for purpose of survey.

Write a report on how your school celebrated Environment Day : Total Marks 5

Make use of the following questions.

1) When did you celebrate environment day ?

2) What were the arrangements made ?

3) Who were present on the occasion ?

4) How did you celebrate it ?

5) Why did you decide to celebrate it ?

6) Where were all the arrangements made ?

7) What is the importance of the day ?

_____

_____

_____

_____

_____

_____

_____

_____

C – Listening Skills

Sample Question (Words / Sentences)

Two types of tasks : Listening and writing words and sentences, were conducted which were carrying 3 marks each. In this tasks the researcher was reading five words and five sentences twice loudly and the students were asked to write any three words and sentences from it on answer sheet in 10 minutes.

In, this test, the ability to listen with understanding of words, phrases, short sentences and to write it correctly were tested.

The following list of words and sentences is selected for purpose of survey.

1) The words and sentences for the oral test for listening skill

The teacher will read out (only 3 words and only 3 sentences) and each word and sentence) will be read twice. Students have to listen the words and sentences carefully and write them.

Words (any three)

1) listen	2) escape	3) fibres	4) brook
5) altitude	6) uproot	7) shelter	8) praise
9) creative	10) prevent	11) country	12) recover

2) Sentences (any three)

1) Take this medicine twice a day.

2) What a wonderful day it is !

3) Can you help me now ?

4) Give me a glass water.

5) How many colours are there in a rainbow ?

6) Don’t make noise here.

7) What a beautiful scene it is !

8) May I come in sir ?

9) Do you like playing cricket ?

10) How many members are there in your family ?

Listening Skill

(Answer Paper)

Total marks : 6

Three Words:

_____

_____

_____

Three Sentences:

_____

_____

_____

_____

_____

_____

D – High order Thinking Skills

To assess the analytical ability, evaluation capacity and creativity, a questionnaire / test consisting 20 multiple choice questions for 20 marks was framed and conducted. It was based on IX and X Std. Science, Algebra and Geometry Syllabus of Secondary School Board of Maharashtra. The main criteria for assessing were to test the ability of synthesis, generalization, explanation, interpretation, manipulation and understanding the concepts etc.

Sample Questions

Q.1 – In polluted cities, it may harmful to get wet in first shower, during monsoon because first shower …….

a) may develop cold in body b) may develop fever

c) may consist acid rain d) none of these

Q.2 – Amar is travelling by his car with uniform velocity in the same direction. What will be the acceleration of his car.

a) positive b) negative

c) zero d) none of these

Personal Qualities and Skills

Table III (a)

Table showing sample item, response pattern and scoring of the tools

Tool	Sample Item	Options	Scoring
Ethics and Values	Do you believe that discrimination in any form is wrong	True False	1 2
Motivation	I am always careful	a) To please others with my manners b) To do my best in whatever I undertake c) To perform activities in my own way	a) -1 b) -3 c) -2
Entrepreneurial Skills	Does it often take you a long time to get started on something	a) Always b) Often c) Sometimes d) Never	1 2 3 4
Self confidence	I am hesitant about taking decisions on my own	True False	1 2

Reliability and Validity

The field of education is in a state of flux and educational testing reflects it, both in the US and around the world (Anastasi and Vrbina, 2008). Many observers agree that there is a need to integrate assessment and instruction in such a way that these aspects of the educational enterprise of the learner. In the present research, the researcher has constructed tools to assess basic employability skills of the learner. (i.e. reading, writing and listening skills) Even higher order skills i.e. (analytical, synthesis and evaluate aspects) have been assessed. Along with cognitive aspects the present research has also included aspects related to personal skills. Assessment of personal skills and qualities includes ethics and values, motivation, entrepreneurship skills and self confidence.

Thus, the research examines cognitive aspects as well as behavioral aspects of the learner. The researcher constructed tests to measure each of the skills included in the study. The tests constructed are objective measures of the skills examined in the study. In the earlier section of the chapter the description of the tests has been given. For any test to be put to use, its reliability and validity are essential factors.

Reliability

Reliability refers to the consistency of scores obtained by the same persons when they are reexamined with same sets on different occasions or with different sets of equivalent items or under other variable examining conditions. The concept of reliability underlies statistical computations by which we can predict the range of fluctuation likely to occur in a single individual's score as a result of irrelevant or unknown chance factors. The concept of reliability has been used to cover several aspects of score consistency. Thus, the test reliability indicates the extent to which individual differences in test scores are attributable to "true" differences in the characteristics under consideration and the extent to which they are attributable to chance errors. Higher the reliability coefficient more the likelihood of true differences. There are different ways by which reliability of a test can be computed. The type of reliability of a test can be computed. The type of reliability measure depends on the nature of the test.

In the present study, items for reading, writing, listening and higher order skills have been adapted from the "The Teacher Manual for English subject (Marathi Medium Std. IX and X) published by the State Board of Maharashtra and the Std. IX and X textbooks of science and mathematics of SSC Board of Maharashtra. Separate reliability and validity for the tests assessing reading, writing, Listening and HOT Skills has not been statistically computed.

Extent of tests was however shown to several academicians. Approval of the items was seeked by the experts and on their confirmation the tests items were finalized. The content validity was reported to be satisfactory. For the tests constructed assessing personal qualities it was felt necessary to compute reliability indices. The tests on ethics and values, motivation, entrepreneurship skills and self confidence were administered to pilot sample of 97 Marathi Medium studying in Std. IX and Std. X from different schools. The data was scored. Score of each respondent on each item of the respective test was entered in SPSS (17^{th} version) Cronbach Alpha reliability coefficient was computed for ethics and values test, motivation tests and entrepreneurship skills tests. Kuder-Richardson reliability coefficient was computed for test of self confidence.

Kuder-Richardson and Cronbach Alpha are methods for finding reliability based on the consistency of responses to all items in the test. For such type of reliability the tests needs to have homogenous items. Since each of test measured a single aspect inter item consistency proved to be the best method for finding reliability.

Table III (b)

Table showing no. of items, range of scores and reliability coefficient of the tools

Variable	No. of Statements / Questions	Range of Scores	Cronbach's alpha
Ethics and Values	10	10 – 20	0.82
Motivation	10	10 – 30	0.84
Entrepreneurial Skills	37	37 – 148	0.88
Self confidence	10	10 – 20	0.79

The Cronbach's Alpha value for overall scale is 0.82, 0.84, 0.88 and 0.79 resp. The Cronbach's Alpha value based on standardized items is 0.70. [Pedhazur and Schmelkin (1991)] Hence reliability of tools was established.

Table III (c)

Score Measuring

Sr. No.	Variable (Skills)	Low	Moderate	High	Total No. of Question
1	Reading Skills	0 – 4	5 – 7	8 – 10	Q.1 / Q.2
2	Writing Skills	0 – 4	5 – 7	8 – 10	Q.1 / Q.2
3	Listening Skills	0 – 2	3 – 4	5 – 6	Q.1 / Q.2
4 5 6	High Order Thinking Skills	0 – 6	7 – 13	14 – 20	Q.7 to Q.20
7	Ethics and Values	10 – 20	21 – 30	31 – 40	Q.1 to Q.10
8	Motivation	10 – 16	17 – 23	24 – 30	Q.1 to Q.10
9	Entrepreneurial Skills	37 – 74	75 – 110	111 – 148	Q.1 to Q.37
10	Self confidence	10 – 13	14 – 17	18 – 20	Q.1 to Q.10

Tools constructed and used for Teachers Survey

The multiple type questionnaire contains 10 questions pertaining to the various aspects of overall development of students.

The first section consisted questions related to relation between student and teacher, personality development subject, higher order thinking skills, career orientated, knowledge about management science. The second section of questionnaire was dealing with personal views of teachers regarding overall development of student.

Reference

Pedhazue E.J. and Schmelkin, L.P. (1991) Measurement, design and analysis. An integrated Approach, Hill Sdale, New Jersey LEA.

Chapter IV

Research Methodology

The focus of this study was to assess the attainment of Basic Employability Skills among secondary students. This study also examined the effect of demographic factors on presence of basic employability skills among secondary students.

Statement of the problem

"Preparation of a valid research tool for assessing the skills of basic employability possessed by secondary school students (Std. IX and X) from Marathi Medium and Semi-English Medium Secondary Schools in Pimpri Chinchwad Area during 2012-13 and identifying the relation between the basic employability skills and demographic sociological / social variables such as Gender, Area or Locality of school, type of school and instruction medium."

Topic of the Study

The investigator states the topic of his research thus :

"A study of implementation of the basic employability skills amongst secondary school students (Std. IX and X) from Marathi Medium Schools with reference to Pimpri Chinchwad Area (during 2012 – 13)

Research Design

Type of Research : It was an empirical research as it was based on teaching experiences (22 years) of researcher from his own coaching institute for secondary students.

Variables such as Gender of student's, Types and Areas of school were affecting other variables. i.e. Basic Employability Skills (Reading, Motivation, etc.) These variables were identified and verified, which were measureable of interest to find the relation between them.

Nature of Research : It was applied research. The problem is skill gap was identified and defined. Efforts were undertaken by researcher to find probable solution or actions to solve the problem.

Some of the variables were qualitative (for teacher) and quantitative (for student) in nature and strictly demanded in-depth analysis of events which were based on experiences of researcher.

Hence nature of this research was mixed mode of descriptive, qualitative and quantitative in nature.

Type of analysis : It was qualitative and quantitative research analysis.

The variables like basic employability skills (Reading, Listening, Motivation etc.) are quantitatively analyzed and the school teacher opinions were qualitatively analyzed.

Operational Definitions

Basic Employability Skills

A) Academic Skills

a) Reading Skills b) Writing Skills c) Listening Skills

B) Thinking Skills

High Order Thinking Skills (Analysis, Creativity, Evalauation)

C) Personal Qualities

a) Ethics and Values

b) Motivation

c) Entrepreneurial Skills

d) Self-Confidence

Secondary School Students (Std. IX and X)

Standard IX and X

These are the classes in the secondary stage of school education ranging from Standard I and to Standard X. At the end of Standard X, the students will take final examination.

Operationally it means the students of Standards IX & X in the academic year 2012 – 13 from corporation and private marathi medium school in Pimpri-Chinchwad area.

Pimpri Chinchwad

It is a part of Pune district in state of Maharashtra. It consists of Urban, Semi urban and Rural area. Pimpri-Chinchwad Municipal Corporation Area consist total 22 villages. The details are as follows :

Name of Village	Type of Village (Urban/Semi Urban/Rural	Nos.
Pimpri, Chinchwad, Nigdi, Akurdi, Kasarwadi, Sangvi, Kalewadi, Dapodi	**Urban**	8
Rahatani, Tathawade, Talawade, Pimpale-Nilakh, Pimpale-Saudagar, Pimpale-Gurav	**Semi-Urban**	6
Moshi, Ravet, Punawale, Chikhali, Wakad, Bhosari, Thergaon, Talegaon-Dhabhade	**Rural**	8
	Total	**22**

Geographical Map for Pimpri Chinchwad Municipal Corporation is enclosed (Annexure)

Method of Investigation

As the area of researcher and the population of the study are vast the researcher has chosen the survey method for this study.

Objectives

1) To find the attainment level of basic employability skills in secondary school students.
2) To study the effect of demographic factors (Gender, Locality and Type of schools and Medium of Instruction) on basic employability skills.
3) To study the role of school teachers in teaching basic employability skills in secondary schools.

Hypothesis

H-1) Secondary School Students (Std. IX and X) from Marathi and Semi-English Medium Schools possess moderate level of basic employability skills (BES)

H-2) There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools (boys and girls) on basic employability skills (BES). (Gender of students)

H-3) There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools from Urban, Semi-urban and Rural areas on basic employability skills (BES) (Area of School)

H-4) Marathi Medium Secondary School Students (Std. IX and X) from Private Marathi Medium Schools and from Pimpri-Chinchwad Corporation Schools have same attainment level of basic employability skills. (Type of Schools)

H-5) There is no difference between students from Semi-English Medium Schools and Marathi Medium Schools on basic employability skills (BES) (Medium of instruction)

Population and sampling (For schools and students)

Sample size determination : In consultation with the guide, experts in educational and management field and earlier studies. The sample size for secondary schools, teachers and students was decided.

It was based on principles of stratification and proportion.

The sample size for schools was based on stratified sampling since school was not a homogenous group.

The population i.e. total schools was stratified based on strata like area of schools, types of school.

The sample size of students was based on simple random sampling on selection by school authority.

Sampling procedure : The proportional and incidental sampling techniques have been implemented to decide the sample.

The students i.e. samples were selected as instructed by the respective school authority.

i) For schools

Population

All 99 secondary Marathi Medium Schools from Pimpri-Chinchwad Corporation Area

The population of the present study consists of all secondary schools of Standard IX and X from 16 Pimpri Chinchwad Corporation Schools and 83 Private granted and non-granted Marathi Medium Secondary Schools in Pimpri Chinchwad Area.

Table IV(a)

Pimpri Chinchwad Area

Marathi Medium Secondary Schools (2011-12)

	Total Schools	Schools selected for survey	%
Pimpri Chinchwad Municipal Corporation Schools (PCMC Schools)	16	7	44 %
Private Marathi Medium Secondary Schools (Granted / Non-granted)	83	8	10 %
	99	15	15 %

Sampling and basis of selection of 15 schools.

Justification of selection of 15 schools

Pimpri-chinchwad municipal corporation area is politically divided into wards. e.g. Bhosari, Nigdi, Pimpri, Akurdi, Chinchwad. Researcher intended to cover sample representation from each ward consisting some specific backgrounds. Hence the15 schools out of 99 schools were stratified on the basis of backgrounds like Gender of students (Boys and Girls), Area of School (Urban, Semi-Urban and Rural), Type of school (Corporation and Private) and Medium of instructions (Semi-English and Marathi Medium).

For student

Population of students (IX and X Std.) from 15 schools

All secondary students (4176 No.) from 15 schools

	Total Population (IX and X Std.)	Sample selection	Sampling %
10th Std.	1929	442	-
9th Std.	2247	425	-
Total	**4176**	**867**	**20.76 %**

Sampling and basis of selection of students

Total samples of students are 867 No.

After fixing 15 schools, average 25 - 30 secondary students, from Std. IX and X from each school were randomly chosen to form the sample of the study.

Sampling % for students : 20.76 %

Table IV(b)

List of Schools Selected for Survey

Sr. No.	Name of School	Date of Survey	Area	No. of Samples Taken	
				IX Std.	X Std.
1	JPNV (Gharkul)	23/11/2012 and 26/11/2012	Nigdi-Pradhikaran	31	35
2	Bhairavnath School	03/12/2012 and 04/12/2012	Bhosari	30	29
3	PCMC, Landewadi	03/12/2012 and 04/12/2012	Bhosari	30	30
4	PCMC, Thergaon	05/12/2012 and 06/12/2012	Thergaon	32	30
5	PCMC, Wakad	5/12/2012 and 6/12/2012	Wakad	30	29
6	PCMC, Pimpale Gurav	07/12/2012	Pimpale-Gurav	31	26
7	PCMC, Pimpale Saudagar	08/12/2012 and 11/12/2012	Pimpale-Saudagar	27	35
8	PCMC, Pimpri Nagar	11/12/2012	Pimpri	28	29
9	Bhoir School	12/12/2012	Akurdi	25	20
10	PCMC, Sant Tukaram Nagar	12/12/2012	Sant Tukaram Nagar	30	26
11	New English School	12/12/2012	Chinchwad	33	30
12	Barane School	13/12/2012	Dange Chowk	31	30
13	Chapekar School	13/12/2012	Chinchwadgaon	26	26
14	New English School	13/12/2012	Bijali Nagar	32	30
15	JPNV (Gurukul)	14/12/2012	Nigdi	26	20
PCMC : Pimpri Chinchwad Corporation Secondary School				**442**	**425**
JPNV : Dyan Prabodhini School, Nigdi				**Total : 867**	

Table IV(c)

Gender Wise Distribution of the Samples

	Gender				
	Boys		Girls		Total
	Std. X	Std. IX	Std. X	Std. IX	
Population	981	1209	948	1038	4176
Sample Drawn	217	207	225	218	867
Percentage of Population	22.12	17.12	23.73	21.00	20.76

Table IV(d)

Area Wise Distribution of the Samples

Area / Locality	No. of Schools	Population		Samples Drawn		Percentage of Population	
		Std. X	Std. IX	Std. X	Std. IX	Std. X	Std. IX
Urban	7	539	635	200	190	36.73%	29.92 %
Semi-Urban	4	556	621	122	118	21.94 %	19.00 %
Rural	4	834	991	120	117	14.39 %	11.80 %
Total	**15**	**1929**	**2247**	**442**	**425**	**22.80 %**	**18.91 %**
		4176		**867**			

Table IV(e)

Distribution of the Samples with Respect to School Type

Type of Schools	Population		Samples Drawn		Percentage of Population	
	Std. X	Std. IX	Std. X	Std. IX	Std. X	Std. IX
Corporation Schools	1011	1203	208	205	20.57	17.04
Private Schools	918	1044	234	220	25.49	21.07
Total	**4176**		**867**			

Table IV(f)

Medium of Instruction Wise Distribution of the Samples

Medium of Instruction	Population		Samples Drawn		Percentage of Population	
	Std. X	Std. IX	Std. X	Std. IX	Std. X	Std. IX
Semi-English Medium	1152	1333	152	155	13.19	10.52
Marathi Medium	777	914	290	270	37.32	29.54
Total	1929	2247	442	425		
	4176		**867**			

Collection of Primary data

Collection of primary data and questionnaire

By using three types questionnaire (structured, closed and descriptive), the primary data was collected from 15 selected schools

- The special class room sessions were conducted under supervision of respective school teachers

Questionnaire was made by taking account of level of perception and understanding of secondary students (IX and X Std.) by framing questions in three levels (Low, Moderate, Higher)

1) The primary data a was collected from 15 selected secondary school.
2) A pilot study was conducted for testing questionnaire. The results were satisfactory.
3) For collection of primary data, structural close type questionnaire was made.
4) Special class room sessions were conducted in 15 schools to collect data under supervision of respective school teachers.

Rational for making range of score.

1) Ethics and Values

a) The minimum score as 10 and maximum score as 40 were identified.

b) To identify lower level of score

The 35 % cut off score was treated as the low level.

$\therefore$ For $100 \rightarrow 35$ $\quad \therefore \frac{100}{40} = \frac{35}{x}$

$40 \rightarrow x$ $\quad \therefore x = \frac{35 \times 40}{100} = 14$

$$\therefore \mathbf{x = 14}$$

$\therefore$ 14 is cut off score (higher value) for lower grade.

$\therefore$ The range of lower level is 10 – 14

c) To identify higher level of score

The 75 % cut off score was treated as the high level.

$\therefore$ For $100 \rightarrow 75$ $\quad \therefore \frac{100}{40} = \frac{75}{y}$

$40 \rightarrow y$ $\quad \therefore y = \frac{75 \times 40}{100} = 14$

$$\therefore \mathbf{y = 30}$$

$\therefore$ 30 is cut off score (lower value) for higher grade.

$\therefore$ The range of higher level is 30 – 40

d) Moderate level of score

The scores between low and high score are treated as moderate score.

$\therefore$ Moderate level is 15 – 29

2) Motivation

a) The minimum score as 10 and maximum score as 30 were identified.

b) To identify lower level of score

$\therefore$ For $100 \rightarrow 35$ $\quad \therefore \frac{100}{30} = \frac{35}{x}$

$30 \rightarrow x$ $\quad \therefore x = \frac{35 \times 30}{100} = 10.5$

$\therefore \mathbf{x = 11}$

$\therefore$ The range of lower level is 10 – 11

c) To higher level of score

$\therefore$ For $100 \rightarrow 75$ $\quad \therefore \frac{100}{30} = \frac{75}{y}$

$30 \rightarrow y$ $\quad \therefore y = \frac{30 \times 75}{100} = \frac{2250}{100}$

$\therefore \mathbf{y = 22.50}$

$\therefore \mathbf{y = 23.00}$

$\therefore$ The range higher level is 23 – 30

d) Moderate level of score

$\therefore$ Moderate level is 12 – 22

3) Entrepreneurial Skills

a) Minimum score = 37

Maximum score = 148

b) Lower level of score

$\therefore$ For $100 \rightarrow 35$ $\quad \therefore \frac{100}{148} = \frac{35}{x}$

$148 \rightarrow x$ $\quad \therefore x = \frac{148 \times 35}{100} = 51.80 = 52$

$\therefore \mathbf{x = 52}$

$\therefore$ The lower level is 37 – 52

c) Higher level of score

$\therefore$ For $100 \rightarrow 75$ $\quad \therefore \frac{100}{148} = \frac{75}{y}$

$148 \rightarrow y$ $\quad \therefore y = \frac{148 \times 75}{100} = \frac{111}{100}$

$\therefore \mathbf{y = 111}$

$\therefore$ The higher level is 111 – 148

d) Moderate level of score

$\therefore$ Moderate level is 53 – 110

4) Self-confidence

a) Minimum score = 10

Maximum score = 20

b) Lower level of score

$\therefore$ The lower level is 0 – 7

c) Higher level of score

$\therefore$ The higher level is 8 – 14

d) Moderate level of score

$\therefore$ Moderate level is 15 – 20

Summary Table

Table IV(g)

Based on Total Scores, Levels are assigned

	Ethics and Values	Motivation	Entrepreneurial Skills	Self-confidence
Marks Score				
Low	10 – 20	10 – 16	37 – 74	10 – 13
Moderate	21 – 30	17 – 23	75 – 110	14 – 17
High	31 - 40	24 – 30	111 – 148	18 – 20
Levels				
Low	10 – 14	10 – 11	37 – 52	0 – 7
Moderate	15 – 29	12 – 22	53 – 110	8 – 14
High	30 - 40	23 – 30	111 – 148	15 – 20

Research Tools

The investigator constructed research tools with the help of his research guide and experts. The details of the research tools are given below (Refer Table V (h))

Table IV (h)

Tools for testing basic employability skills

Skills	Pattern of Questions	Duration for Testing	No.of Questions
1) Reading Skills	Descriptive	20 min.	2
2) Writing Skills	Descriptive	25 min.	2
3) Listening Skills	Descriptive	10 min.	2
4) High Order Thinking Skills	Making Preference	35 min.	20
5) Ethics and Values, Motivation, Self Confidence	Making Preference	12 min. each	10 Q. each
6) Entrepreneurial Skills	Making Preference	25 min.	37

All tools were specially constructed for this study. Reliability and validity for all tools have been checked.

Detailed Analysis (Question wise)

I) Academic Skills

The following assessment functions for Reading, Writing and Listening skills were framed and applied.

a) For reading skills

Two descriptive questions were framed. The power of skimming, scanning and understanding the concept and grammar, comprehension ability etc. were tested.

b) For writing skills

Two descriptive questions were framed. The power of expression, how to extract information and present in a diagrammatic form, understanding of content etc. were tested.

c) For listening skills

The power of understanding of words, sentences and phrases and to write them correctly etc.

Illustration (For reading skills)

The measured value of mean for reading skills was 5.9370 which were lying between 5 – 7, hence the attainment level of reading skill was moderate.

II) High order thinking skills (HOT skills)

To assess the analytical ability, evaluation capacity and creativity, a questionnaire was framed and applied.

For Higher Order Thinking Skills

Total Questions were asked	=	20 Questions
Total Marks	=	20 marks (20 Q x 1)

Level of Attainment (Score)

Low Level	Moderate Level	High Level
0 – 6	7 – 13	14 – 20

Since the mean values of HOT Skills was 8.544 which was lying between 7 – 13. The result was moderate level.

III) Entrepreneurial skills

The concept of entrepreneurial skills includes proficiencies live creativity, planning, decision making, leadership, negotiation skills, imitativeness, team work, confidence, marketing, social attitude etc.

By framing 37 questions, researcher tried to assess most of the proficiencies of entrepreneurial skills present in secondary students.

Some examples

Questionnaire for Entrepreneurial skills

Sr. No.	Q. No.	To Test Proficiency for Entrepreneurial
1	Q. 4	Confidence
2	Q. 6	Initiativeness
3	Q. 19	Social Attitude
4	Q. 36	Negotiation Skills

For Entrepreneurial Skills

Total Questions = 37 Questions

Total Marks = 148 marks (37 Q x 4)

Minimum Score = 37

Maximum Score = 148

Lower Level of Attainment

For $100 \rightarrow 35$ $\therefore \frac{100}{148} = \frac{35}{x}$ $\therefore x = 51.80$

$148 \rightarrow x$ $\therefore x = 52$

∴ Lower Level is 37 – 52

Higher Level of Attainment

For $100 \rightarrow 75$ $\therefore \frac{100}{148} = \frac{75}{y}$ $\therefore y = 111.00$

$148 \rightarrow y$ $\therefore y = 111$

∴ Higher Level is 111 – 148

Moderate Level of attainment 53 - 110

Since the mean values of entrepreneurial skills was 106.4233 which was lying between 53 – 110, the level of attainment for entrepreneurial skills was moderate.

Similarly for all other remaining skills, the result was moderate level.

IV) For other skills

To assess the level of attainment of Ethics and Values, Self motivation and Self confidence, similar procedure was adopted. The results was moderate level of attainment.

Rational of the Tool

By reviewing the literature, considering the SCANS report, discussing with experts from education and management field and guide, the researcher had decided to focus on basic employability skills for his research

For academic and thinking skills

- Due to non availability of standardized tools researcher had prepared his own research tools with the help of experts.
- It was based on curriculum of Std. IX and X std of SSC board of Maharashtra (English, Geometry, Algebra, Science subjects)

For personal skills and qualities.

- For ethics and values, motivation, Entrepreneurial skills and self confidence, Standardized tools were used.

Reliability

The items for testing academic and higher order thinking skills have been adapted from curriculum and text books published by SSC Board of Maharashtra. After confirmation from experts, the items were finalised.

The tests on personal skills and qualities were administered to pilot sample of 97 students. Cronbach Alpha reliability coefficient was computed. The result was satisfactory.

Validity

Item of testing all skills were shown to experts from management and psychology. The results was valid.

Pilot Study

A pilot survey for 96 students was conducted. It was use for **testing validity** and **reliability** of questionnaire prepared. The results were satisfactory.

Construction of Tools

I) For Academic Skills

For framing questionnaire and test for academic skills the teachers manual for English Subject (Marathi Medium Std. X) published by Maharashtra State Board was considered as a resource.

Reading Skills

Two unseen extracts or paragraphs (5 marks each - total 10 marks) were selected from comprehension exercise book based on curriculum of Std. IX and X Std. of SSC Board of Maharashtra. In each passage, out of three, two factual question (3 marks) were asked for which answers could be easily found or located from text. One word, one phrase answers were admissible. Third questions was based on personal response for which answers would be related student's own ideas and interests in relation to the topic or to the authors point of view. The assessment functions were testing of skimming and scanning, understanding the grammar, concept etc.

Writing Skills

Two sub questions, A report writing and a information transfer skills carrying 5 marks each total 10 marks were taken from writing skills exercise book based on IX and X std. syllabus.

In a report writing skill question, students were asked to prepare a report based on the events with help of given points: In a information transfer question (from Non-verbal to verbal) the students were asked to write a paragraph on information presented in simple diagram. The assessment factors were : to test power of expression, how to extract information and present in a diagrammatic form, how to describe people, events, places, interpretation skills, understanding of content, vocabulary range, background knowledge etc.

Listening Skills

Two types of tasks : Listening and writing words and sentences, were conducted which were carrying 3 marks each. In these tasks the investigator was reading five words and five sentences twice loudly and the students were asked to write any three words and sentences from it on answer sheet in 10 minutes.

In, this test, the ability to listen with understanding of words, phrases, short sentences and to write it correctly were tested.

II) For High order Thinking Skills

To assess the analytical ability, evaluation capacity and creativity, a questionnaire / test consisting 20 multiple choice questions for 20 marks was framed and conducted. It was based on IX and X Std. Science, Algebra and Geometry Syllabus. The main criteria for assessing was to test the ability of synthesis, generalization, explanation, interpretation, manipulation and understanding the concepts etc.

Sample Questions :

Q.1 – In polluted cities, it may harmful to get wet in first shower, during monsoon because first shower …….

a) may develop cold in body
b) may develop fever
c) may consist acid rain
d) none of these

Q.2 – Amar is travelling by his car with uniform velocity in the same direction. What will be the acceleration of his car.

a) positive
b) negative
c) zero
d) none of these

III) For Ethics and Values, Motivation, Entrepreneurial Skills, Self confidence

Taking into consideration the psychological aspects of secondary school children the researcher decided to construct the tools measuring ethics-values, motivation, entrepreneurship skills and self-confidence. The available tests measuring motivation and self-confidence were too lengthy and time consuming for the respondents. Hence a few relevant statements from already standardized tests on motivation (Mukherjee, 2000) and self-confidence (Basavanna, 1975) were adopted. The investigator reviewed the existing literature on ethics-values as well as on entrepreneurship skills. The items were constructed in simple English and translated to Marathi.

Items were given for content validation to the experts from psychology and management faculty. The judgments of the experts and basic quantitative analysis (such as reliability, Mean, Variability, etc.) on pilot sample gave favourable results regarding the usage of tools. For each of the given statement/ question the respondent needs to select one of the option which best suits him/her. High scores indicate more presence of the measured ability / skills. To measure academic achievement, the grades of earlier year's final examination were considered.

Procedure

The authority of a few Marathi Medium Schools from Pimpri-Chinchwad area was contacted. The concerned people were briefed about the survey and its purpose. Confidentiality of scores was assured. Assurance was also given that the students were to be contacted only to know about the abilities/skills they possess and the investigator would not interfere in any of school administrative part. The permission for data collection was thus taken from the school" authority before data collection. The Class IX and X students were randomly selected from these schools. The purpose of the study was explained to them. The participants found the research interesting and they volunteered for this project. The tests were administered in accuracy and with proper care. Instructions were given ensuring the participants have understood what they were supposed to do. Doubts were cleared. The investigator personally collected the data and saw that the respondents have answered the questionnaire completely. The data was then given for statistical analysis.

Data Collection

Respondents were selected at random. The investigator prepared a data form to collect the information from the school. (Copy enclosed) (School Information Form)

All the tests were administered on all 867 subjects. The tools were administered with the previous permission from the heads of schools. (Refer a copy of permission letter) (enclosed)

The teachers in the respective schools helped the investigator in the contacting the subjects (students), giving instructions to them etc. The investigator administered the tools personally in the class rooms.

It took nearly one hour and 40 minutes to answer all the items in the Test of Academic and High Order Thinking Skills and it took another one hour and 15 minutes to answer all the items in the test of Ethics and Values, Motivation, Entrepreneurial Skills and Self-Confidence.

Since the researcher contacted the respondents in respective classroom under supervision of school teacher, all of them had responded properly. The responses were scored and the data were organized in tabular form for analysis.

Justification of selection of 99 schools

The 99 schools were stratified the basis of demographic strata like gender of students (boys / girls), Area of schools (Urban, Semi-urban, Rural), Type of schools (Corporations, Private granted schools) and Medium of schools (Semi-English, Marathi medium). The researcher intended to find the impact of socio-economical factors on attainment of basic employability skills.

Justification of selection of 15 schools

Pimpri-chinchwad municipal corporation area is politically divided into wards. E.g. Bhosari, Nigdi, Pimpri, Akurdi, Chinchwad. Researcher intended to cover sample representation from each ward consisting some specific backgrounds. Hence the15 schools out of 99 schools were stratified on the basis of backgrounds like Gender of students (Boys and Girls), Area of School (Urban, Semi-Urban and Rural), Type of school (Corporation and Private) and Medium of instructions (Semi-English and Marathi Medium).

After selecting 15 schools, out of total 4176 students (IX and X Std.) 867 students were randomly chosen to form the sample of study. In the present study, sample was selected on the basis of randomly purposive sampling technique.

Statistical Analysis

In the present study following statistical analysis are implemented.

1) Descriptive Statistics

The data obtained from surveys or from any research approaches are the raw data. The responses given by the individuals are more important to be understood. The organizing, summarizing and presenting the data is called descriptive statistics. Descriptive statistics are used to describe the basic features of the data in a study. Mean and standard deviations or standard error are good indicators of descriptive. In the present study first hypothesis (H-1) is tested on Mean Scores.

2) Test of Normality

As the scores are not normally distributed in this study, the non-parametric tests have been used.

Mann Whitney U test is very useful for non-parametric alternative to the t test. It is used for assessing the difference between two independent samples especially in the circumstances when the assumption of normality which is required for applying the t test is not met. Kruskal Wallis test in non parametric alternative to one way ANOVA for assessing the difference between more than two independent samples.

3) Mann Whitney U Test

Mann Whitney U Test is used when two different groups of participants are compared on the given measures. Mann Whitney U Test is used when the data is not normally distributed or the variances of the two groups are markedly different. The logic behind the Mann Whitney U Test is to rank the data for each measure and then see how different the two ranks totals are Mann Whitney U Test reflects the difference between the two rank totals. In the present study, Mann Whitney U Test has been used to examine differences between the groups as follows :

a) Gender difference on measured variables (H-2)
b) Difference between Marathi Medium Students and students from Semi English Medium on the measured variables. (H-5)
c) Differences between students from private schools and students from corporation schools on measured variables. (H-4)

   Mann Whitney U Test was used because the data of present research is not normally distributed.

4) Kruskal Walls H Test

Kruskal Walls H Test is used when more than two groups of participants are to be compared on the given measures. Kruskal Walls H Test is used when the data is not normally distributed. In Kruskal Walls the groups are compared with the ranks given to them. The mean rank indicates whether there are more high ranks in one group than in the other. The chi square for the Kruskal Walls indicates whether the difference between the groups is statistically significant or not. In the present study, Kruskal Walls H Test has been used to compare responses of students from urban areas, students from suburban areas and students from rural areas on the measured variables. Since the data of present research is not normally distributed the researcher selected Kruskal Walls H Test for comparison between study groups made on basis of the area of their schools.

5) Cronbach Alpha Reliability Analysis

Cronbach Alpha Reliability Analysis is based on the consistency of responses to all items in the tests. The more homogenous the domain, higher will be the internal consistency of the measuring tool. In the present research Cronbach Alpha coefficient has been computed to examine the reliability of following tools.

a) Internal consistency of statements measuring ethics and values.
b) Internal consistency of statements measuring motivation.
c) Entrepreneurship skills
d) Self confidence

Cronbach Alpha Reliability Analysis was done even for the pilot sample of the measuring tools, namely, ethics and values, motivation, entrepreneurship skills as well as self confidence.

Table IV(i) : Table showing no. of items, range of scores and reliability coefficient of the tools. Cronbach's alpha standardized value

Variable	No. of Statements / Questions	Range of Scores	Cronbach's Alpha
Ethics-values	10	10 – 20	0.82
Motivation	10	10 – 30	0.84
Entrepreneurship Skills	37	37 – 148	0.88
Self confidence	10	10 – 20	0.79

The Cronbach's alpha value for overall scale is 0.82, 0.84, 0.88 and 0.79 resp. The Cronbach's alpha value for based on standardized items is 0.7.

Limitation

The Pimpri Chinchwad city is the industrial city. The Pimpri Chinchwad Corporation is one of the Richest Municipal Corporation in India. The parents are economically better and socially advanced. The presence of Basic Employability Skills may be influenced by demographic socio-economical factors.

Therefore, the results derived from the study may not be applicable to the subjects (students) of other states and districts who are likely to differ in background.

Thus the study cannot present all the factors influencing the presence of Basic Employability Skills.

Teachers Survey

Researcher intended to assess the perception of secondary school teachers about teaching of basic employability skills among secondary school students.

Table IV (j) No. of Teachers Selected for Survey (Samples)

	Pimpri-Chinchwad Corporation School (PCMC School)	Private Marathi Medium Schools	Total
No. of Schools Selected for Research	7	8	15
No. of Secondary School Teachers Selected for Survey	31	36	67

In the first section multiple type questionnaire contains 10 questions pertaining to the various aspects of overall development of school students (like thinking skills, knowledge about management science etc.) Percentage analysis was conducted for it.

In second section of survey personal views of teachers regarding overall development of school students were collected and assessed.

Objectives for Teachers Survey

1) To study the perception of secondary school teachers towards basic employability skills development among secondary students.
2) To compare the perception of secondary school teachers from corporation and private Marathi medium secondary schools towards employability skill development.

Sample for Teachers Survey

This survey was conducted in 15 schools (7 → Pimpri-Chinchwad Corporation Schools and 8 → Private Marathi Medium Secondary School in Pimpri-Chinchwad). For this study 67 in-service secondary school teachers were part of sample. Purposive sampling technique was used for the selection of sample. Teachers were selected from both kind of school i.e. Pimpri-Chinchwad Municipal Corporation School (Total 31 No. of Teacher) and Private Marathi Medium Secondary Schools (Total 36 Nos. of teachers). Only consideration was that teachers should have teaching experience minimum 5 years in secondary schools.

Tools used for Teachers Survey

The multiple type questionnaire contains 10 questions pertaining to the various aspects of overall development of students.

The first section consisted questions related to relation between student and teacher, personality development subject, higher order thinking skills, career orientated, knowledge about management science. The second section of questionnaire was dealing with personal views of teachers regarding overall development of student.

Procedure of Data Collection for Teachers Survey

The tool was handed over to the secondary school teachers of different schools as per the sample selected. They were given a two hours time to fill up the entire questionnaire. The researcher had given the every possible help to teachers regarding the filling up the questionnaire. The entire data was collected in a month's time : While collecting the questionnaire it was ensured that all the items were filled up as per the directions given in the questionnaire.

Analysis of Data for Teachers Survey

The results of questionnaire were analyzed through percentage only and are represented in the following Table

Table IV (k)

Teachers profession (No. of Years)

No. of Years of teaching profession.	Responses No. of Teachers	%
a) 1 – 5 years	10	15 %
b) 6 – 10 years	8	12 %
c) 11 – 15 years	9	14 %
d) 15 – 20 years	15	22 %
e) 21 – 25 years	14	20 %
f) 26 – 30 years	11	17 %
	67	**100 %**

Table IV (l)

Results of First Section (Teachers Survey)

Option No.	Q.1	Q.2	Q.3	Q.4	Q.5	Q.6	Q.7	Q.8	Q.9	Q.10
A	2 3 %	7 10 %	6 9 %	6 9 %	44 66 %	63 94 %	5 7.5 %	8 12 %	17 25 %	29 45 %
B	15 20 %	26 40 %	2 3 %	2 3 %	23 34 %	1 1.5 %	47 70 %	10 15 %	6 9 %	3 4 %
C	50 75 %	27 40 %	57 85 %	57 85 %	-	1 1.5 %	5 7.5 %	28 27 %	12 18 %	17 25 %
D	- -	7 10 %	1 1.5 %	1 1.5 %	-	1 1.5 %	10 15 %	18 27 %	23 34 %	13 20.5 %
Not Answer	-	-	1 1.5 %	1 1.5 %	-	1 1.5 %	-	3 4 %	9 14 %	5 7.5 %
	67	**67**	**67**	**67**	**67**	**67**	**67**	**67**	**67**	**67**

Findings for Teachers Survey

1) Only 18 % teachers are aware about higher order thinking skills.
2) Only 25 % teacher are able to explain 4 p's of marketing.
3) About 66 % teachers reported that they are teaching the subject personality development subjects to 9^{th} and 10^{th} Std.
4) Only 7.5 % teachers reported that acquiring employability skills is the most important for students for his / her future successful career.
5) 94 % teachers agreed that there is co-relation between study skills and personality development skills.
6) 60 % teachers are having teaching experience more than 15 years.
7) It was observed that, there was less percentage of secondary school teachers under survey who participated in various innovative projects.

Recommendations from Teacher's Survey

School teachers need orientation as well as training to teach and develop basic employability skills among secondary school students.

There should be collaboration between school management and teachers training college to initiate the process of teaching of Basic Employ ability Skills. The wide gap of understanding between teachers and students must be reduced.

Chapter V

Analysis of Data

The problem here is the skills of basic employability of standards IX and X secondary students and to study the attainment level of basic employability skills and the effect of demographic factors on it. For this problem, the researcher collected data & analysed the data using appropriate statistical procedures (Test of Normality) :

Hypothesis 1 (H-1)

Secondary School Students (Std. IX and X) from Marathi and Semi-English Medium Schools possess moderate level of basic employability skills (BES)

Table V (a)

Table showing Means, SDs and SDs for the measured variables

Basic Employability Skills	Measured Values of Mean	Boys Score	Girls Score	Score Measuring			Result of Levels of Attainment
				Low	Moderate	High	
Reading Skills	5.9370	5.8015	6.0725	0 – 4	5 – 7	8 – 10	Moderate
Writing Skills	2.0958	2.0128	2.1788	0 – 4	5 – 7	8 – 10	Low
Listening Skills	3.2945	3.2905	3.2985	0 – 2	3 – 4	5 – 6	Moderate
HOT Skills	8.5444	8.5139	8.5749	0 – 6	7 – 13	14 – 20	Moderate
Ethics and Values	29.7059	29.4300	29.6660	10 – 20	21 – 30	31 – 40	Moderate
Self-Motivation	19.8800	19.6900	20.0070	10 – 16	17 – 23	24 – 30	Moderate
Entrepreneurial Skills	106.4233	106.804	106.059	37 – 74	75 – 110	111 – 148	Moderate
Self Confidence	15.1811	15.8300	15.8182	10 – 13	14 – 17	18 – 20	Moderate

It is seen from table V (a), the measured values of means of basic employability skills are lying between low and high level of attainment of basic employability skills.

It is found that basic employability skills are of only moderate level. (except writing skills)

Result : Hypothesis H-1 is accepted.

Hence Secondary School Students (Std. IX and X) from Marathi and Semi-English Medium Schools possess moderate level of basic employability skills (BES)

Hypothesis 2 (H-2)

There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools (boys and girls) on basic employability skills (BES). (Gender of students)

Table V (b)

Mann, Whitney U test results for Gender differences

	Gender	N	Mean Rank	Sum of Ranks
Reading Skills	Boys	424	426.88	180569.00
	Girls	443	439.82	194842.00
	Total	867		
Writing Skills	Boys	424	405.49	171520.50
	Girls	443	460.25	203890.50
	Total	867		
Listening Skills	Boys	424	426.40	180369.00
	Girls	443	440.28	195042.00
	Total	867		
HOT Skills	Boys	424	430.24	182422.50
	Girls	443	437.60	193855.50
	Total	867		
Ethics and Values	Boys	424	416.83	176736.50
	Girls	443	450.43	199541.50
	Total	867		
Motivation	Boys	424	423.37	179508.50
	Girls	443	444.17	196769.50
	Total	867		
Entrepreneurial Skills	Boys	424	446.11	187128.50
	Girls	443	422.41	189149.50
	Total	867		
Self Confidence	Boys	409	413.47	169110.00
	Girls	118	414.52	173268.00
	Total	827		

	Reading Skills	Writing Skills	Listening Skills	HOT Skills	Ethics and Values	Motivation	Entrepreneurial Skills	Self Confidence
Mann Whitney U	90893.000	81844.500	90693.000	92322.500	86636.500	89408.500	88782.500	85265.000
Wilcoxon W	180569.000	171520.500	180369.000	182422.500	176736.500	179508.500	187128.500	169110.000
Z	-.769	-3.291	-.825	-.434	-1.982	-1.230	-1.393	-.064
Sig.	.442	.001	.409	.664	.047	.219	.164	.949

No significant difference exists in the basic employability skills of boys and girls students. (Ref. Table V (b))

According to Mann Whitney U Tests for gender differences and from above table VI (b), it is seen that there is no much difference between boys and girls for attainment of basic employability skills.

Considering Z-score and two tailed P-value, the output reveals that result is significant. (Z = -0.769, p 70.05)

No significant difference exists in the basic employability skills of two genders (boys and girls)

Result : Hypothesis H-2 is accepted.

Hence there is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools (boys and girls) on basic employability skills (BES). (Gender of students)

Hypothesis 3 (H-3)

There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools from Urban, Semi-urban and Rural areas on basic employability skills (BES) (Area of School

Table V (c)

Kruskal Wall H-Test Results for Locality / Area

	Locality / Area	**N**	**Mean Rank**
Reading Skills	Urban	389	459.15
	Rural	240	427.31
	Semi-Urban	238	397.93
	Total	**867**	
Writing Skills	Urban	389	430.15
	Rural	240	453.91
	Semi-Urban	238	418.37
	Total	**867**	
Listening Skills	Urban	389	441.85
	Rural	240	414.78
	Semi-Urban	238	438.76
	Total	**867**	
HOT Skills	Urban	389	447.83
	Rural	240	485.19
	Semi-Urban	238	359.78
	Total	**867**	
Ethics and Values	Urban	389	416.49
	Rural	240	487.38
	Semi-Urban	238	408.79
	Total	**867**	
Motivation	Urban	389	446.30
	Rural	240	458.63
	Semi-Urban	238	389.07
	Total	**867**	
Entrepreneurial Skills	Urban	389	422.26
	Rural	240	464.33
	Semi-Urban	238	407.40
	Total	**867**	
Self Confidence	Urban	365	415.40
	Rural	240	418.99
	Semi-Urban	222	406.30
	Total	**827**	

	Reading Skills	Writing Skills	Listening Skills	Hot Skills	Ethics & Values	Motivation	Entrepreneurial Skills	Self Confidence
Chi-Square	9.211	2.650	1.927	32.443	15.329	11.041	6.903	0.356
Df	2 N = 867	2	2	2	2	2	2	2
Asymp. Sig.	.010	.266	.382	.000	.000	.004	0.032	.837

The chi-square value x^2 (df = 2, N = 867) is different skills = (9.211, 2.650, ……., 6.903), $p < 0.05$ indicates that presence of BES differ significantly across area or locality of schools.

According to Kruskal Wall H-Tested and from above table VI (c), the following analysis are made

a) The mean rank values of Reading Skills and Listening Skills for Urban Schools are greater than that of from Rural and Semi Urban Schools.

   Hence for Reading Skills and Listening Skills, Secondary Students from Urban Area are better than that of from Semi Urban and Rural Area.

b) The mean rank values of other remaining skills and personal qualities (Writing Skills Higher Order Thinking Skills, Ethics and Values, Motivation, Entrepreneurial Skills and Self Confidence) for rural schools are greater than that of from Urban and Semi Urban Area of Pimpri Chinchwad. Hence for these skills secondary students from rural area are better than that of from semi-urban and urban area students.

c) Also the Chi-square value x (df = 2, N =867) is different for all skills (9.211, 2.650, ……., 6.903), $p < 0.05$. It indicates that presence of basic employability skills differs significantly across area of schools.

   Hence it is inferred that area of school has significant impact over the attainment of basic employability skills from Marathi medium secondary students (Std. IX and X)

   Result : Hypothesis H-3 is rejected.

Hence There is difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools from Urban, Semi-urban and Rural areas on basic employability skills (BES) (Area of School)

Hypothesis 4 (H-4)

Marathi Medium Secondary School Students (Std. IX and X) from Private Marathi Medium Schools and from Pimpri-Chinchwad Corporation Schools have same attainment level of basic employability skills. (Type of Schools)

Table V (d)

Mann Whitney U Test Results for Type of School

Ranks

	Type of Schools	N	Mean Rank	Sum of Ranks
Reading Skills	Corporation	414	392.71	162189.50
	Private	453	470.69	213221.50
	Total	**867**		
Writing Skills	Corporation	414	418.59	172879.50
	Private	453	447.09	202531.50
	Total	**867**		
Listening Skills	Corporation	414	390.15	161130.00
	Private	453	473.03	214281.00
	Total	**867**		
HOT Skills	Corporation	414	407.11	168544.50
	Private	453	458.57	207733.50
	Total	**867**		
Ethics and Values	Corporation	414	430.62	178275.00
	Private	453	437.09	198003.00
	Total	**867**		
Motivation	Corporation	414	401.12	166064.00
	Private	453	464.05	210214.00
	Total	**867**		
Entrepreneur	Corporation	414	414.43	171575.00
	Private	453	451.88	204703.00
	Total	**867**		
Self Confidence	Corporation	391	404.49	158155.00
	Private	436	422.53	184223.00
	Total	**827**		

	Reading Skills	Writing Skills	Listening Skills	HOT Skills	Ethics and Values	Motivation	Entrepreneurial Skills	Self Confidence
Mann Whitney U	76698.500	87388.500	75639.000	82639.500	92370.000	80159.000	85670.000	81519.000
Wilcoxon W	162189.500	172879.500	161130.000	168544.500	178275.000	166064.000	171575.000	158155.000
Z	-4.626	-1.711	-4.927	-3.037	-.382	-3.716	-2.201	-1.098
Asymp. Sig. (2-tailed)	.000	.087	.000	.002	.703	.000	.028	.272

It is seen that Table VI (d), the values of mean rank of basic employability skills for private schools are greater than that of corporation schools.

Hence type of schools has significant impact over the level of attainment of Std. IX and X secondary students in basic employability skills (BES)

Result: Hypothesis H-4 is rejected.

Hence Marathi Medium Secondary School Students (Std. IX and X) from Private Marathi Medium Schools and from Pimpri-Chinchwad Corporation Schools have different attainment level of basic employability skills. (Type of Schools)

Hypothesis 5 (H-5)

There is no difference between students from Semi-English Medium Schools and Marathi Medium Schools on basic employability skills (BES) (Medium of instruction)

Table V (e)

Mann Whitney U test results for Medium of Instructions

Ranks

	Type of Schools	**N**	**Mean Rank**	**Sum of Ranks**
Reading Skills	Marathi	559	349.13	194813.00
	Semi-English	308	586.36	180598.00
	Total	**867**		
Writing Skills	Marathi	559	333.39	186031.00
	Semi-English	308	614.87	189380.00
	Total	**867**		
Listening Skills	Marathi	559	335.19	187034.50
	Semi-English	308	611.61	188376.50
	Total	**867**		
HOT Skills	Marathi	559	412.87	230795.00
	Semi-English	308	472.35	145483.00
	Total	**867**		
Ethics and Values	Marathi	559	416.84	233011.00
	Semi-English	308	465.15	143011.00
	Total	**867**		
Motivation	Marathi	559	417.10	233160.50
	Semi-English	308	464.67	143117.50
	Total	**867**		
Entrepreneurial Skills	Marathi	559	402.36	224922.00
	Semi-English	308	491.42	151356.00
	Total	**867**		
Self Confidence	Marathi	528	384.39	202959.00
	Semi-English	299	401.45	139419.00
	Total	**827**	493.07	

Test Statistics

	Reading Skills	Writing Skills	Listening Skills	HOT Skills	Ethics and Values	Motivation	Entrepreneurial Skills	Self Confidence
Mann Whitney U	38852.000	30070.000	31073.500	74275.000	76491.000	76640.500	68402.000	63303.000
Wilcoxon W	194813.000	186031.000	187034.500	230795.000	233011.000	233160.500	224922.000	202959.000
Z	-13.488	-16.200	-15.750	-3.363	-2.729	-2.691	-5.013	-4.795
Asymp. Sig. (2-tailed)	.000	.000	.000	.001	.006	.007	.000	.000

It is inferred from Table VI (e), the values of mean rank of basic employability skills for Semi-English Schools have greater than that of for Marathi Medium Schools.

Hence medium of schools have significant impact over the level of attainment of Std. IX and X secondary students in basic employability skills (BES)

Result: Hypothesis H-5 is rejected.

Hence There is difference between students from Semi-English Medium Schools and Marathi Medium Schools on basic employability skills (BES) (Medium of instruction

Chapter VI

Findings, Conclusions and Recommendation

Findings

By and large the present study may create an awareness among the teachers, parents and school stake holders to make use of the clues available in the form of findings / conclusions / recommendations for designing strategic programme towards developing employability skills techniques suitable for the target population to initiate, implement and develop basic employability skills effective and efficient way at all levels of schooling.

Background of basic employability skills

The concept of basic employability skills is often interpreted in different ways. It can non technical vocational skills that teach a trade or prepare participants for pursuing a job or vocation and it can also mean teaching participants various external skills. A third interpretation, and one researcher framed, has more to do with internal capacities and behaviors that allow individuals to "build the needed competencies for human development and to adopt positive behavior that enable then to deal effectively with the challenges of everyday life. Basic employability skills are widely interpreted and this type of programme has to potential to be molded to fit the exact needs of the community. Researcher goals for this research is to create an educational model that would empower the secondary school students. With employability skills that would make them more productive and useful members of society as well as give them the confidence and the skills to choose a path in a life. Researcher vision is to equip children with employability skills and values that would prepare them for general challenges of life and adulthood such as life planning, money management and social interactions, encourage long term thinking and entrepreneurship. By teaching children skills that play a role in various occupations, researcher hoped to encourage them to seek out opportunities of their own choice rather than what society dictates for them.

i) Findings related to Basic Employability Skills

(1) The level of attainment of Understudy Secondary School Students (Std. IX and X) from Pimpri Chinchwad Area in Basic Employability Skills is moderate.

That 50 % to 70 % of the samples falls under this category.

(2) The level of attainment of understudy Secondary School Students (Std. IX and X) from Pimpri Chinchwad Area in the sub skills of Basic Employability Skills with regards to

a) Reading Skills.

b) Writing Skills.

c) Listening Skills

d) Entrepreneurial Skills

are only moderate (59 %, 30 %, 53 % and 71 % respectively) (Refer calculation)

(3) The level of attainment of understudy Secondary School Students (Std. IX & X) from Pimpri Chinchwad Area in the personal qualities with regards to

a) Ethics and Values

b) Motivation

c) Self Confidence

d) HOT Skills

are only moderate (74 %, 66 %, 76 % and 42 % respectively) (Refer calculation)

Calculation for (1), (2), (3)

(1) Range 50 % to 70 %

(2) a) 59 % b) 30 %

c) 3.2/6 = x/10 ∴ x = 5.3 ∴ x = 53 % d) 106.4/148= x/10 ∴ x = 71 %

(3) a) 29.7/40 = x/10 ∴ x = 74 % b) 19.8/30= x/10 ∴ x = 66 %

c) 15.18/20 = x/10 ∴ x = 76.0 % d) 8.54 / 2.0 = x/10 ∴ x = 42 %

(Refer Table VI (a), Page 122 of thesis)

The secondary school education is a major source for acquiring basic employability skills (BES) It offers the students of different categories the same exposure for a short duration. Private coaching is given in majority schools to weaker students. The state or well as central governments on their part offer free coaching campaigns at different levels for deserving students in the underprivileged classes. Moreover, reservation of seats in higher and professional studies, relaxation in marks and ages at the every points, concession in payment of fees, monetary assistance to buy books and meet travel expenses, reservation of vacancies in the job market and so on and so forth for students of socially privileged communities have gave a long way in reducing the gap between them and the privileged ones in the field of education. Therefore this may also be considered as a reason for the moderate level of achievement shown by students of different schools in Basic Employability Skills.

Social status does not have any significant impact on acquiring Basic Employability Skills.

Hence the level of attainment of basic employability skills in Marathi Medium Secondary Students is moderate.

ii) Findings related to Basic Employability Skills and Gender

1) The Boys of Understudy Secondary School Students (Std. IX and X) from Pimpri Chinchwad Area are moderate in Basic Employability Skills. That is 50 % to 70 % of the sample falls under the category.
2) The level of attainment of Boys in the sub skills of Basic Employability Skills with regard to
    a) Reading Skills.
    b) Writing Skills.
    c) Listening Skills
    d) Entrepreneurial Skills

   are only moderate (58 %, 20 %, 53 % and 72 %) respectively (Refer calculation)
3) The level of attainment of Boys in personal qualities with regard to
    a) Ethics and Values
    b) Self Motivation
    c) Self Confidence
    d) HOT Skills

   are only moderate (73.5%, 65%, 79% and 42 %) respectively (Refer calculation)
4) The Girls of Understudy Secondary School Students (Std. IX and X) from Pimpri Chinchwad Area are moderate in Basic Employability Skills. That is 50 % to 70 % of the sample falls under the category.
5) The level of attainment of Girls in the sub skills of Basic Employability Skills with regard to
    a) Reading Skills. b) Writing Skills.
    c) Listening Skills d) Entrepreneurial Skills

   are only moderate (60 %, 23 %, 55 % and 71 %) respectively (Refer calculation)
6) The level of attainment of Girls in personal qualities with regard
    a) Ethics and Values b) Self Motivation
    c) Self Confidence d) HOT Skills

   are only moderate (75 %, 67 %, 79 % and 42 %) respectively (Refer calculation)
7) In Standard IX and X students skills of Basic Employability is not found to be influenced by gender. Both Boys and Girls have scored similar results.

Calculation

2) c) $\frac{3.2}{6} = \frac{x}{10} \therefore x = 53\ \%$ 2) d) $\frac{106.804}{148} = \frac{x}{10} \therefore x = 72\ \%$

3) a) $\frac{29.43}{40} = \frac{x}{10} \therefore x = 73.50\ \%$ 3) b) $\frac{19.7}{30} = \frac{x}{10} \therefore x = 65\ \%$

c) $\frac{15.83}{20} = \frac{x}{10} \therefore x = 79\ \%$ d) $\frac{8.5139}{20} = \frac{x}{10} \therefore x = 42\ \%$

5) c) $\frac{3.3}{6} = \frac{x}{10} \therefore x = 55\ \%$ 5) d) $\frac{106.059}{148} = \frac{x}{10} \therefore x = 71\ \%$

6) a) $\frac{29.966}{40} = \frac{x}{10} \therefore x = 74.9\ \%$ 6) b) $\frac{20.07}{30} = \frac{x}{10} \therefore x = 66.69\ \%$

c) $\frac{15.8182}{20} = \frac{x}{10} \therefore x = 79\ \%$ d) $\frac{8.5749}{20} = \frac{x}{10} \therefore x = 42\ \%$

The present study was made with an assumption that gender would influence the skills of basic employability. But it is proved wrong.

Generally girls are soon withdrawn from schools and this reflects society's attitude towards girls. Boys are independent inside and outside home and they are not much restricted like girls. They are more dominating at home and school compared to girls. Boys have some more time to study and they can maximum utilize the study time available. But at the same time due to physical conditions and duties at home, girls are not able to utilize their free time available for their studies.

Boys are encouraged to participate in co-curricular and extracurricular activities which are denied to girls though they are interested in them. Girls are unable to make use of their latent talents and they are in a shell. Due to all the above reasons a difference was expected in basic employability skills. But the result of present study shows that both boys and girls are of the same category that is "moderate".

It shows employability (a cognitive characteristic) is not affected by the cultural elements found in the life style of both the genders. It also upholds the fact that cognitive development is of the same level for both girls and boys.

It may be attributed to the similarity of the educational environment available for both of them, like same school setting, same classrooms, same learning materials and methods of teaching, same type of examination etc.

Due to these, the cultural variations in the bringing up of boys and girls are found to be nullified so as to wield any influence over the skills of basic employability.

Hence Boys and Girls at Std. IX and X are very much identical in their skills of basic employability Investigator investigated and found that gender differences are not significant with regard to basic employability skills (BES).

iii) Findings related to Basic Employability Skills and Area

1) The level of attainment of Understudy Secondary School Students (Std. IX and X) from Urban Area of Pimpri Chinchwad in Basic Employability Skills is only moderate. (50 % to 70 %)
2) The level of attainment of Understudy Secondary School Students (Std. IX and X) from Semi Urban Area of Pimpri Chinchwad in Basic Employability Skills is only moderate. (50 % to 70 %)
3) The level of attainment of Understudy Secondary School Students (Std. IX and X) from Rural Area of Pimpri Chinchwad from in Basic Employability Skills is only moderate. (50 % to 70 %)
4) Standard IX and X student's skills of Basic Employability is found to be influenced by Area of Schools.
5) Skills of Reading and Listening of Standard IX and X students are influenced by the Area of schools. Students from Urban Area scores better than others. (Semi Urban and Rural)
6) Skills of writing, High Order Thinking, Entrepreneurial Skills and Personal Qualities like Ethics and Values, Motivation and Self Confidence are influenced by the Area of schools. Students from Rural Area score better than others (Urban and Semi Urban Area)

Secondary students from Urban Area scores high level of attainment in Reading and Listening skills than that of semi-urban and rural schools. Reading and Listening skills required congenial atmosphere to master it.

Both skills are difficult to learn at school. The social background is also important factor which develop these both skills. Home environment, quality family life and parents education are some important major social factors which contribute a major role to acquire these skills. For urban background, all these factors are present substantially than that rural and semi-urban background. Secondary students from rural and semi-urban area scores high level of attainment of skills of writing, high order thinking skills, personal qualities etc. Most of students of above categories are belonging to lower middle or lower class of society. Most of the parents of these students are working on daily wages. But situations are changing-Parents in socially backward communities are keen on the educating their wards to the level possible to provide a better future for them. Measures taken by Government to bring than into main stream of life are also equally important. Parents become more confident alert for their pupils future.

The present study shows that the attainment levels of basic employability skills among secondary students from Urban, Semi-urban and Rural area are moderate.

Rural and Semi-urban locality may have large percentage of middle class and lower middle class population trying to come up in life through education. Therefore they may consider education much important. As a result teachers in Rural and Semi-urban schools may be forced to work harder to make the students learn better. But, academic skill activities may be predominant in the urban class families due to the availability of newspapers, magazines and periodicals. Thus urban students may be better equipped than Rural and Semi-Urban students in the basic skills of reading and listening.

The present study states that Urban students are superior in Reading and listening skills. In Urban locality, majority of the population are from middle class. A large percentage of them may be in white collar or blue collar jobs with higher academic or technical qualifications. Therefore for their children there may be a better exposure to reading and listening related activities. It is confirmed by the higher level achievement of Urban students in the skills of Reading skills and listening skills. Moreover it also reveals the fact that the higher economic and higher Social status of the Urban placed pupils and the lower economic and lower Social status of the Semi-urban and Rural oriented pupils are of no use for the respective pupils with regard to their development of reading and listening skills.

Likewise area of school seems to influence the thinking and personal skills of standard IX and X students. The general criticism is that students from Semi-urban and Rural schools are poor in personal skills. Dhanger (1985) states that pupils from Urban areas are better in personal skills compared to Rural students. Patil (1985) states the Urban groups are superior to the Rural groups on English language achievement. Srinivasa Rao (1986) states that students in Rural are significantly backward when compared to the students in Urban areas in personal skills. All this shows the higher level achievement of Urban students over Rural students in the skills of reading and listening. Naturally, therefore one may presuppose the presence of positive attitude towards academic skills in these students. But, the present study shows that students in Semi-urban and Rural areas are better in thinking skills. In the case of Rural students their attitude towards other skills is positive unlike the students of other categories. But in spite of this they are of the moderate level as others in Reading comprehension. It may be because of the pull of certain other intellectual, social, emotional and linguistic factors found in them. However, the presence of positive attitude in them shows there tendency to go up higher and higher in the ladder of education.

Hence the level of attainment of basic employability skills of secondary school students is influenced by area of school.

iv) Findings related to Basic Employability Skills and Type of Schools

1) The level of attainment of Understudy Secondary School Students (Std. IX and X) from Pimpri Chinchwad Corporation Schools is only moderate in the BES. (50 % to 70 %)
2) The level of attainment of Private Marathi Medium Secondary School Students (Std. IX and X) from Pimpri Chinchwad Area is only moderate in the BES. (50 % to 70 %)
3) Standard IX and X student's skills of Basic Employability is found to be influenced by type of schools.
4) Students from Private Marathi Medium Secondary Schools Scores better than students from Pimpri Chinchwad Corporation Schools in the BES.

Secondary students from Private Marathi Schools scores high level of attainment of Basic Employability Skills than that of Pimpri Chinchwad Corporation Schools.

Majority of students from Private Marathi Medium School are belonging to middle and lower middle class. Lack of proper home environment, quality of family life & parents education etc. are some economical and social factors which may lead to difficulty to acquire the basic employability skills for corporation schools students.

Also the negative attitude of stakeholders for educational development of corporation schools is major cause for it. Most of students of corporation schools are belonging to lower strata of society like slum area.

Hence the level of attainment of basic employability skills in Marathi Medium Secondary Students is influenced by type of schools.

v) Findings related to Basic Employability Skills and Medium of Schools

1) The level of attainment of Secondary School Students (Std. IX and X) from Semi- English Medium Schools from Pimpri Chinchwad Area is only moderate. (50% to 70%)
2) The level of attainment of Secondary School Students (Std. IX and X) from Marathi Medium Schools from Pimpri Chinchwad Area is only moderate. (50 % to 70 %)
3) Standard IX and X student's skills of Basic Employability is found to be influenced by medium of schools.
4) Students from Semi-English Medium Secondary Schools Scores better than those from Marathi Medium Secondary Schools from Pimpri Chinchwad.

Secondary students from Semi-English Medium scores high level of attainment of basic employability skills than that of from Marathi Medium Schools.

The criteria of selection of Semi-English students are academic result. Hence the Semi-English student are more serious and studious, hardworking students than of Marathi Medium Students School are also paying more attention towards Semi-English students.

Naturally the levels of interest in studies, intelligence and cognitive ability etc. are present more in Semi-English Students. Hence Semi-English students are more competitive than Marathi Medium Students.

Hence the level of attainment of basic employability skills in Marathi Medium Secondary Students is influenced by medium of schools.

Observations for Basic Employability Skills

Academic Skills

It suggests that students are moderate in the skill

It may be due to classroom teaching. Most of teacher read and explain the text book. Loud reading is the only form of activity found in the every class rooms Speaking of English is totally absent. Writing from memory occur now and then. Because of these students may have a passive understanding of reading and writing aspects.

1) The common practice in the schools undersurvey is to make memorize answer by teachers.
2) But it was rare to come across students engaged in creative writing and oral communication in English.
3) Thus researcher is concluding that outside the classroom also reading was the only skill that is used often and more than of other three language skills i.e. listening, speaking and writing.
4) Only for the purpose of exams students were reading the text. In exams there were more factual questions and hence they were doing only surface level reading.
5) Higher level skills such as organizing or sequencing information gathered for further analysis was moderate.
6) Schools also fail to provide systematic teaching of academic skills to students. Success in developing academic skills in students depends on the teacher.
7) Personal and social adjustments, home condition peer relations, teacher pupil relations all influence attainment level of basic employability skills.

   But the skill is the moderate. It makes one think that there are certain factors personal or environmental influential enough to nullify the negative effect of it.
8) Cognitive ability i.e. understanding ability may be essential for the acquisition of specific skills such as reading, writing and listening which is often considered as a powerful mean of knowledge acquisition, structuring and application of the acquired knowledge.
9) The higher level cognition tasks call for a higher level analyzing, synthesizing and evaluating skills. But the subjects being dependent may not be highly analytical or evaluative to cope with the demands of higher level tasks of cognition. This may be reasons why they were only moderate in their skills of basic employability.

a) Reading Skills : The attainment level overall result of was moderate (60%)

In the reading component of tests, students were expected to read two unseen extracts and demonstrate their understanding of directly stated information and ideas. They were also asked to write their response for factual and personal response type questions. They were also asked to make inferences and to interpret by connecting the meaning of the texts to their personal knowledge and experience.

b) Writing Skills : The attainment level for these skills was found to be moderate. In the writing component of tests, students were given two descriptive questions one was to prepare a report based on events and second was to write a paragraph on information presented in diagram. The assessment factors to test power of expression and extracting information, to present in a diagrammatic form etc.

c) Listening Skills : The results were moderate level of attainment of basic employability skills. In the listening component, students were given two types of tasks listening and writing words and sentences. In this test, the ability to listen with understanding of words phrases, short sentences and to write it correctly was tested.

d) High Order Thinking Skills : The overall result was moderate level of attainment. In the thinking skill component students were given a text consisting 20 multiple choice questions. The main criteria for assessing were to test the ability of synthesis, analysis, evaluation and creativity etc.

e) Personal Qualities and Skills : The results for attainment level for Ethics and Values, Motivation, Entrepreneur Skills and Self Confidence were moderate. To assess all these skills, open-ended multiple choice questionnaire was framed and conducted.

General Observation for Secondary Students under Survey

i) Confidence : Belief in one's abilities allows a person to aspire and achieve. They would have to be confident enough to stand up to pressure and believe in their own decisions. The under survey students were found less confident.

ii) Coping with Stress (Time Management) : School-going children in Marathi Medium School have various stresses and time commitments. Besides going to school, they attend tuition, maybe go to work, and have various responsibilities in the house, particularly girls.

iii) Creativity and Resourcefulness : Creativity allows children to utilize and express their individuality. It provides an outlet for energy that may not be applicable elsewhere. Since schools do not encourage originality, children seemed to rarely tap into their creative sides. Even while doing arts and crafts, children tended to follow the model rather than creating something of their own. This lack of creativity transcended artistic creativity and also showed itself in children's problem solving and critical thinking capabilities. They were so used to memorizing single answers to questions that they never considered how to find answers and solutions to questions and problems. Resourcefulness is a related topic that researcher felt would be useful to children. By learning how to be resourceful or think creatively about obstacles, children would become better problem solvers and more efficient workers. The undersurvey students were found less creative and resource fuel.

iv) Critical Thinking : Critical thinking skills allow one to fully analyze and assess problems or situations. They are tools to put pieces of a puzzle together and understand the different parts. Based on the common occurrence of children being unable to answer the same question posed in different ways, critical thinking skills would be beneficial to them. Undersurvey student have not been taught how to analyze and understand different parts of issues and situations. The education system taught them to accept whatever was dictated to them. Given the method of examination in schools, which often pulled exactly from textbooks and in which teachers sometimes even give questions ahead of time, children do not have to understand the inner workings of any given topic in order to receive good marks. Critical thinking skills can equip children with the ability to think through situations carefully and will aid in their decision making and problem solving skills very few students who were underserved were found to think critically.

v) Futures and Long-term Thinking : Researcher found that students under survey were rarely asked what their dreams were or what they hope to be when they grow up and often felt that they did not have the option to have these dreams; they would go into whatever was decided for them by family or society. This kind of thinking leads children to put off developing their potential and just accept whatever fate dictates so this module was aimed at preventing this. Thinking about the future and developing aspirations would give children something to work toward.

vi) Effective Communication : Communication is a skill every person needs in life to build relationships and interact with other people. Researcher found a lot of the students undersurvey were uncomfortable talking in front of others and when they did many of

them spoke in a similar manner that they must have been taught in schools: arms folded, looking distantly, and talking quickly as if reading off a list. Researcher wanted them to learn how to speak effectively and to recognize that their body language also conveys messages to other people. If they wanted to enter a professional job, they would have to learn these skills.

vii) Interpersonal Skills : It is necessary to know how to interact with different types of people at home, school, and work. Children sometimes behave the same way with adults as they do with their peers and may therefore create an unfavorable impression of themselves. Once children learn how to behave with different types of people, they will build better relationship and will be able to get what they want.

viii) Problem Solving : Children face various issues at home, school, work and in society. Often problems seem overwhelming and it is difficult to see or find a solution to them. With problem solving skills, children will learn to break down problems into manageable parts so that they can work to find a solution. Problem solving is a key component of this research, which aims to address children's problems. For this research it was moderate.

Comparision of Private Marathi Medium Schools from Chinchwadgaon and Bhosari

1) Private Marathi Medium Schools in Chinchwadgaon

Chinchwadgaon is one of the highly socio-economically developed area of Pimpri-Chinchwad Corporation. Mostly Marathi Medium students are from lower economically and socially privileged class. Many of upper class students are learning in CBSE and English medium schools. One of the more prominent things, researcher noticed in these groups was that students from Marathi medium schools were found in active and reluctant to participate, lacking confidence.

2) Private Marathi Medium School in Bhosari

Bhosari is the area when mostly people are working in small scale industry. It is a one of the least developed area in Pimpri-Chinchwad Corporation consisting major slum area. Surprisingly it is found that the secondary school students from Private Marathi Medium School were egar to learn & participate. There was no gender discrimination against girls.

Hence by comparing both schools one from developed area (Chinchwadgaon) and one from undeveloped area (Bhosari) following conclusions can be made

1) Private Marathi Medium Schools from developed area are lagging behind in overall development of students.

2) Private Marathi Medium Schools from undeveloped area are better in overall development of students.

Effect of community level on Basic Employability Skills

Majority of the students randomly selected from schools were belonging to privileged section who fall under 'moderate' category in the basic employability skills.

Many studies (Aikara, J., 1990; Mistry, D.S., 1988; Wadhawan, B.G., 1988) have shown that the students' level of achievement in school subjects is bound to differ according to their communities. Generally students belonging to forward communities hail from families which are socially, economically and educationally well off. As these families have good reputation in society, their children may get good recognition in the schools. Obviously they won't be first generation learners as their elders are highly educated. They may get timely help and proper academic guidance from their elders. Besides a decent living, they are blessed with the sources needed for a good academic pursuit. Since all these essential resources are just open to them, they are expected to be better than students of other communities.

Privileged community students, mostly belong to middle and lower class families which predominantly rely on educational endeavors. Education being their only asset they embark on salaried jobs. Higher the education, the higher will be their occupational status. Therefore parents in privileged communities are keen on educating their wards to the level possible to provide a better future for them.

For long, socially backward families were economically and educationally deprived. Fundamental rights were denied to them and they were kept as a separate entity in all social activities. Now by the measures taken by the government, they are being brought into the main stream of life. Therefore majority of the learners of these communities are first generation learners and as such they are unable to get educational guidance from their elders. They seldom get opportunities to study in schools with good infrastructure. Still they are not exposed to good educational environment inside and outside their home. The surrounding in which they are reared does not enable them to listen to instructions of competent teachers. By the governmental assistance in the form of free education, scholarship, mid-day meal, free books, uniform etc. they get some education instead of nothing. Due to this lower Social status and economic and educational backwardness, socially privileged students may not stand on par with students of other communities. Many research studies (Singh, 1975; Singh, 1979; Das, 1969) state that students of socially privileged are of less calibre and intelligence than students of other communities. Contrary to this some studies (Prince, 1981; Sharma, 1982 and Singh, 1982) found that the educational aspirations of the backward community students were high and these students did not take the occupations of their father. Their

educational aspirations are as high as that of the students of the privileged classes. Financial assistance and reservations may have facilitated their educational advancement.

Because of all the above reasons difference in scholastic achievement between the two different communities are anticipated. But, the present study shows that both come under the 'moderate' category in the skill of basic employability skills. The following may be the reasons why all are of the same level in basic employability skills.

The school, which is the only source for learning English, offers the students of different categories the same exposure to the second language. The researcher has undertaken this study only in regional Marathi medium schools and hence all the students are exposed to English language only for a short duration. They are expected to learn English during the English period lasting for only 45 minutes a day. Students as such, irrespective of their community make only a poor use of English inside and outside the school, i.e., students of different communities are on the same plane as far as English is concerned.

This may also be attributed to their long years of education, i.e., from standard I to standard VIII, IX. Marked difference expected or found in the students of these categories at the entry point may have been erased off by these nine long years of exposure to education of same kind and same status. It explains, therefore, the phenomenon of students of different communities pooling at the moderate level in their of basic employability skills.

Private coaching is given in majority of the schools to weaker students. It also helps in language improvement. Moreover there are certain social organizations which offer free board and lodge to certain categories of students who can't afford to pay for these facilities. The state as well as the central governments on their part offer free coaching campaigns at different levels for deserving students in the underprivileged classes. Moreover, reservation of seats in higher and professional studies, relaxation in marks and age at the entry points, concession in payment of fees, monetary assistance to buy books and meet travel expenses, reservation of vacancies in the job market and so on and so forth for students of privileged communities have gone a long way in reducing the gap between them and the privileged ones in the field of education. Therefore this may also be considered as a reason for the 'moderate' level of achievement shown by students of different communities in basic employability skills.

However the differential analysis of the individual attainments of two three groups reveal significant differences between the students of privileged and forward communities. Many studies (Patel, 1984; Singh 1979 etc.) show that caste plays a major role in predicting school achievements. Forward community students are superior in school performance to privileged

community students. Students of forward communities are often exposed to good interpersonal interaction at home. Since all the members of the families are educated, there is a possibility of sharing their experiences in a variety of ways, i.e., the language, be it Marathi or English, may be used in different forms to suit different situation. Standard form of the language may be used even in ordinary communications. All these lead to a favourable home condition for forward community students to make use of the language for different communicative purposes. They get plenty of chances to visit libraries and to have libraries at home where they can collect and read books of their own choice. As they have televisions at home and avail many English satellite channels like BBC, Discovery etc. they are exposed to variety in the use of the language. Hence it may be interpreted that these factors may have caused positive effect over the attainment of the forward community students in basic employability skills.

Effect of Parent's Education on attainment level of basic employability skills

Presence of basic employability skills is not influenced by Parental education. It shows that Parental education may foster academic skills readiness, but not necessarily positive academic skill attitude. Moreover, it gives rise to the fact that possession of a particular type of skill need not necessarily give rise to a positive attitude towards the performance of that task. In the same way Parental education is not found to influence the Cognitive style of standard IX and X students.

Effect of Parent's Annual Income on attainment level of basic employability skills

From this it may be presumed that Parental education and Parental annual income are interrelated. Higher Parental education, may lead to higher Parental annual income.

Higher Parental annual income leads to greater availability of academic skill sources. Srinivasa Rao (1982) and Dass (1984) stated that the academic skills of children depended mostly on socio-economic status. When the annual income is high the socio-economic status will also be high. When there is high socio-economic status, there may be a chance of getting more educational oriented appliances such as computer, videocassettes etc. In such families one can expect very good encouragement and motivation for higher studies. Thus it may be concluded that because of these reasons, students from high Parental annual income families are found to do better in basic employability skills.

The present study shows that the Parental annual income does not influence basic employability skills and all its components. It seems to contradict the previous finding related to Parental income (Patel, 1983) which states children of higher income group parents were superior in skills. It may be inferred therefore that income of the parents is not in

correspondence with their education and there may not be characteristics common to education and income, for the sample taken for the study.

As basic employability skills also is not influenced by Parental annual income. The population of this study comprises pupils of standard IX and X studying in government and government-aided institutions. All such institutions have similar structure, similar mode of teaching, similar mode of examinations etc. Therefore the expected linguistic differences in the students of different Parental annual income may get nullified because of the climate of the school from where they get education. In the same way Cognitive style is also not influenced by Parental annual income. Thus it may be concluded, that in the case of students of different Parental annual income, the psychological characteristics like attitude Cognitive style is of no use in developing their skills of academic. Moreover, it suggests the fact that the psychological characteristics are almost the same for high, moderate and low Parental education and Parental annual income groups.

Observations about Pimpri-Chinchwad Corporation Schools

i) **Physical Environment**

The most salient characteristics that stuck researcher in each school was the school environment. Children were seated in spacious class rooms that often had proper teaching and learning instruments. They had big desks or benches on which they could sit seat comfortably or arrange their books so as to be able concentrate on learning. There was of the upto 40-50 students for one teacher. There was no noise distraction from inside and outside schools.

Most of all amenities which are given to Private English medium students were available for these corporation school children's.

ii) **Parents and Students**

Most of the parents are working on daily wages. Very few parents are doing jobs in big companies like Tata, SKF, Bajaj etc.

More than 90 % students were belonging to privileged class Girls students, were found to be more serious, sincere, interactive than boys students. While interacting with students, few students were found to be interested and responsible. Many students looked bored and many would talk or play with class mates. They did not interact, ask questions or indicate whether they understood what was being questioned.

iii)**Teaching:** The teaching methods generally amounted to one-way didactic process, where the teachers and students did not really interact. Teachers read from textbooks and went at one pace regardless of whether or not the whole class was following. The teachers tried to be strict with the children, but did not always have a great amount of control over the students. Researcher noticed no teaching aids other than the textbook were given to teachers.

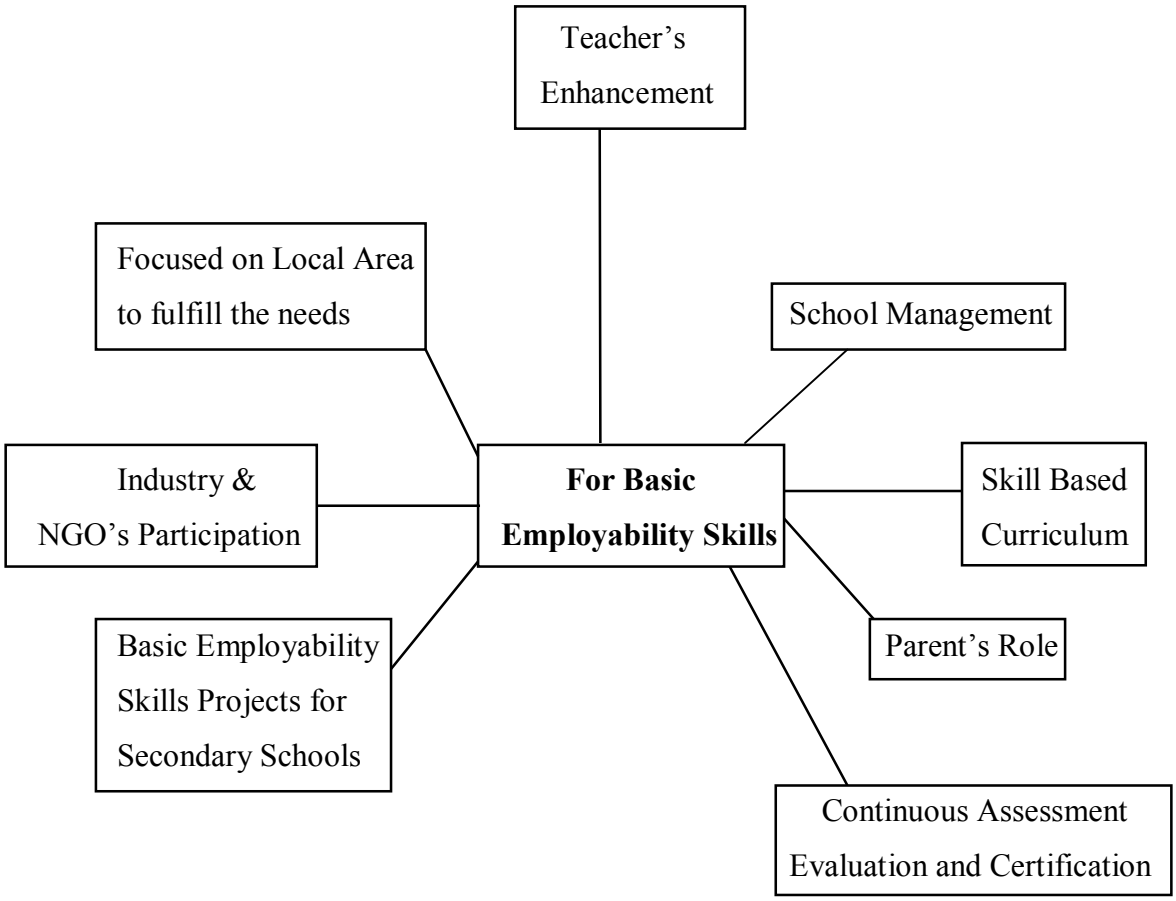
iv) **Overall Observations:** The way the students were being taught was not effective. They did not have a nurturing environment where they could focus on learning. They were being taught to simply memorize facts rather than fully process and understand concepts. The student was not learning how to think for themselves or how to apply concepts to different situations. Creativity was being stifled by the non-interactive lecture format and lack of stimulating teaching materials. The forms of discipline prevented teachers from gaining the trust of the children or promoting a sense of respect for children or adults. Student learned to communicate both verbally and physically in an aggressive manner. Besides not properly learning the academic, subjects, the thinking and learning techniques that are imbibed through schooling and that are important in non-academic life, were not being learned. Children were reluctant to think for themselves and did not seem to value originality. There was usually a set of talkative children who were quick to volunteer answer and the rest of the children were content to let them handle class participation alone. There was a lack of desire to achieve. Children did not seem to their exams seriously and when results arrived, children seemed to accept their marks as matter of fact. They did not seem to fully grasp their role in achieving high marks. Judging by some of the children's notebooks that researcher saw, it seemed that study habits were not taught to the children. Organization skills were lacking and note taking was haphazard such that if researcher asked children to refer back to their notes to find an answer to a question, they were either unable to find the information or their notes were be incomplete.

Conclusions

1. Some skills are difficult to learn at school. The social background is also important factors which develop these skills. Home environment, quality family life and parents education are some important major social factors which contribute a major role to acquire these skills. For urban background, all these factors are present substantially than that rural and semi-urban background. Hence secondary students from urban schools are more prominent in the reading and listening skills.
2. Secondary students from rural area scores high level of attainment of writing, high order thinking skills and personal qualities and skills.
3. Major students from rural area are belonging to lower middle and socially and economically backward area. Most of Parents are working in small scale industries.
4. Situation are changing. Parents from rural area are keen on the educating their wards to the level possible to provide a better future for them. Due to measures taken by government they are being brought into the main stream of life. Also teachers from rural schools are working hard to make the students learn better. The general criticism is that students from rural schools are poor in academic skills. When compared to the students in urban and semi-urban areas naturally, one may presuppose the presence of positive attitude towards basic employability skills in urban and semi-urban students.
5. The present study shows that students in Rural areas are better in writing skills, higher order thinking skills and personal skills. It may be because of the pull of certain other intellectual, social, emotional and linguistic factors found in them.
6. Though the most of parents of rural students are either uneducated or lower educated, the attainment level of basic employability skills is not influenced by parental education.

Recommendation

Following framework of strategic recommendation may be initiated to implement the identification, teaching, development, assessment, certification and evaluation of basic employability skills at secondary schools.



1) Teacher's Enhancement

It is the teacher who interprets and implements the educational policy in the actual classrooms. He or She is the most crucial person in the system.

Some Recommendation for Teachers

1) He or she can communicate to students that they have the ability to perform tasks successfully and that they are expected to do so; provide monitoring and encouragement to help them achieve success.
2) He or she can express work values through classroom instruction. Model attention to quality thoroughness, and a positive attitude.
3) He or she can utilize democratic instructional strategies such as role playing / simulation, problem- solving exercises, and group discussion with students ; keep the use of lectures and reward structures to a minimum.
4) He or she can adapt instructional strategies to the tasks being taught and to the students performing them; do not hold rigidly to texts or syllabi.
5) He or she can individualize instruction as much as possible, making use of a range of materials in different media in response to students' differing learning styles.
6) He or she can participate in professional development activities and / or enroll in classes that emphasize methods to teach employability skills.

Proposed Strategic Action for Teachers

School can conduct induction training programme during pre-service or in-service training to enable to better orient and equip teachers for the teaching basic employability skills. Teachers morale can be boosted and need to be motivated to committing to the pursuit of excellence both in teachers and students. He can become active collaborator in the knowledge exploration to students.

Skill Teacher : A separate paper on skill education would be included in B.Ed. and M.Ed. courses.

School Internship for Teachers

Pre-service and in-service component of teacher education.

Do research of innovation on current educational practice and frame a course for professional Development.

Initiate this model involving a brief theoretical orientation and multicultural and teaching for diversity.

Need to organizing learner centered, activity based participatory learning.

2) School Management

The school is remains instrument to implement educational activities and programme determined by State and Central Government.

Strategic Role for School Management

School Management can make its own strategy through reflection and vision building exercises to implement basic employability skills at schools involving all stake holders. It can take collective responsibility of whole school in a corporate framework. It should make provisions for continuous professional development of school teachers through opportunities for participating in the field of based research and development activities. It can conduct periodic assessment and evaluation of schools against planned quality improvement measures.

3) Skill Based Curriculum

Proposed Strategic Action

The school should focus on problem solving and reasoning skills and decrease the emphasis on rote memorization. Curriculum should focus on inherent creative capabilities of the students. There is need for curriculum that focus on work place skills and restructuring of secondary schools that would deliver those skills.

4) Parent's Role

Strategic Action for Parents

The school arrange the seminar for parents to make aware what is happening in the society and what is required to develop skills. Parents can play strategic partner with school authority to teach and initiate the basic employability skills in students.

5) Continuous Assessment, Evaluation and Certification

It is need to know the successful implementation of basic employability skills among secondary students. There should be continuous, regular and time bound programme. There should be assessment and evaluation must be done by professional authority. Continuous research and changes should be done according to requirement. Feedback mechanism to identify deficiencies must be conducted.

6) Basic Employability Skills Projects

Following are some illustration of projects which can be implemented at secondary schools for developing basic employability skills.

List of Projects

1) School to work transition
2) Employability skills port folio
3) In schools jobs
4) Project based on integrated career curriculum
5) Involving parents in career development
6) Career awareness fair and career pathshala

Projects in Details

1) School to Work Transition

It involves "Learning by doing" links education with real world learning.

2) Basic Employability Skills Portfolio

It may develop school based competencies with extracurricular accomplishment and identify personal strength and weaknesses.

3) In School Jobs

It can create formal programme to experience condition of work in the outside world and give students opportunities to apply abstract knowledge to practical problems.

4) Project Based on integrated Career Curriculum

Curriculum consists human relations, time management concepts, creativity, problem solving skills, critical thinking, oral communication and written communication skills.

All are integrated in business employment. Students can understand how Maths, Science, the social Science and English relate to business and industry environment.

5) Joining Parents in Their Jobs

Students can be allowed to have experience what their parents do in their workplace.

6) Career Awareness Fair and Career Pathshala

7) Industry and NGO's Participation

Secondary school students can and should-acquire 21st century skills not only in the classroom, but also in the community. Students spend only a limited portion of their time in school, but the world beyond the classroom can offer significant teaching and learning opportunities as well.

Educators and states should partner with the business community (Industry) and community-based organizations (NGO) to develop a broad consensus on the basic employability skills

they value. They should jointly implement a strategy to help secondary school students acquire basic employability skills, both in traditional educational settings and outside of school, including workplace experiences and after-school activities.

8) Focus on Local Area to fulfill the needs

It has most crucial aspects for decentralisation of jobs. It can initiate for social and economical development of local area. It may satisfy the needs of local employers and enterprise. It can initiate entrepreneurial activities with small and medium enterprises in local areas. It may be useful for skills enhancement of local workforce. It may focus on local industries like Agro-based, dairy service, food industry etc. It can fulfill the needs of local area.

Employability Skills Training Schools

Authority can conduct school based Apprenticeships or Traineeship or Vacation Course to offer a Certificate of Skills Holder and to enable secondary students the opportunity to work with employers and complete a nationally recognized qualification. It may link secondary school with vocational educational institutes like ITI, Diploma Course etc. It can offer service for mentoring, motivation career counseling, career guidance etc.

Chapter - VII

Future Scope for Research

The following studies may be undertaken to answer many of problems raised on the basis of the findings of present study.

1 A critical study on teaching and learning of academic skills in secondary classes.

2 To study basic employability skills developed by students of primary and higher secondary students in Maharashtra.

3 An investigation of basic employability skills developed by students of secondary English Medium and Higher secondary students on the basis of different communities like Open, OBC, SC/ST, NT etc. categories.

4 A study of personal and environmental factors influencing basic employability skills at primary, secondary and higher secondary educational level.

5 Preparation and validation of materials for developing basic employability skills for students of different classes.

6 Evolving strategies for developing interest and fostering positive attitude towards basic employability skills in students of different classes.

7 Developing strategies for effective teaching, learning and developing of basic employability skills among the students of Marathi and English Mediums schools of all levels.

Chapter VIII

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Chapter IX

Annexure

1) School Information Form

No. of School ☐

Date : _____

Name of School : _____

Address of School : _____

Phone No. _____

Name of the Principal : _____

Phone No. : _____ E-mail : _____

Secondary School Teachers

1) Name (Science) _____ Phone No. : _____

2) Name (Maths) _____ Phone No. : _____

3) Name (English) _____ Phone No. : _____

4) Name (Hist. / Geog.) _____ Phone No. : _____

Type of School : Boys ☐ / Girls ☐ / Coeducation ☐

Area of School : Urban ☐ / Suburban ☐ / Rural ☐

No. of students : (Marathi Medium) Secondary School

	Boys	**Girls**	**Total**
9th Std.			
10th Std.			
Total			

Period of First Semester Exam. : From _____ to _____

Period of Diwali Vacation. : From _____ to _____

Starting Date of Second Semester : From _____

Possible Date / Period of Survey : _____

Remarks : _____

2) A copy of permission letter to conduct survy.

Copy of permission
letter No. : / C-1 / 2012 - 13
Researcher Name
Date : / / 2012

To,

_____

_____

Subject : Approval Letter for Conducting **"Survey for Marathi Medium Secondary School (9th and 10th Std.)"** in Pimpri-Chinchwad Area.

Sir / Madam,

This communication is with my interest in perusing Research Survey regard to my **PhD dissertation in Management Science** from T.M.V. (Pune). A letter is enclosed. My PhD subject is based on **"Presence of Basic Employability Skills in Secondary Students in Marathi Medium Schools in Pimpri-Chinchwad Area".** For this research, the survey will be conducted to collect data base from PCMC Municipal Schools / Govt. Aided / Non Aided Marathi Medium Secondary Schools.

The Requirements of Survey

Sr. No.	Description	Required Nos.
1	Marathi Medium Secondary Schools run by PCMC / Govt. Aided / Non Aided	Minimum 15 Schools of PCMC Corporation and Other Schools (Govt. Aided / Non Aided)
2	No. of Students per School	IX Std.→ 30 Nos. (15 Boys + 15 Girls) X Std.→ 30 Nos. (15 Boys + 15 Girls)
3	No. of Secondary School Teachers per School	Minimum 5 Teachers
4	Period of Survey	November 2012 to December 2012
5	Time Schedule	Minimum 2.00 hours (Two Days Only)

Basic Employability Skills and Personal Qualities

a) Academic Skills

1) Reading **2) Writing Skills** **3) Listening Skills**

b) High Order Thinking Skills (HOT Skills)

4) Analysis **5) Evaluation** **6) Creating**

c) Personal Qualities / Skills

7) Ethics and Values **8) Motivation**

9) Entrepreneurial Qualities **10) Self Confidence**

I am giving **assurance** that **the result** or **any other information** about this survey will be published or used **with prior permission of Authority.**

The ethics of secrecy will be followed by me.

In this regard I will be grateful for your kind support in helping me with the research survey. I look forward for your valuable rely.

Thank you

Kind regards

Researcher Name

PhD Student

Management Science

Enclosed : Copy of University Letter

3) Table

List of Schools (Surved)

Period of Survey - 23/11/2012 to 14/12/2012

Sr. No.	Name of School	Medium	Date of Survey	Area of School	Type of School	Place
1	JPNV (Gharkul)	SE	23/11/2012 and 26/11/2012	Urban	Private School	Nigdi-Pradhikaran
2	Bhairavnath School	SE	03/12/2012 and 04/12/2012	Rural	Private School	Bhosari
3	PCMC, Landewadi	M	03/12/2012 and 04/12/2012	Rural	Corporation School	Bhosari
4	PCMC, Thergaon	M	05/12/2012 and 06/12/2012	Rural	Corporation School	Thergaon
5	PCMC, Wakad	M	5/12/2012 and 6/12/2012	Rural	Corporation School	Wakad
6	PCMC, Pimpale Gurav	SE	07/12/2012	Semi Urban	Corporation School	Pimpale-Gurav
7	PCMC, Pimpale Saudagar	SE	08/12/2012 and 11/12/2012	Semi Urban	Corporation School	Pimpale-Saudagar
8	PCMC, Pimpri Nagar	M	11/12/2012	Urban	Corporation School	Pimpri
9	Bhoir School	M	12/12/2012	Urban	Private	Akurdi
10	PCMC, Sant Tukaram Nagar	M	12/12/2012	Semi Urban	Corporation School	Sant Tukaram Nagar
11	New English School	M	12/12/2012	Urban	Private School	Chinchwad
12	Barane School	M	13/12/2012	Urban	Private School	Dange Chowk
13	Chapekar School	M	13/12/2012	Urban	Private School	Chinchwadgaon
14	New English School	M	13/12/2012	Semi Urban	Private School	Bijali Nagar
15	JPNV (Gurukul)	M	14/12/2012	Urban	Private School	Nigdi

4) Table

List of Schools (Surved) (in detail) Period of Survey - 23/11/2012 to 14/12/2012

Sr. No.	Name of School	10th Boys	10th Girls	Total	9th Boys	9th Girls	Total	Medium of Instruction	Date of Survey	Area of School	PCMC or Private	Area
1	JPNV (Gharkul)	16	15	31	15	20	35	Semi Eng.	23/11/2012 and 26/11/2012	Urban	Private School	Nigdi-Pradhikaran
2	Bhairavnath School	18	12	30	14	15	29	Semi Eng.	03/12/2012 and 04/12/2012	Rural	Private School	Bhosari
3	PCMC, Landewadi	15	15	30	13	17	30	Marathi	03/12/2012 and 04/12/2012	Rural	Corporation School	Bhosari
4	PCMC, Thergaon	15	17	32	15	15	30	Marathi	05/12/2012 and 06/12/2012	Rural	Corporation School	Thergaon
5	PCMC, Wakad	14	16	30	15	14	29	Marathi	5/12/2012 and 6/12/2012	Rural	Corporation School	Wakad
6	PCMC, Pimpale Gurav	11	20	31	11	15	26	Semi Eng.	07/12/2012	Semi Urban	Corporation School	Pimpale-Gurav
7	PCMC, Pimpale Saudagar	15	13	28	12	23	35	Semi Eng.	08/12/2012 and 11/12/2012	Semi Urban	Corporation School	Pimpale-Saudagar
8	PCMC, Pimpri Nagar	15	13	28	14	15	29	Marathi	11/12/2012	Urban	Corporation School	Pimpri
9	Bhoir School	10	15	25	10	10	20	Marathi	12/12/2012	Urban	Private School	Akurdi
10	PCMC, Sant Tukaram Nagar	15	15	30	18	8	26	Marathi	12/12/2012	Semi Urban	Corporation School	Sant Tukaram Nagar
11	New English School (C.G.)	15	18	33	14	16	30	Semi Eng.	12/12/2012	Urban	Private School	Chinchwad
12	Barane School	17	14	31	13	17	30	Marathi	13/12/2012	Urban	Private School	Dange Chowk
13	Chapekar School	11	15	26	16	10	26	Marathi	13/12/2012	Urban	Private School	Chinchwadgaon
14	New English School (B.N.)	14	18	32	15	15	30	Marathi	13/12/2012	Semi Urban	Private School	Bijali Nagar
15	JPNV (Gurukul)	16	10	26	14	6	20	Marathi	14/12/2012	Urban	Private School	Nigdi
	Total	217	225	442	207	218	425		Total (Boys + Girls)		867	

5) Table

Total Samples Table (Total Population and Selected Sample Table)

Sr. No.	Name of School	Total Nos. of Students						Selected Samples						Total No. of Students	Selected Students for sample	Selection %
		10th			9th			10th			9th					
		Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total			
1	JPNV (Gharkul)	93	72	165	118	100	218	16	15	31	15	20	35	383	66	17.20%
2	Bhairavnath School	187	219	406	211	241	452	18	12	30	14	15	29	858	59	6.90%
3	PCMC, Landewadi	40	41	81	37	31	68	15	15	30	13	17	30	149	60	40.20%
4	PCMC, Thergaon	114	120	234	177	101	278	15	17	32	15	15	30	512	62	12.10%
5	PCMC, Wakad	60	53	113	109	84	193	14	16	30	15	14	29	312	59	18.91%
6	PCMC, Pimpale Gurav	96	139	235	128	123	251	12	19	31	11	15	26	486	56	11.70%
7	PCMC, Pimpale Saudagar	98	86	184	105	129	234	14	13	27	12	23	35	418	62	14.80%
8	PCMC, Pimpri Nagar	44	36	80	58	51	109	15	13	28	14	15	29	189	57	30.15%
9	Bhoir School	11	20	31	16	18	34	10	15	25	10	10	20	64	45	71.87%
10	PCMC, Sant Tukaram Nagar	48	36	84	48	22	70	15	15	30	17	9	26	154	56	36.36%
11	New English School	110	52	162	116	62	178	15	18	33	14	16	30	380	63	16.57%
12	Barane School	18	16	34	30	22	52	17	14	31	13	17	30	86	59	68.60%
13	Chapekar School	21	19	40	11	11	22	11	15	26	16	10	26	87	52	59.77%
14	New English School	24	29	53	29	37	66	14	18	32	14	16	30	139	62	44.60%
15	JPNV (Gharkul)	17	10	27	16	6	22	16	10	26	14	6	20	49	46	93.83%
		981	948	1929	1209	1038	2247	217	225	442	207	218	Total	4176	867	20.83%

Synopsis

Overview

Education is the process of Human Resource Development. Human workforce is developed in many ways. Human workforce is also further developed on – the - job through systematic or informal training programmes. Many workers increase their productivity by acquiring new employability skills (technical and non-technical skills) and perfecting old one. Non technical skills involve basic employability skills. Basic employability skills refer to specific skills essential for employability which can be taught in the schools. If those basic skills of employability are taught in secondary schools effectively and efficiently, it may save costs which are incurred on training and development of entry level employees. Also it will be added value to secondary education.

While Primary Education is a basic enabling factor for participation and freedom, for trading a life with dignity and overcoming basic deprivation, secondary education is the gateway for prosperity, for transforming the economy and establishing social justice in any country. It opens the world of work to the youth of the country and contributes to socio economic development of the Community. Secondary Education is a crucial stage in the educational hierarchy as it prepares the students for higher education and also the world of work. With the liberalization and globalization of the Indian economy, the rapid changes witnessed in scientific and technological world and the general need to improve the quality of life and to reduce poverty, it is essential that schools leavers acquire a higher level of knowledge and basic employability skills than what they are provided in the eight years of elementary education, particularly when the average earning of a secondary school certificate holder is significantly higher than that of a person who has studied only up to class VIII. The policy at present is to make secondary education of good quality available, accessible and affordable to all young persons in the age group of 14 to 18 years.

Need for this Research

Secondary Education School education play a central rule in the development of human resource and in turn socio-economic development. India is emerging as the fastest growing economy in the world. The success depends largely upon human resource development. We need to tune our secondary education to emerge as the single largest provider of workforce in all spheres of national productivity. Hence teaching and learning of basic employability skills at secondary schools is the need of time. By acquiring basic employability skills at secondary

school level, the student can definitely become more empowered and enhanced in human resource qualities. Hence it is need for secondary schools to provide basic employability skills education to students to bridge the gap between skilled and unskilled workforce. There is also need to enhance the quality of secondary education by implementing basic employability skills at schools.

It is need to examine the attainment levels of basic employability skills at secondary schools. Also it is need to study the effect of demographic factors (Socio-economic) on attainment level of basic employability skills among secondary students.

Also the role of school teachers for teaching basic employability skills is needed to be studied.

This leads to following key questions

- What is the level of attainment of basic employability skills among the secondary school students.
- What are the socio-economical factors (demographic), responsible for development of basic employability skills at secondary schools.
- What is the contribution of school teachers to teach and to develop basic employability skills among secondary school students.

Employability Skills

Employability skills are ability of individuals as per the requirement of the employers and the ability to perform the tasks thereby achieving organizational goals and objectives. Employability skills refer to specific skills essential for employment. They are composite skills (technical and non-technical). These are the critical tools and traits required to perform tasks at workplace. These skills are much sought after these days by employers. The needs of employability skills are different in different industries. As IT industry needs different skill and hotel industry needs different skill. However, certain skills qualities such as communication skills, interpersonal skills, truthfulness, right attitude, analytical skill, decision-making and team building skills are a few which are common and basic skills for every sector.

Basic Employability Skills

This study was conducted to examine the attainment level of selected Basic Employability Skills as they apply to secondary schools students to prepare students for entry level positions in workforce. Basic Employability Skills are identified as Basic or foundation or thinking skills or personal qualities.

In 1988, the American society for training and development and the united states department of labor identified basic skills for the work.

In 1991 the secretary's commission on achieving necessary skills (SCANS, 1991) identified foundation skills and competencies common to all occupations which along with academic skills, were designated as potential indicators of successful entry to the work place.

The foundation skills included following skills.

i) **Basic skills**

Reading, Writing, Mathematics, Listening, Speaking etc.

ii) **Thinking skills**

Creative Thinking, Decision Making, Problem solving etc.

iii) **Personal qualities**

Self-confidence, motivation, sociability etc.

Brief survey of earlier work (Literature Survey)

This chapter provided a synthesis of recent and past research on the themes of employability skills, secondary education, skill gap etc.

- By taking into account of a huge availability of literature, it was thought to refer exact material. It was resulted in proper information base.
- The basic employability skills in this research have been identified through U.S. development of labour's secretary's commission on achieving necessary skills (SCANS) in partnership with educator, business, industry representation.
- Also some references are considered from **Studies in India**, which are as follows ;
  - National policy on education, 1986
  - Kothari Commission Report on Education, 1964
  - National Curriculum Framework (NCERT) 2005 ; recommendations of focus group paper on work and education.
  - Central Board of Secondary Education (CBSE) reports on entrepreneurships in secondary schools

All the literature published on this background states about teaching and learning of basic employability skills in the secondary schools. However efforts have not been seen to measure attainment level of basic employability skills imported by secondary schools.

The students, parents and the society are quite unaware of attainment level of basic employability skills imported by the secondary students as there is no official yard stick available for such a measurement. On this background them is a need to understand the perception of implementation of basic employability skills by stake holders, the students, the parents and the teaching faculty. There is also a need to investigate better methods for enhancing of learning and teaching of basic employability skills to secondary students in the secondary schools.

Education plays an important role in achieving both rapid and sustainable economic development, as also in sustainable human development. Sustainable development requires sustainable educational development. Only a strong and vibrant education system can contribute to sustainable development. Recognizing this, India has made during the post-independence period constant efforts to develop education. As a result India has one of the largest education networks in the world. It has helped in achieving self-sufficiency in manpower. All this has contributed to social, economic and technological development.

Education is an essential tool for achieving a sustainable future. This has been well recognised by independent India. As a result, during the post independence period, there has been an educational explosion in terms of number of schools, colleges, universities, number of "students, teachers and public expenditures on education.

Educational reform is taking place. Efforts have been made to reduce truancy and dropout rates, introduce computer literacy and foreign languages in the early years, establish after-school programs, require more basic academic courses for a high school diploma, extend the school year, and enhance job-readiness programs with collaborative partnerships between business and industry. Today's schools must determine new standards, curricula, teaching methods, and materials. Teachers and schools must begin early to help students see the relationships between what they study and its applications in real-world contexts. It is not true that everything we need to know in life we learned in kindergarten; it is true, however, that we can begin very early to learn what life requires. If they are taught basic employability skills, students in the schools of tomorrow will find the content more relevant and challenging. Teachers will find their classes to be more attentive and interested. Employers and college officials will be delighted with the results because the curriculum will be tied to

real things in the real world. By teaching basic employability skills, our schools will soon become schools of tomorrow.

The objectives of present work which were framed based on above background were as follows

i) To study the attainment level of basic employability skills among secondary students.

ii) To study the effect of socio-economical factors such as Gender, Area of Schools, Type of Schools and Medium of Schools on attainment level of basic employability skills.

iii) To study the role of school teachers to teach basic employability skills.

Hypothesis

On the basis of above objects and interactions with large number of concerned people following hypotheses are put forward

H-1) Secondary School Students (Std. IX and X) from Marathi and Semi-English Medium Schools possess moderate level of basic employability skills (BES)

H-2) There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools (boys and girls) on basic employability skills (BES). (Gender of students)

H-3) There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools from Urban, Semi-urban and Rural areas on basic employability skills (BES) (Area of School)

H-4) Marathi Medium Secondary School Students (Std. IX and X) from Private Marathi Medium Schools and from Pimpri-Chinchwad Corporation Schools have same attainment level of basic employability skills. (Type of Schools)

H-5) There is no difference between students from Semi-English Medium Schools and Marathi Medium Schools on basic employability skills (BES) (Medium of instruction)

Research Methodology and Collection of Data

Statement of the problem - "Preparation of a valid research tool for assessing the skills of basic employability possessed by secondary school students (Std. IX and X) from Marathi Medium and Semi-English Medium Secondary Schools in Pimpri Chinchwad Area during 2012-13 and identifying the relation between the basic employability skills and demographic and sociological variables such as Gender, Area or Locality of school, type of school and instruction medium."

Scope

- Secondary school students (Std. IX and X) from Marathi Medium and Semi-English Medium Secondary Schools in Pimpri Chinchwad Area during 2012-13
- Pimpri-Chinchwad : It is a part of Pune district in state of Maharashtra
- Pimpri – Chinchwad Municipal Corporation Area consist 22 villages [8 – urban, 6 - semi-urban, 8 – rural)

Method of Investigation : Survey method

Type of Research : It was an empirical research as it was based on teaching experiences (22 years) of researcher from his own coaching institute for secondary students.

Variables such as Gender of student's, Types and Areas of school were affecting other variables. i.e. Basic Employability Skills (Reading, Motivation, etc.) These variables were identified and verified, which were measureable of interest to find the relation between them.

Nature of Research : It was applied research. The problem is skill gap was identified and defined. Efforts were undertaken by researcher to find probable solution or actions to solve the problem.

Some of the variables were qualitative (for teacher) and quantitative (for student) in nature and strictly demanded in-depth analysis of events which were based on experiences of researcher.

Hence nature of this research was mixed mode of descriptive, qualitative and quantitative in nature.

Type of analysis : It was qualitative and quantitative research analysis.

The variables like basic employability skills (Reading, Listening, Motivation etc.) are quantitatively analyzed and the school teacher opinions were qualitatively analyzed.

For Objectives and Hypothesis, refer slide 5 (Page 10)

Population and sampling (For schools and students)

Sample size determination : In consultation with the guide, experts in educational and management field and earlier studies. The sample size for secondary schools, teachers and students was decided.

It was based on principles of stratification and proportion.

The sample size for schools was based on stratified sampling since school was not a homogenous group.

The population i.e. total schools was stratified based on strata like area of schools, types of school.

The sample size of students was based on simple random sampling on selection by school authority.

Sampling procedure : The proportional and incidental sampling techniques have been implemented to decide the sample.

The students i.e. samples were selected as instructed by the respective school authority.

i) For schools

Population

All 99 secondary Marathi Medium Schools from Pimpri-Chinchwad Corporation Area

The population of the present study consists of all secondary schools of Standard IX and X from 16 Pimpri Chinchwad Corporation Schools and 83 Private granted and non-granted Marathi Medium Secondary Schools in Pimpri Chinchwad Area.

Pimpri Chinchwad Area

Marathi Medium Secondary Schools (2011-12)

	Total Schools	Schools selected for survey	%
Pimpri Chinchwad Municipal Corporation Schools (PCMC Schools)	16	7	44 %
Private Marathi Medium Secondary Schools (Granted / Non-granted)	83	8	10 %
	99	15	15 %

Sampling and basis of selection of 15 schools.

Justification of selection of 15 schools

Pimpri-chinchwad municipal corporation area is politically divided into wards. e.g. Bhosari, Nigdi, Pimpri, Akurdi, Chinchwad. Researcher intended to cover sample representation from each ward consisting some specific backgrounds. Hence the15 schools out of 99 schools were stratified on the basis of backgrounds like Gender of students (Boys and Girls), Area of School (Urban, Semi-Urban and Rural), Type of school (Corporation and Private) and Medium of instructions (Semi-English and Marathi Medium).

Geographical Map for Pimpri Chinchwad Corporation Area is enclosed.

ii) For student

Population of students (IX and X Std.) from 15 schools

All secondary students (4176 No.) from 15 schools

	Total Population (IX and X Std.)	Sample selection	Sampling %
10th Std.	1929	442	-
9th Std.	2247	425	-
Total	**4176**	**867**	**20.76 %**

Sampling and basis of selection of students

Total samples of students are 867 No.

After fixing 15 schools, average 25 - 30 secondary students, from Std. IX and X from each school were randomly chosen from school authority to form the sample of the study.

Sampling % for students : 20.76 %

Collection of Primary Data and Questionnaire

By using three types questionnaire (structured, closed and descriptive), the primary data was collected from 15 selected schools. The special class room sessions were conducted under supervision of respective school teachers. Questionnaire was made by taking account of level of perception and understanding of secondary students (IX and X Std.) by framing questions in three levels (Low, Moderate, Higher)

Rational for making range of score

One Example

Ethics and Values

Minimum score = 10, Maximum score = 40

a) Lower Level Score

35 % cut off $\Rightarrow$ low level

$\therefore$ For $100 \rightarrow 35$ $\quad \therefore x = \frac{40 \times 35}{100} = 14$

$40 \rightarrow x$

$\therefore$ Range of lower level = 10 – 14

Lower level score :- 10 to 14

b) Higher Level Score

75 % cut off $\Rightarrow$ higher level

$\therefore$ For $100 \rightarrow 75$ $\quad \therefore y = \frac{40 \times 75}{100} = 30$

$40 \rightarrow y$

$\therefore$ Range of higher level = 30 – 40

Higher level score :- 30 to 40

c) Moderate Level Score :- 15 - 29

Levels of Attainment of Basic Employability Skills

Based on Total Scores, Levels are assigned

	Ethics and Values	Motivation	Entrepreneurial Skills	Self-confidence
Levels				
Low	10 – 14	10 – 11	37 – 52	0 – 7
Moderate	15 – 29	12 – 22	53 – 110	8 – 14
High	30 - 40	23 – 30	111 – 148	15 – 20

Research Tools

The researcher constructed research tools with the help of his research guide and experts. The details of the research tools are given below.

Tools for testing basic employability skills

Skills	Pattern of Questions	Duration for Testing	No.of Questions
1) Reading Skills	Descriptive	20 min.	2
2) Writing Skills	Descriptive	25 min.	2
3) Listening Skills	Descriptive	10 min.	2
4) High Order Thinking Skills	Making Preference	35 min.	20
5) Ethics and Values, Motivation, Self Confidence	Making Preference	12 min. each	10 Q. each
6) Entrepreneurial Skills	Making Preference	25 min.	37

Academic Skills

The following assessment functions for Reading, Writing and Listening skills were framed and applied.

a) For reading skills

Two descriptive questions were framed. The power of skimming, scanning and understanding the concept and grammar, comprehension ability etc. were tested.

b) For writing skills

Two descriptive questions were framed. The power of expression, how to extract information and present in a diagrammatic form, understanding of content etc. were tested.

c) For listening skills

The power of understanding of words, sentences and phrases and to write them correctly etc.

Illustration (For reading skills)

The measured value of mean for reading skills was 5.9370 which were lying between 5 – 7, hence the attainment level of reading skill was moderate.

High order thinking skills (HOT skills)

To assess the analytical ability, evaluation capacity and creativity, a questionnaire was framed and applied.

For Higher Order Thinking Skills

Total Questions were asked = 20 Questions

Total Marks = 20 marks (20 Q x 1)

Level of Attainment (Score)

Low Level	Moderate Level	High Level
0 – 6	7 – 13	14 – 20

Since the mean values of HOT Skills was 8.544 which was lying between 7 – 13. The result was moderate level.

Entrepreneurial skills

The concept of entrepreneurial skills includes proficiencies live creativity, planning, decision making, leadership, negotiation skills, imitativeness, team work, confidence, marketing, social attitude etc.

By framing 37 questions, researcher tried to assess most of the proficiencies of entrepreneurial skills present in secondary students.

Some examples

Questionnaire for Entrepreneurial skills

Sr. No.	Q. No.	To Test Proficiency for Entrepreneurial
1	Q. 4	Confidence
2	Q. 6	Initiativeness
3	Q. 19	Social Attitude
4	Q. 36	Negotiation Skills

For Entrepreneurial Skills

Total Questions = 37 Questions

Total Marks = 148 marks (37 Q x 4)

Minimum Score = 37

Maximum Score = 148

Lower Level of Attainment

For 100 $\rightarrow$ 35

148 $\rightarrow$ x

$\therefore$ **Lower Level is 37 – 52**

$$\therefore \frac{100}{148} = \frac{35}{x} \quad \therefore x = 51.80$$

Higher Level of Attainment

For 100 $\rightarrow$ 75

148 $\rightarrow$ y

$\therefore$ **Higher Level is 111 – 148**

$$\therefore \frac{100}{148} = \frac{75}{y} \quad \therefore y = 111.00$$

Moderate Level of attainment 53 - 110

Since the mean values of entrepreneurial skills was 106.4233 which was lying between 53 – 110, the level of attainment for entrepreneurial skills was moderate.

Similarly for all other remaining skills, the result was moderate level.

For other skills

To assess the level of attainment of Ethics and Values, Self motivation and Self confidence, similar procedure was adopted. The results was moderate level of attainment

Procedure for Data Collection

The authority of a few Marathi Medium Schools from Pimpri-Chinchwad area was contacted. The concerned people were briefed about the survey and its purpose. Confidentiality of scores was assured. Assurance was also given that the students were to be contacted only to know about the abilities/skills they possess and the investigator would not interfere in any of school administrative part. The permission for data collection was thus taken from the schools authority. The Class IX and X students were randomly selected from these schools.

The purpose of the study was explained to them. The participants found the research interesting and they volunteered for this project. The tests were administered in accuracy and with proper care. Instructions were given ensuring the participants have understood what they were supposed to do. Doubts were cleared. The investigator personally collected the data and saw that the respondents have answered the questionnaire completely. The data was then given for statistical analysis.

Total Time Duration for questionnaires

For Academic and HOT Skills - 1 hr 40 min. = 100 min.

For Personal Skills and Qualities - 1 hr. 15 min. = 75 min.

Rational of the Tool

By reviewing the literature, considering the SCANS report, discussing with experts from education and management field and guide, the researcher had decided to focus on basic employability skills for his research

For academic and thinking skills

- Due to non availability of standardized tools researcher had prepared his own research tools with the help of experts.
- It was based on curriculum of Std. IX and X std of SSC board of Maharashtra (English, Geometry, Algebra, Science subjects)

For personal skills and qualities.

- For ethics and values, motivation, Entrepreneurial skills and self confidence, Standardized tools were used.

Reliability

The items for testing academic and higher order thinking skills have been adapted from curriculum and text books published by SSC Board of Maharashtra. After confirmation from experts, the items were finalised.

The tests on personal skills and qualities were administered to pilot sample of 97 students. Cronbach Alpha reliability coefficient was computed. The result was satisfactory.

Pilot Study

A pilot survey for 96 students was conducted. It was use for **testing validity** and **reliability** of questionnaire prepared. The results were satisfactory.

Statistical Analysis

In the present study following statistical analysis are implemented.

As the scores are not normally distributed in this study, the non-parametric tests have been used.

Mann Whitney U test is very useful for non-parametric alternative to the t test. It is used for assessing the difference between two independent samples especially in the circumstances when the assumption of normality which is required for applying the t test is not met. Kruskal Wallis test in non parametric alternative to one way ANOVA for assessing the difference between more than two independent samples.

Descriptive Statistics

Summarizing and presenting the data is called descriptive statistics. Descriptive statistics are used to describe the basic features of the data in a study. Mean and standard deviations or standard error are good indicators of descriptive statistics. In the present study first hypothesis is tested on Mean Scores. [H-1] (Hypothesis – 1)

Mann Whitney U Test

Mann Whitney U Test is used when two different groups of participants are compared on the given measures. In the present study, Mann Whitney U Test has been used to examine differences between the groups as follows :

- Gender difference on measured variables [H-2] (Hypothesis - 2)
- Difference between Marathi Medium Students and students from Semi English Medium on the measured variables. [H-5] (Hypothesis - 5)
- Differences between students from private schools and students from corporation schools on measured variables. [H-4] (Hypothesis - 4)

Kruskal Walls H Test

Kruskal Walls H Test is used when more than two groups of participants are to be compared on the given measures. Kruskal Walls H Test is used when the data is not normally distributed. In Kruskal Walls H Test the groups are compared with the ranks given to them. The chi-square value for the Kruskal Walls H Test indicates whether the difference between the groups is statistically significant or not. In the present study, Kruskal Walls H Test has been used to compare responses of students from urban areas, suburban areas and rural areas on the measured variables. Since the data of present research is not normally distributed the researcher selected Kruskal Walls H Test for comparison between study groups made on basis of the area of their schools. [H-3] (Hypothesis – 3)

Cronbach Alpha Reliability Analysis

Cronbach Alpha Reliability Analysis is based on the consistency of responses to all items in the tests. In the present research, Cronbach Alpha coefficient has been computed to examine the reliability of following tools.

- Internal consistency of statements measuring ethics and values.
- Internal consistency of statements measuring motivation.
- Entrepreneurship skills
- Self confidence

Cronbach Alpha Reliability Analysis was done even for the pilot sample of the measuring tools, namely, ethics and values, motivation, entrepreneurship skills as well as self confidence.

Limitation of Study

The Pimpri Chinchwad city is the industrial city. The Pimpri Chinchwad Corporation is one of the Richest Municipal Corporation in India. The parents are economically better and socially advanced. The presence of Basic Employability Skills may be influenced by demographic socio-economical factors.

Therefore, the results derived from the study may not be applicable to the subjects (students) of other states and districts who are likely to differ in background.

Thus the study cannot present all the factors influencing the presence of Basic Employability Skills.

Teachers Survey

Researcher intended to assess the perception of secondary school teachers about teaching of basic employability skills among secondary school students.

No. of Teachers Selected for Survey (Samples)

	Pimpri-Chinchwad Corporation School (PCMC School)	Private Marathi Medium Schools	Total
No. of Schools Selected for Research	7	8	15
No. of Secondary School Teachers Selected for Survey	31	36	67

Tools used for Teachers Survey

- The multiple type questionnaire contains 10 questions pertaining to the various aspects of overall development of students.
- The first section consisted questions related to relation between student and teacher, personality development subject, higher order thinking skills, career orientated, knowledge about management science.
- The second section of questionnaire was dealing with personal views of teachers regarding overall development of student.

Findings from Teacher's Survey

1) Only 18 % teachers are aware about higher order thinking skills.
2) Only 25 % teachers are able to explain 4 p's of marketing.
3) About 66 % teachers reported that they are teaching the subject personality development subjects to 9th and 10th Std.
4) Only 7.5 % teachers reported that acquiring employability skills is the most important for students for his / her future successful career.
5) 94 % teachers agreed that there is co-relation between study skills and personality development skills.
6) 60 % teachers are having teaching experience more than 15 years.
7) It was observed that, there was less percentage of secondary school teachers under survey who participated in various innovative projects.

Recommendations from Teacher's Survey

- School teachers need orientation as well as training to teach and develop basic employability skills among secondary school students.
- There should be collaboration between school management and teachers training college to initiate the process of teaching of Basic Employ ability Skills.
- The wide gap of understanding between teachers and students must be reduced.

Analysis of Data and Findings

1) Hypothesis 1 (H-1)

Statement : Secondary School Students (Std. IX and X) from Marathi and Semi-English Medium Schools possess moderate level of basic employability skills (BES)

Result : It is seen from table V(a) P-117 of thesis, the measured value of means of basic employability skills are lying between low and high level of attainment of basic employability skills.

Hypothesis H-1 is accepted

Hence Secondary School Students (Std. IX and X) from Marathi and Semi-English Medium Schools possess moderate level of basic employability skills (BES)

Findings for Hypothesis 1 (H-1)

The level of attainment of basic employability skills in Marathi medium schools in Pimpri – Chinchwad area is moderate. Social status does not have any significant impact on acquiring basic employability skills. Government policies like free coaching campaigns, reservation in state, relaxation in marks, concession in payment of fees, monetary assistance to buy books and meet travel expenses etc. are responsible to reduce the gap in the field of education between socially privileged and forward communities.

2) Hypothesis 2 (H-2)

Statement : There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools (boys and girls) on basic employability skills (BES). (Gender of students)

Result : It is seen from table V (b) P-118 and Mann Whitney U Tests, there is no significant difference exists in the basic employability skills of two genders (boys and girls)

Hypothesis H-2 accepted.

Hence There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools (boys and girls) on basic employability skills (BES). (Gender of students)

Findings for Hypothesis 2 (H-2)

For Secondary students from Standard IX and X, basic employability skills which are not found to be influenced by Gender difference. Both boys and girls have scored similar results. It may be attributed to similarity of the educational environment available for both of them like same school setting / class rooms / learning material / methods of teaching / type of examinations etc. Hence Gender differences are not of significant with regard of basic employability skills.

3) Hypothesis 3 (H-3)

Statement : There is no difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools from Urban, Semi-urban and Rural areas on basic employability skills (BES) (Area of School)

Result : According to Kruskal Wall H Test and Table. V (c) P-120 of thesis.

1) Mean rank value of reading and listening skills for secondary students from urban schools are grater than that of from rural and semi urban schools. Hence for reading and listening skills, secondary students from urban area are better than that of from semi urban and rural area.
2) Mean rank values of Writing Skills, High Order Thinking Skills, Ethics and Values, Motivation, Entrepreneurial Skills and Self Confidence for students from rural area are greater than that of from urban and semi-urban school.

Hence for Writing Skills, Ethic and Value, Motivation, Entrepreneurial Skills and Self Confidence for secondary students from rural school are better than that of from urban and semi-urban school students.

3) Also the chi-square values are different for all skills.

It indicates that presence of basic employability skills differs significantly across area of schools.

Hence it is inferred that area of school has significant impact over the attainment of basic employability skills from Marathi medium secondary students.

Hence **Hypothesis H-3 is rejected.**

Hence there is difference between secondary school students (Std. IX and X) from Marathi and Semi-English Medium Schools from Urban, Semi-urban and Rural areas on basic employability skills (BES) (Area of School)

Findings for Hypothesis 3 (H-3)

The level of attainment of understudy secondary students (Std. IX and X) from urban, semi-urban and rural area of Pimpri-Chinchwad, is only moderate.

It is influenced by area of school :-

- Skills of reading and listening of understudy students is influenced by area of school. Students from urban area score better than semi-urban and rural students.
- For urban school home environment, quality family life and parents education are some of the important major social factors which contribute a major role to acquire these skills.

- Skills of writing and higher order thinking and entrepreneurial and personal qualities like ethics and values, motivation and self confidence are influenced by the area of schools.
- Students from rural area score better than those from urban and semi-urban area.
- It is due to positive attitude and pull of certain other intellectual, social, emotional and linguistic factors found in them.

4) HYPOTHESIS 4 (H-4)

Statement : Marathi Medium Secondary School Students (Std. IX and X) from Private Marathi Medium Schools and from Pimpri-Chinchwad Corporation Schools have same attainment level of basic employability skills. (Type of Schools)

Result : It is seen from table V(d) P-122 of thesis, the values of mean rank of basic employability skills for private school are greater than that of corporation school. Hence type of school has significant impact over the level of attainment of basic employability skills Std. IX and X secondary students.

Hypothesis H-4 is rejected

Hence Marathi Medium Secondary School Students (Std. IX and X) from Private Marathi Medium Schools and from Pimpri-Chinchwad Corporation Schools have different attainment level of basic employability skills. (Type of Schools)

Findings for Hypothesis 4 (H-4)

The level of attainment of understudy secondary students (IX and X Std.) from Pimpri-Chinchwad Municipal Corporation schools and private Marathi medium secondary schools is moderate.

- Standard IX and X student's skills of basic employability is found to be influenced by type of schools.
- Students from private Marathi medium secondary schools scores better than students from Pimpri-Chinchwad corporation school.
- Majority of students from private Marathi medium schools are belonging to middle and lower middle class. Lack of proper home environment, quality of family life and parents education etc. are some economical and social factors which may lead to difficulty to acquire the basic employability skills for corporation school students.
- The negative attitude of stake holders for educational development of corporation schools is the major cause for it.

HYPOTHESIS 5 (H-5)

Statement : There is no difference between students from Semi-English Medium Schools and Marathi Medium Schools on basic employability skills (BES) (Medium of instruction)

Result : It is seen from table V(e) P-124 of thesis, the values of mean rank of basic employability skills for semi-English students have greater than that of for Marathi medium secondary students.

Hence medium of schools have significant impact over the level of attainment of Std. IX and X secondary students in basic employability skills.

Hypothesis H-5 is rejected

Hence There is difference between students from Semi-English Medium Schools and Marathi Medium Schools on basic employability skills (BES) (Medium of instruction)

Findings for Hypothesis 5 (H-5)

The level of attainment of secondary school students (Std. IX and X) from semi-English medium and Marathi medium in the basic employability skills is moderate.

- Standard IX and X student's skills of basic employability skills is found to be influenced by medium of schools.
- Students from semi-English medium secondary schools scores better than those from Marathi medium secondary schools from PCMC area in the basic employability skills.
- Academically semi-English students are better than that of from Marathi medium.
- They are more serious, studious and hardworking students than that of from Marathi medium students.
- The levels of interest in studies, intelligence and cognitive abilities are present more in semi-English students.

General Findings

1) School and school management

Most of the Corporation and Private Marathi medium schools are being provided the all amenities by Government which is given to established English medium schools. But school remains an instrument to implement educational activities and programme determined by state and central Govt. Hence sometimes it is difficult to adapt now change in system. The school principal is not able to take independent decision. Hence there is no indication of any innovative activity like skill development which is to be implemented by school. Reading is the only skill that is used more than other skills. There is absence of skill educational model which can develop basic employability skills among secondary students. There is no long term approach or strategy to implement basic employability skills at secondary schools.

School is the only resource for teaching and learning basic employability skills effectively and efficiently to secondary students. But due to some reason like non-interactive lecture, lack of stimulating materials and organization skills, it is difficult for schools to teach and develop basic employability skills. Surprisingly it is seen that private Marathi medium schools from developed area (e.g. Chinchwadgaon) are lagging behind than that of underdeveloped area (e.g. Bhosari) in basic skill development of students.

It may be due to :

- Effective and efficient school teachers
- Attention of school authority
- Role of parents

2) Students

Most of students under survey are belonging from socially, economically and educationally lower and backward communities. But present research shows that student from both communities i.e. forward and backward communities possess same level i.e. moderate level of basic employability skills.

It may be due to :

- Common text book, curriculum, exams
- Govt. policies
- Positive role of teachers and school management (rural and urban schools)
- Role of parents from rural and urban area

Still some problems are seen in the under survey

- Only few students were found to be interested and sincere for studies.
- Most of students looked bored and many would talk or play with class mates. They are less interested to ask the questions and interact with teachers.
- Some qualities or abilities were not seen like cognitive abilities, higher level skills such as organizing or sequencing information gathered.

3) About the teachers

Most of Marathi medium school teachers unlike English medium school teachers are not having any fear about losing their job. It is due to job-guarantee and seniority.

Hence they are not ready to learn and apply new techniques for teaching. They are not innovative and adaptable for any new change. Most of the teachers are not having their e-mail accounts. They are facing difficulties to adjust with their students in class rooms.

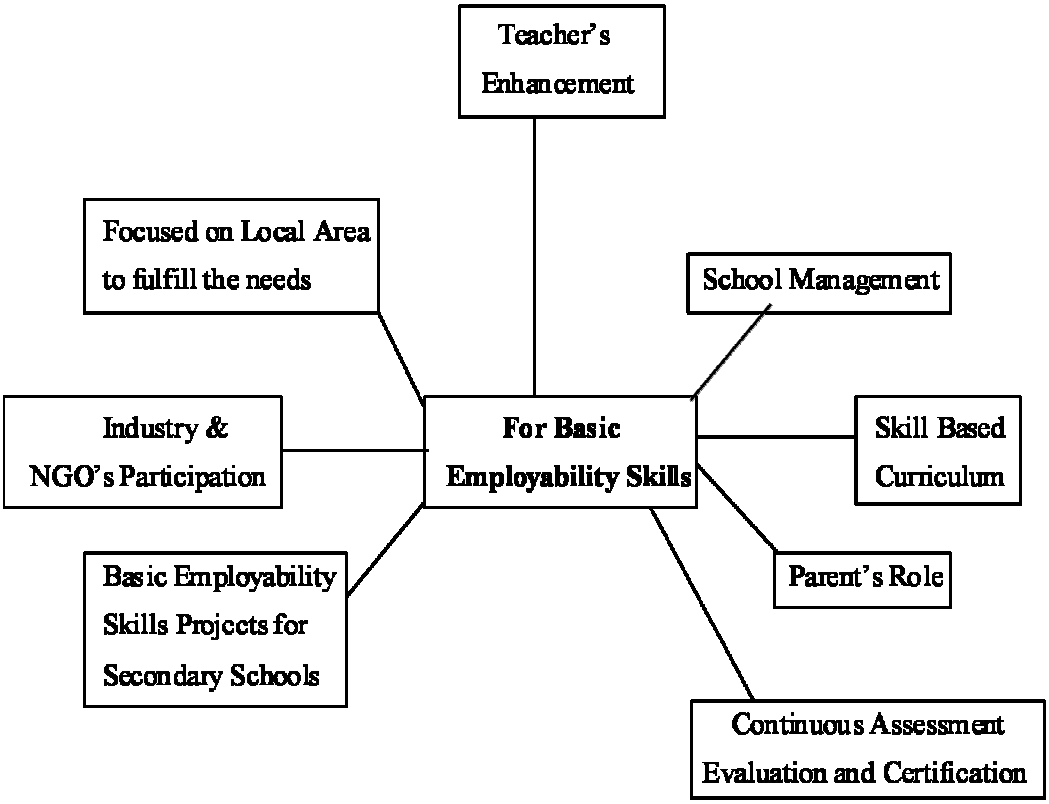
Hence it is concluded that there is a wide gap of understanding and interaction between school teachers and their students. There are some exceptions. In spite of it, the presence of basic employability skills among secondary students is moderate. It may be due to common curriculum, examination system and school environment.

Conclusions for this research

1) Some skills are difficult to learn at school. The social background is also important factors which develop these skills. Home environment, quality family life and parents education are some important major social factors which contribute a major role to acquire these skills. For urban background, all these factors are present substantially than that rural and semi-urban background. Hence secondary students from urban schools are more prominent in the reading and listening skills.
2) Secondary students from rural area scores high level of attainment of writing, high order thinking skills and personal qualities and skills.
3) Major students from rural area are belonging to lower middle and socially and economically backward area. Most of Parents are working in small scale industries.
4) Situation are changing. Parents from rural area are keen on the educating their wards to the level possible to provide a better future for them. Due to measures taken by government they are being brought into the main stream of life. Also teachers from rural schools are working hard to make the students learn better. The general criticism is that students from rural schools are poor in academic skills. When compared to the students in urban and semi-urban areas naturally, one may presuppose the presence of positive attitude towards basic employability skills in urban and semi-urban students.
5) The present study shows that students in Rural areas are better in writing skills, higher order thinking skills and personal skills. It may be because of the pull of certain other intellectual, social, emotional and linguistic factors found in them.
6) Though the most of parents of rural students are either uneducated or lower educated, the attainment level of basic employability skills is not influenced by parental education.

Recommendation

Following framework of strategic recommendation may be initiated to implement the identification, teaching, development, assessment, certification and evaluation of basic employability skills at secondary schools.



1) Teacher's Enhancement

School can conduct induction training programme for school teachers during pre-service or in service training to enable to better orient and equip for teaching basic employability skills. A separate paper on skills education can be included in B.Ed. and M.Ed course.

2) School Management

School management can make and apply own strategy to implement basic employability skills. School management can make provisions of continuous professional development of school teachers.

3) Skill Based Curriculum

The curriculum should be focused on basic employability skills and restructuring of secondary schools that would deliver those skills.

4) Parent's Role

Parents can play strategic partner with school authority to teach and to initiate the basic employability skills in secondary students.

5) Continuous Assessment, Evaluations and Certification

The aim is to know the successful implementation of basic employability skills and evaluation them. It can be done by professional authority. Feedback mechanism should be carried to identify deficiencies.

6) Basic Employability Skills projects for secondary schools students

Following are some projects which can be implemented at secondary schools for developing basic employability skills among secondary school students.

a) School to work transition

It involves "Learning by Doing" links education with real world learning

b) Joining parents in their jobs

Students can be allowed to have experience what their parents do in their workplace.

c) Career Awareness Fair

d) Career Pathshala

7) Industry and NGO's participation

A broad consensus on the basic employability skills can be developed by Industry and NGO's. They can jointly implement a strategy to help secondary students skills.

8) Focused on local area to fulfill the needs

Some entrepreneurial activation based on needs of local area can be activated. It can initiate the students to start some business activity to satisfy the need in future.

Future Scope for Research

The following studies may be undertaken to answer many of problems raised on the basis of the findings of present study.

1) A critical study on teaching and learning of academic skills in secondary classes.
2) To study basic employability skills developed by students of primary and higher secondary students in Maharashtra.
3) An investigation of basic employability skills developed by students of secondary English Medium and Higher secondary students on the basis of different communities like Open, OBC, SC/ST, NT etc. categories.
4) A study of personal and environmental factors influencing basic employability skills at primary, secondary and higher secondary educational level.
5) Preparation and validation of materials for developing basic employability skills for students of different classes.
6) Evolving strategies for developing interest and fostering positive attitude towards basic employability skills in students of different classes.
7) Developing strategic models for effective teaching, learning and developing of basic employability skills among the students of Marathi and English Mediums schools of all levels.

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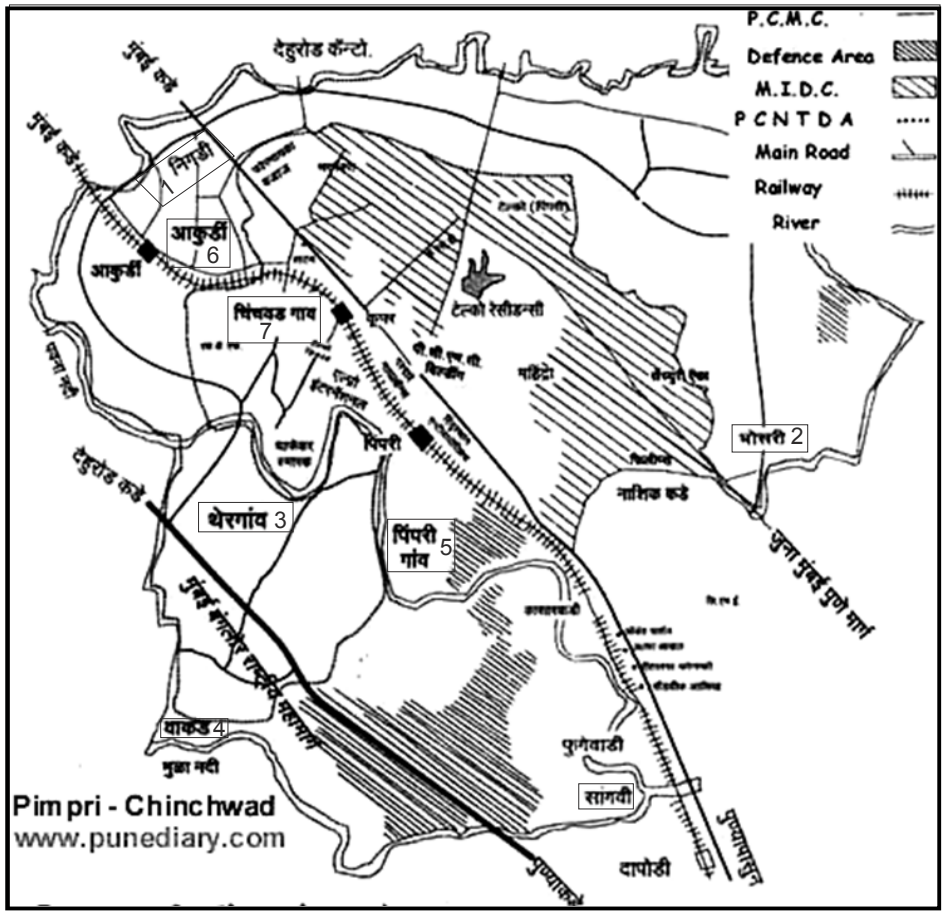
Annexure

It includes questionnaires, survey data sheets and other data pertaining to the research undertaken.

Geographical Map for Pimpri Chinchwad Corporation Area is enclosed.

Geographical Map for Pimpri Chinchwad Corporation Area



Sr. No.	Area	No. of Schools
1	Nigdi-Pradhikaran	2
2	Bhosari	2
3	Thergaon	1
4	Wakad	1
5	Pimpri	1
6	Akurdi	1
7	Chinchwad	2
8 to 15	Pimpale-Gurav, Pimple-Saudagar, Sant Tukaramnagar, Dange Chowk, Bijalinagar	5
	No. of Schools	**15**