6.0 Introduction

Education of persons

Education today is increasingly considered to be a process of overall development of individuals. It needs to address both the cognitive as well as the affective aspects of learning. Fields of knowledge do not exist separately form each other, nor do they exist separately from the people who study them. Knowledge and learning – the processes by which people create knowledge – are living systems made up of often – invisible networks and inter relationships. The ideology of nature of knowledge and knowing, the teachers’ and learners’ underlying beliefs, values and emotions and their social interactions in learning environments are all part of that living system, and all affect the ability of individuals and groups to learn (Senge, P. et al., 2000).

The pervasive emphasis on the cognitive domain and its separation from the affective domain poses a threat to society, in that educational institutions may produce detached individuals, uncommitted to humanitarian ends (Weinstein and Fantini, 1971).

A few attempts have been made to include these principles into our education system. The aims laid down by The National Curriculum Framework (NCERT 2005) mentions a few of these principles. They are:

- A commitment to democratic values of equality, justice, freedom, concern for others’ well being, secularism, respect for human dignity and rights.
- Independence of thought and action pointing to a capacity of carefully considered, value based decision making, independently and collectively.

- Sensitivity to well being of others and their feelings, together with knowledge and understanding of the world should form the basis of a rational commitment to values.

- Learning to learn and willingness to unlearn and relearn are important as means of responding to new situations in a flexible and creative manner.

The question is how much of this is actually seen in class rooms and how much of it is still only on paper.

Our schools and education system have to recognize the importance of emotions in learning and overall growth and development of the child. We have to look beyond making children good at memorizing facts and making sure they get high grades in exams.

To be able to incorporate the humanistic aspect in education, a deeper understanding of emotions and their role in life, is imperative.

**Emotion**

The Oxford dictionary defines emotions as “any agitation or disturbance of mind, feeling, passion; any vehement or excited mental state.” Daniel Goleman (Goleman, 1995) takes emotion to refer to “a feeling and its distinctive thoughts, psychological and biological states, and range of propensities to act.” There are hundreds of emotions, along with their blends, variations, mutations and nuances and many more subtleties than we have words for.

Scientists have had lots to say about what emotions are. For some, they are bodily responses that evolved as part of the struggle to survive. For others,
emotions are mental states that result when bodily responses are ‘sensed’ by the brain. Another view is that the bodily responses are peripheral to an emotion, with the important stuff happening completely within the brain. A popular view today is that emotions are thoughts about situations in which people find themselves. Another notion is that emotions are social constructions, things that happen between rather than within individuals.

Emotions derive from instincts and give rise to feelings. They are a source of energy and information. What we do with this energy can be good or bad, right or wrong, but the feelings by themselves are not good or bad, neither right nor wrong. Without them we cannot function. As Jeanne Segal (Segal, 2000) says, ‘Feelings are the most powerful resource we have. Emotions are a life line to self awareness and self preservation that deeply connect us to ourselves and others, to nature and the cosmos. Emotions inform us about things that are of utmost importance to us – the people, values, activities and needs that lend us motivation, self control, zeal and persistence.’

Even though this view has been supported by a vast body of research, there have been some schools of thought that have felt that cognition and affect are entirely separate of the other.

Separation of reason and passion
Since ancient times, humans have found it compelling to separate reason from passion, thinking from feeling, cognition from emotion. These contrasting aspects of the mind have been viewed as waging a battle to gain control over the human psyche. Plato, an ancient Greek philosopher, said, that passions and desires and fears make it impossible for us to think. For him and many others
even today, emotions are like wild horses that have to be reigned in by the intellect, which is thought of as a charioteer.

The long tradition of separating passion from emotion has given rise to 'cognitive sciences', which is also described as the 'new science of mind'. However cognitive science is the science of only a part of the mind, the part having to do with thinking, reasoning and intellect. It leaves emotions out. And minds without emotions will make a human devoid of feelings – of desire, of pleasure, of fear, of pain.

Today emotion and cognition are best thought of as separate but interacting mental functions mediated by separate but interacting brain systems. This has come about by the understanding of how emotion is organized in the brain and how the brain has separate areas for dealing with cognition and emotion.

**Historical background of understanding of emotions**

One of the major goals of emotion research has been to identify the processes that intervene between the occurrence of an emotion-arousing stimulus and the conscious emotion it elicits.

William James (James, 1884), thought of emotion as a sequence of events that starts with the occurrence of an arousing stimulus and ends with a passionate feeling, a conscious emotional experience. This theory was questioned in 1920 by Walter Cannon (Cannon, 1920). He proposed the concept of an “emergency reaction” or “fight or flight response”, a response by the human body when the situation demands exertion of physical energy. Stanley Schachter and Jerome Singer (Schachter and Singer, 1960), said that physiological responses inform
the brain that a state of heightened arousal exists; we examine the circumstances; label the arousal and the labeling decided the emotion we feel. In 1980, Robert Zajnoc (Zajnoc, 1980), argued on the basis of logic and experiments that preferences or simple emotional reactions could be formed without any conscious registration of the stimuli. Sylvan Tomkins (Tomkins, 1963) proposed the existence of eight basic emotions: surprise, interest, joy, rage, fear, disgust, shame and anguish. These were said to represent innate, patterned responses that are controlled by 'hardwired' brain systems.

The idea of biologically primitive emotions has its own detractors too. One such approach is the social constructivist approach. These theorists argue that emotions are products of society, not biology. Cognitive processes play an important role in these theories by providing the mechanism through which the social environment is represented and interpreted on the basis of past experiences and future expectations the bottom line is that Nature and nurture are partners in our emotional life. The trick is to figure out what their unique contributions are.

Moods and personality
Two thousand years ago Hippocrates and a physician named Galen (Around 400 B.C) divided people into 4 temperament types. This theory survived until the 19th century.

Ernst Kretschmer (Kretschmer, 1920), believed that there was a connection between body type and mental disorders. He coined the term ectomorph for thin nervous type, mesomorph for the athletic type, endomorph for the heavy
and jolly type. Carl Jung (Jung, 1929), developed his famous theory of introversion and extroversion.

Stella Chess and Alexander Thomas (Chess and Thomas, 1950) did long term studies on children and theorized about inherited, innate temperament traits that seemed to be genetically dominant. They identified traits like activity level, approach or withdrawal tendencies, threshold of responsiveness and distractibility.

Hans Eysenck (Eysenck, 1960), has done an enormous amount of research on introversion and extroversion and their connection to arousal. Introversion is described as a turning inward of energy and attention to introspection and self-focusing. Extroversion is a turning outward, attending to objects, people and goals.

**Neurological aspects of emotion**

A major goal of modern brain science is to figure out which parts of the brain are responsible for emotions. The notion that functions are localized to specific parts owes its origin to ‘Phrenology’. It originated through the work of a scientist Franz Joseph Gall (Gall, 1800). He suggested that mind has a lot of faculties like sensing, feeling etc. He went further to say that each faculty had its own organ in the brain.

Since then, many researchers have done various experiments and it has been found that emotions have a neurological basis and are there for a reason. We need to be able to understand their importance and harness the energy and potential they have. Emotional literacy can help individuals to utilize emotions effectively.
Emotional intelligence

Mayer and Salovey (Mayer and Salovey, 1990) were the first to define emotional intelligence, calling it 'the ability to monitor one's own feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action. It is the ability to accurately appraise and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth'.

Daniel Goleman (Goleman, 1995), describes it as, 'The capacity for recognizing our own feelings, for motivating ourselves, and for managing emotions well in ourselves and in our relationships.' He contrasts I.Q and E.I- 'The intellect is based solely on the workings of the neo cortex, the more recently evolved layers at the top of the brain. The emotional centers are lower in the brain, in the more ancient sub cortex; Emotional intelligence involves these emotional centers at work, in concert with the intellectual centers'.

Doctors have related emotional health and its impact to physical health for a very long time now. The discovery that certain molecules transmit signals between the nervous and immune systems has only reaffirmed this belief. There is proof today that high emotional intelligence can make one stay ahead. A study of engineers at the prestigious Bell Lab in Princeton, New Jersey, found that the star performers – employees who were responsible for creative breakthroughs – were not those with the best academic and technical credentials, nor those with the highest I.Qs. The star performers were the employees who possessed high E.Qs (Goleman, 1995).
Emotional intelligence plays a far greater role than assuring satisfied employees and employers. The higher the E.Q, the more likely one is to succeed in personal relationships, in parenting, in self confidence in adding value to the community and in self satisfaction. Unless, emotions are applied intelligently and intentionally, no great feats can be achieved they are the sources of energy, the spirit that actually moves us.

Looking at the discussion above, we can conclude that there is need to promote emotional literacy. An emotionally intelligent person will stay open to feelings; feel them through, regardless of whether they are pleasant or painful. He will be able to monitor emotions and understand their utility. He will be able to identify emotions and interpret their meanings. His emotions are accessible and he is able to use them as aids for judgment, memory and enriching experiences.

Here it is important to mention that the terms emotional intelligence and emotional literacy are used interchangeably by the experts and professionals.

**Aspects of emotional intelligence**

Emotional intelligence has two major parts – Intrapersonal aspect and the Interpersonal aspect. The intrapersonal aspect refers to our capacity for recognizing emotions in our selves and accepting them, managing our emotions and motivating ourselves. The interpersonal aspect deals with recognizing emotions in others, accepting them and thus developing healthy relationships. The key skills are:

- **Intrapersonal aspect**
- Awareness of emotions
- Acceptance of emotions
- Management of emotions
- Self motivation

Interpersonal aspect
- Empathy
- Handling relationships

**Awareness of emotions**
Self awareness is the ability to accurately sense and identify feelings and to understand and appreciate them. It is the ability to look within and acknowledge what we see. It is the keystone to emotional intelligence.

**Acceptance of emotions**
This is the ability to accept feelings, to feel comfortable in experiencing feelings. Unless we give ourselves permission to ‘feel’, we will not be able to deal with the emotion at all. An ignored or denied emotion will stay there, unresolved.

**Management of emotions**
Self management is the ability to use our understanding of feelings, to reason well and act intentionally. The goal of managing emotions is to balance and not suppress feelings.

**Self motivation**
Self motivation is the ability to focus the power of our emotions and use them towards a purpose. It is to marshal emotions in the service of a goal. When we
are aware of our emotions, create the ability to manage them, we also become capable of channelising emotions to give us motivation.

**Empathy**
It is the ability to recognize and appropriately respond to the feelings and emotions of others. Empathy makes us more attuned to social signals that indicate what others need or want. It is the sensitivity to other people's feelings and concerns, and understanding their perspective; appreciating the differences in how people feel about things.

**Handling relationships**
Interpersonal relationships are established and maintained when they are mutually satisfying. They are characterized by meaningful social interchange, sensitivity towards the other, acceptance of the other and finally, intimacy and warmth. Thus, this is the art of managing relationships by understanding and accepting emotions in others.

**Stress and emotional intelligence**
Stress and emotions are not separate and independent from each other. Stress is bound to cause emotions. Stress calls forth distressing emotions, like – anger, envy, anxiety, guilt, sadness etc. to be able to deal with stress, it is important to be able to deal with these emotions.

**Health and emotional intelligence**
Studies have shown that emotional factors affect many illnesses, like – cancer, heart disease, high blood pressure, psychosomatic disorders, gastric problems etc.
Achievement and emotional intelligence
Recent research points to the fact that achievement can be affected by addressing emotions and helping children deal with them. To get the students to the next academic level, we must meet them where they are and give the skills and resources that help them cope with stressors so that they are able to attend to academics. Without these social and emotional skills, the stressors take over and prevent students from living up to their academic potential. Emotional skills are thus needed, not just for their own sake but also to impact academics positively.

6.1 Rationale of the study
The above discussion poses a very compelling argument for addressing emotions in our education system. Learners construct knowledge from an inner scaffolding of their individual and social experiences, emotions, aptitudes, beliefs, values, purpose and more. In other words, if we are learning in a classroom, what we understand is determined by how we understand things, who we are and what we already know, as much as by what is covered and how and by whom it is delivered. Increasing students’, teachers’ and other people’s awareness of these connections strengthens the process of learning. Disconnecting them weakens the scaffolding and consequently, the knowledge (Senge, McCabe, Lucas, Smith, Dutton and Kleiner, 2000).

Emotional learning is important for each individual. Understanding emotions is directly connected to both cognitive achievements and motivation to learn. Dealing effectively with emotions helps individuals to develop more positive relationships and provide a sense of mental or psychological well being. Those adolescents who are ‘emotionally developed’ are deemed to be better able to
live with or cope with difference. Moral views and value systems are shaped by both attitudes and feelings. The sense of purpose and meaning that individuals gain in their lives is derived in equal parts from both feelings and understanding (McCarthy and Park, 1998).

Emotional literacy helps children to recognize their emotions to be able to label or define them; understand their emotions in order to become effective learners; handle or manage their emotions in order to develop or sustain positive relationships; and appropriately express emotions in order to develop as rounded people who are able to help themselves and, in turn, those around them (Sharp, 2001).

To support this view, we need to teach the core competences of emotional literacy within the classroom. The 'one-size-fits-all' classroom probably accounts for why so many students are not motivated enough or do not perform to the best of their abilities.

The studies discussed in Chapter 2 (review of related literature) show that developing skills of emotional intelligence clearly advantages children both in and out of school. It has a correlation with achievement, motivation, aggression and many other areas.

It would not be fair to say that no effort has been made in the direction of getting the humanistic principles into our classrooms. The specifications mentioned in the National Curriculum Framework (NCERT, 2005) require many of these principles to be observed in schools. But converting these principles from written rules to actual facts in school still has a long way to go.
A continuous and ongoing program on emotional literacy for students will help address many of the issues discussed above. Looking at the dearth of such programs available, the present study is an attempt to develop the core competences of emotional literacy in school children. The study is an intervention program, developed on an experiential paradigm and designed to enhance the skills that come under emotional literacy. It intends to help children become aware of their own emotions, accept their emotions, become motivated to achieve, become empathic towards others and to develop positive and healthy relationships.

6.2 Statement of problem
“A study of effectiveness of an intervention program developed to enhance emotional literacy in students of standard VII.”

6.3 Objectives of the study
(1) To develop an intervention program to enhance
   a) Awareness of emotions
   b) Acceptance of emotions
   c) Management of emotions
   d) Self motivation
   e) Empathy
   f) Acceptance of emotions in others
(2) To implement the developed intervention program on the sample of subjects.
(3) To determine the impact of the intervention program on the following personal dimensions and the by products in the sample subjects.
   a) Awareness of their emotions
b) Acceptance of their emotions
c) Management of their emotions
d) Intrinsic motivation
e) Empathy
f) Acceptance of emotions in others
g) Interpersonal relationships
h) Stress
i) Experience of satisfaction with themselves and their studies

6.4 Research questions
1) Does the developed intervention program enhance emotional literacy in the sample of subjects?
2) Does the enhancement of emotional literacy help strengthen the interpersonal relationships?
3) Does the enhancement of emotional literacy lead to greater intrinsic motivation?
4) Does the enhancement of emotional literacy lead to reduction of stress?

6.5 Explanation of terms
1) Emotional literacy – the ability to recognize and identify feelings as they occur, manage the feelings effectively and recognize and accept feelings in others.
2) Intervention program – orientation provided to students in terms of structured experience, concepts and skills on aspects of emotional intelligence.
3) Effectiveness — the effectiveness will be measured by the difference in the personal dimensions and the by products, before and after the intervention program.

6.6 Delimitations of the study
Since this is an intervention program it will be delimited to one class of students, purposively selected by the investigator. Hence, the study is explorative in nature and the findings may not be generalisable across the student population.

6.7 Methodology
Methodology is the organization and structure of the research executed. It includes the procedures and processes used to gain the stated objectives. The design of this study has sources of data, nature of data, sample of the study, tools and techniques used to collect data, procedure of data collection and finally, analysis of the data collected.

To achieve the objectives, two sets of empirical information were collected — qualitative as well as quantitative. Both the data were used in the research but the main focus was on the qualitative data. The quantitative data was used as supportive data, to supplement the information gained through the qualitative data.

For objective one, i.e. to develop an intervention program to enhance intra-personal and inter-personal aspects of emotional intelligence, activities were selected and developed for each of the intra-personal and inter-personal aspects of emotional intelligence. All the activities were experiential in nature with
some necessary theoretical inputs in between. This intervention program was carried out as a pilot study to test its feasibility and appropriateness. The required modifications were made.

For objective two, i.e., to implement the intervention program, the Bar-on EQiYV and stress content validation were conducted. Then the developed intervention program was conducted for the intervention group for 30 hours spread over 30 sessions. This time is excluding the time that was spent on administering the tools (pre test and post test) and in depth interviews with the teachers and students.

For the last objective, namely, to study the impact of the intervention program, data was collected through observation by the investigator, logs of significant learning kept by the sample students, in-depth interviews of students and feedback from the class teacher. At the end of the intervention program, the emotional intelligence test and stress test conducted earlier were conducted once again. This was done to see the effectiveness of the intervention program.

6.8 Sample of the study
For the purpose of achieving the objectives stated above, one school was purposively selected, namely The Bharatiya Vidya Bhavan’s V.M. Public School, Vadodara. The selection was done purely on the basis of the principal’s readiness to make the time available to the investigator to conduct the study.
Keeping in mind the objectives, nature of data and its meaningful analysis, it was imperative to focus on one specific target group of students. For this purpose, one section of Class 8 students was chosen. The class consisted of (30) students out of which 15 attended the sessions of the intervention
program. This division occurred naturally as some of the students were engaged in co-curricular activities as was priorly decided by the school.

6.9 Tools and techniques
The investigator used the following tools and techniques to collect data –

(1) Bar-on EQiYV scale
(2) Stress content validation schedule
(3) Log of significant learning
(4) Investigator's Observation
(5) Feedback from teachers
(6) In depth interviews with the sample of students

6.10 Procedure of data collection
The procedure has been divided into three phases.

6.10.1 Pre-intervention phase
During this phase, the investigator developed an intervention program, keeping in mind the key skills of emotional literacy. The activities chosen, were all experiential in nature. The proposed materials were pilot tested on class 8 students at Sawai Man Singh Vidyalaya, Jaipur. This was done to check the feasibility and appropriateness of the proposed material and tools. And in the light of this experience, the material was reviewed and scrutinized and the necessary modifications were made.
6.10.2 Intervention phase

During this phase, the BarOnEQiYV test and the stress content validation schedule were administered on the sample of students to measure their Emotional Quotient and identify their stressors. The intervention program was then conducted on the experimental group of the sample group of subjects. The intervention program was spread over 30 sessions, a total of 30 hours; excluding the time spent on administration of tools (pre test and post test) and in depth interviews with teachers and students. The program consisted of activities designed to enhance the following parameters of emotional intelligence –

Intra-personal skills

(1) Emotional awareness
(2) Acceptance of emotions
(3) Management of emotions
(4) Self motivation

Inter – personal skills

(5) Empathy
(6) Handling relationships

Students were required to fill their log books after each part of the intervention was over. Detailed notes of observations were also kept by the investigator throughout this phase.

6.10.3 Post intervention phase

After the intervention program was over, the investigator conducted unstructured interviews with the class teacher and noted her feedback on changes that she could notice after the intervention program. Unstructured interviews were also carried out with the intervention group of students to
acquire information on the changes that they had made or were trying to make. The Bar-on EQiYV test and the stress content validation schedule were conducted again on the sample group of students. This was done to quantitatively measure the difference after the intervention phase in the intervention group.

6.11 Procedure of data analysis
As the collected data were both quantitative and qualitative, it was subjected to both quantitative and qualitative analysis. The quantitative data obtained in the form of scores on the various aspects of Emotional Intelligence, were subjected to t-test to find the impact of the intervention on the subjects of the study. The qualitative data obtained by the Stress content validation schedule, observation by the investigator, observations by teachers, students' own logs of significant learning and in depth interviews were all reported under appropriate headings and conclusions were drawn from there.

6.12 Findings
From the analysis of the data it was found that:
1. The scores of all the students in the sample group on the Bar-on EQiYv scale showed an increase in the post test. However, the t-test results showed no significant difference.
2. The stress reduced in all the sample group of students as reported in stress validation schedule.
3. The students were able to identify and name their own emotions.
4. The students were able to accept their own emotions.
5. The students were able to find ways of managing their own emotions.
6. The students were able to motivate themselves to find different ways of dealing with the problems they faced.
7. The students started paying attention to and understanding emotions of others.
8. The students started showing more sensitivity towards other people's emotions and it led to the strengthening of relationships with others.

6.13 Conclusion
The results of the study show that the subjects benefited from the intervention program and there was an improvement in almost all the dimensions of Emotional Intelligence.

6.14 Suggestions for further research
The study has shown that addressing the emotional needs of students, is very crucial for the overall development of individuals. Our educational system needs to address both the cognitive as well as the affective aspects of students to promote holistic development. Thus, there is a need to develop more programs for helping students deal with their emotions.

The inclusion of affective aspect needs to become a part of class room interactions and need not be separately taught to students. There is a need to be able to address students' emotional needs within the class room. Further research in this area is very important.

There have been many attempts all over the world to study the impact of enhancing emotional literacy in students of various ages. It has been proven that it has an impact on health, stress, achievement and several other important
areas of life. Unfortunately, such studies have been very rare in India. There is a need to build a body of research within our own cultural context and use it to redesign our education system.

The present study attempted to enhance emotional literacy in students but such a study conducted within a limited time span may not be the answer. What we need is to build a program within the class room and schools that take care of the students' emotional needs and help them deal with their own emotions as well as emotions of others.