# CHAPTER 1

## INTRODUCTION

Today, Scientific and technological development which are major characteristics of modern societies are the products of higher education in general, and the various specialized fields of studies in particular. By and large, the people have felt a great need and have become more interested in specialized study and training which opens the new ways of life, equipping them with job and many other mental satisfactions. It is mandatory for today's school to facilitate the transition of the youth from the world of school to the world of work especially to meet the challenges of the new society. The education within the four walls of the school has to stretch out to the home, the factory and the farm, through formal as well as non-formal approach for better living and higher production.

This was ofcourse realized by Mahatma Gandhi long back in 1920 who introduced the concepts of basic education - a craft centered school education, when the educand earns while learning and later when he grows, he will have no hesitation in any type of manual labour. The education commission (1964-66) also stressed the introduction of work experience and social service as integral parts of general education. It recommended,

> As another programme to relate education to life and productivity, work experience should be introduced as an integral part of all education, general or vocational. It should be a participation in productive work in school, in

> home, in a workshop, on a farm, in a factory or in any other productive situation. Another programme which can bring education into closer relationship with productivity is to give a strong vocational bias to secondary education and to increase emphasis on agricultural and technical education at the University stage.

Both the 1968 and 1979 documents mentioned the Gandhian educational thought as the cardinal principle governing them. In addition to the usual rhetorics related to socialism, national integration and individual development so generously used in educational policy documents of 1968 and 1979, the next (1984) document introduced a new set of concepts related to manpower development and human resource development. The emphasis seemed to be less on egalitarianism and other socialistic principles and more on productivity and economic self-reliance of the nation. As reported in 1986, this conclusion may seem slightly far-fetched, for the preamble of the policy stated in part II of the document seemed too ambivalent and equivocal to be pinned down to a particular stand or position. At the higher secondary stage it was proposed that by 1990 vocational courses will cover 10 percent students and by 1995, 25 percent. The new education policy document also emphasized the intention of delinking degrees from jobs and of establishing a National Testing Service, including Examination reforms.

A working group of the planning commission had proposed an outlay of Rs.1,828 crore for secondary education under the seventh plan (1984) stated very clearly,

> This includes a sum of Rs.304 crore for Vocationalization of higher secondary education on which great stress is being laid during seventh plan of the total outlay for the

> vocational stream. All new schools at plus two stage should have vocational courses related to local needs. Vocationalization may be introduced in 400 schools per year on 100 percent centrally assisted basis and the setting up of boards of vocational education in each state on the lines of all Indian Board of Vocational education.

With such recommendations education becomes work oriented. Work being the most dynamically important human activity, it not only provides the livelihood but also contributes mental satisfactions, and psychological well being of the worker, It helps to self-actualization, brings forth the hapiness and human comfort. A highly productive man commands high esteem boyond the skills and psychomotor development in the society.

UNESCO's document (1976) on Technical and Vocational education defined it as,

> A comprehensive term embracing those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge of relating to occupations in the various sectors of economic and social life. Such an education would be an integral part of general education and a means of preparing for continuing education. Technical and Vocational education should further contribute to the achievement of society's goals of greater democratization and social, cultural and economic development, while at the same time developing the potential of the individuals for active participation in the establishment and implementation of these goals. It should lead to an understanding of the scientific and technological aspects of contemporary civilization in such a way that men comprehend their environment and are capable of acting upon it, while taking a critical view of the social, political and environmental implications of scientific and technological change. Given the necessity for a new relationship between education, the working life and the community as a whole, "technical and vocational education should exist as a part of a system of life long education adopted to the needs of each particular country.

Thompson (1973) also stated,

> Vocational education is any education that provides experiences, visual stimuli, affective awareness, cognitive information, or psychomotor skills and that enhances the vocational development process of exploring, establishing and maintaining oneself in the world of work.

In this connection Drapper (1970) reported,

> Vocational competence involves much more than what is generally labelled as occupational, vocational or technical education. It is appropriate to think of vocational education as beginning when the individual enters school and includes understanding the processes, agencies, and materials of work, understanding vocational opportunities, exploring vocational experiences, training for a specific occupation, pre-technical education and a sample employment expectation.

In this process of education and vocational guidance a judicious choice is to be made at this juncture. Kothari commission was of the view that vocationalization should serve as a powerful instrument for the transformation of the education system and recommended that in addition to the academic stream of education, a vocational stream with variety of courses from different areas should be started and about half the number of students desiring higher secondary education should be diverted to it so as to prevent the mad rush for Universities. The vocational courses were to be terminal in nature, but they could also lead to higher education after adequate experience of actual work had been acquired by the students.

Patel (1987) also reviewed that,

> In the wake of the acceptance of the recommendations of Kothari commission programmes for vocationalization of higher

secondary education in 10 + 2 pattern of school education were initiated in the year 1976 by some states. From 1976 upto 1986 Eleven and four union territories had introduced vocational courses in varying degrees in Andhra Pradesh, Assam, Gujarat, Haryana, Karnataka, Keral, Maharashtra, Sikkim, Tamil Nadu, Uttar Pradesh, West Bengal, Goa, Andaman and Nicobar Islands, Chandigarh, Delhi and Pondichery, some 120 vocational courses in six vocational areas namely Agroculture, Technology, Commerece, Home Science, Para-medical and Social Science have been introduced. The total intake capacity in vocational courses was about 72,000 while the total number of institution offering them was 1,900.

One of the important aims of vocationalization by the national policy of education (1985) was to ensure optimum development of human resources by training youth for work in accordance with their aptitudes and interests. In view of the above recommendations of Education Commission and various reports in education, it was felt essential to construct a tool measuring educational interests, leading to vocations, of students.

## 1.1 Present System Of Education :

According to the new policy of education in the existing 10 plus 3 system, the first ten years have been further broken up as five years of primary, 3 years of upper primary and 2 years of high school. With the rapid science and technological advancement, specialized education is rendered for specialized professions of diversified interests through increased educational facilities. In view of the present system of education in India (10 + 2 + 3), the student has to choose a course of study after completing $IX^{th}$, $X^{th}$ as well as $XII^{th}$ grade, where after twelve years of primary,

secondary and higher secondary education one enters the University education.

There are two streams of study available for selection after completing IX$^{th}$ grade. At X$^{th}$ grade one can choose either Science or Commerce.

The common streams of study available for selection after completing Xth grade are generally undergraduate diplomas and certificate course in - Agriculture, Land preservation, Animal husbandry, Health, Pharmacy, Nursing, Fine-Arts, Commercial Art, Dramatics, Primary Teacher education, Commerce, Cooperation, Printing, Social service, Nursery School education, canning and Food Preservation, Technical (ITI) education and such others.

After completing XIIth grade the student opting science stream generally can make a choice at polytechnic diploma or from the undergraduate degree courses of study such as medical, Engineering, Science, Electronics & Radio Engineering, Agriculture, Dairy Technology, Architecture, Radio Technology, ceramic Technology, Home Science, Diploma in Homeopathy, Medicine and Surgery, Physiotherapy, Medical Laboratory. The general other branches of degree courses are Commerce, Arts, Fine-Arts, Performing Arts, Business Management, Teacher Education, Social Work and Library Science.

Thus at the end of IXth grade the pupils have two broad streams of education before them, but at the end of XIIth grade there are various streams available at the University level. But how far the students are given an opportunity to select the courses as they wish according to their interest, remains still a question.

At least a third to a half of college students are not free to choose either occupations or education at University level as they please due to many reasons. Williamson (1939) said about 37 percent of college men and 49 percent of college women do give the same choice as both their chosen and preferred vocation due to many factors. They are (i) pressure of family or friends of family to enter a given vocation (ii) to live near mother, etc. (iii) desire to marry (iv) an opportunity to become immediately established (v) Lack of necessary finances to finish education (vi) Lack of necessary ability (vii) Lack of necessary personality (viii) Lack of requisite health and (ix) Lack of information about preferred and competing occupations; So that adequate plans cannot be formulated.

## 1.2 Significance Of Interests On Education :

Interest is an abstraction, a psychological construct, affective in domain, that explains the state of being, especially with regard to the well being of an individual. According to Downie (1958)

> Interests have been defined as one of the main aspect of learning situation. They are motivators of learning,

without them very little learning takes place in many individuals.

1.2.1 Several educationists and education psychologists have claimed that individuals tend to do better at things which interest them most. Rammers and others (1965) discussed the bearing of interests on education and revealed, that because interest motivate learning, they effect education. When pupils are interested, they work harder, longer and more effectively. Even Charles (1902) stressed the importance of interest in education saying -

> When students are animated by powerful interests, as for example in professional courses, they submit chreefully to large amounts of study, but when they are dealing with system of ideas to which no vital interests are attached, they clamour for variety and light work.

1.2.2 Appraising interests of an individual helps to determine whether a student will be satisfied in doing a particular type of work or not, whether the student will be doing this work successfully or not. Study of interests helps to ascertain whether a student is likely to be interested in a particular stream of study. Many times a process of analysing interests may draw the individual's attention to a field of activity to which he had little or no interest previously.

1.2.3 The role of interest in education has also been acknowledged by Rousseau (1909) in the book written by Monroe P. - - -

> Education comes through the workings of natural instincts and interests, and not through responses through external force.

It seems logical here that an adult can lead to a better and more satisfactory adult life than he would have without such interests. It is also said that motivation infleunced by one's interests in addition to aptitudes and abilities can determine the selection of a right course of study. Interest measure not only helps in the formulation of future educational goals but also of relative occupational goals. There is undoubtedly a definite need for an objective and systematic evaluation of the interests, besides all other competence, of all the students entering the University education as the basis for placement within the curricula of their choice.

1.2.4 For an accurate assessment of interests, it is essential that teachers equip themselves with adequately systematized data and measurement tools. It is in this sphere that interest inventory plays an important role. Numerous studies by Strong and Super have shown that successful persons in an occupation or education have certain similarities of interests (a characteristic set of likes and dislikes) which differentiate them from other occupational or educational groups. Strong vocational Interest Blank permits measurement of the occupational pattern with which a given individuals' interests most nearly coincide. Strong interprets the results as follows :

> It is assumed that if a man likes to do the things which men like who are successful in a given occupation and dislikes to do the things which these same men dislike to do, he will feel at home in that occupational environment. Seemingly, also, he should be more effective there than somewhere else because he would be engaged, in the main, in the work he like.

1.2.5 A study conducted by Mccune (1989) at Okalhama State University on how the Predictive criteria of aptitude, Interest and Courses taken at the Home high school relate to student success in programmes at the Indian Meridian Area vocational - Technical School reported that the criterion of interest was found to be a good predictor of whether a student would obtain placement in a job related to training received within a three month period following completion of the programme.

Based on the above mentioned views of experts regarding importance of interests in education the investigator proposed to conduct the exploratory investigation by developing and standardising an instrument for appraising academic interests of higher secondary students of Gujarat on the lines of Strong Compbell's Interest Investory (SCII).

## 1.3 Rationale Of The Study :

Formal education is defined as hierarchically structured and chronologically graded a systematic and well organised education from primary level to University level. In the present system of formal education (10+2+3), a pupil chooses a curriculum after IXth class which normally is continued through XIth, XIIth and University level. It is thought of placement particularly in subject areas where there is a strong element of continuity, where later learnings seem to depend on earlier ones. The pupils have to plan about future

educational career and vocational career after they complete XIIth grade.

Due to advanced science and technology educational courses and specialized vocations are rapidly developing. Institutions of specialized professional courses render to the needs of changing society like India. It is very difficult for a pupil at this juncture to decide about the courses of study for future learning and vocations and to achieve a sure success in it. Such pupils can be helped through guidance by assessing their specific preferences to measure their fitness toward a particular field of study.

George (1960) emphasizing the separate measurement of other traits stated,

> The candidate who has done good work at school under the helpful eye of his teacher, but is not at his best in an Examination, may have commendable qualities of a different kind and these may deserve a separate assessment. In reality many of the students are quite unable to experience the thrill of joy of discovery and learning, and all school subjects without obvious vocational connections do not appeal to them.

1.3.1 The school pupils are not highly motivated to learn because of the mechanised poor examinations system of our country. Our examinations have been used primarily as a screening device to prevent the so-called "weaker" and "duller" students from going ahead, and hence this results in a huge wastage and stagnation. Ullah (1952) reported on examination in India,

> As the examinations are based on a rigid curriculum which is the same for all the pupils irrespective of their different interests, talents and abilities, the weeding out through examination does grievous injustice and harm not only to individuals, but to society as a whole. As the High School and Higher Secondary Examinations in India influence the curriculum still more adversely because of their external nature as externally controlled and administered on a province-wide basis by a central examining body. As the result of which the education has become very unreal and superficial. The paper setters are mostly selected from the University or college staff who usually do not have any experience of actual teaching in a high school. Due to shortage of people in correction work, unqualified staff is given the responsibility.

The whole machinery of examination is defective and harmful, as is testified by the Calcutta University Commission. Such examinations have adversely ifluenced the methods of teaching and learning including the relations of the teacher and taught, that have been responsible for a deplorably widespread use of tutions, private coaching, "keys" and "made easys" that a practice of cramming the prescribed guides, texts, without understanding has been a popular activity neglecting the school guidance.

According to Calcutta University commission report (1920) the validity of our examination is questionable because of the uncertainity of any clear cut criterion, and the inadequacy of sampling of the material which is supposed to furnish a measure of the citerion concerned.

At present the basis for selection at higher education is the total marks achieved at higher Secondary Board examination, that is merit

is the criterion. This does not provide adequate information about the student's academic aptitude. There is a general feeling among students, teachers, parents' community that right from conducting examinations, correction work till final assessment, the students are not assessed objectively by every subject teacher, as a result of which the evaluation and measurement of performance becomes subjective to a certain extent and students after getting admitted on the basis of such scores in a particular stream of study, due to lack of interest in the courses they dropout, show poor achievements, and are unable to adjust with the programme offered at the selected course of study creating student unrest at University level.

As the examination has a limited purpose of serving as a passport to University or College admission, such type of examination is inadequate for a considerable number of students admitted to University, fail to suceed in courses they take, hence no precise meaning can be attached to the score obtained by a candidate.

1.3.2 Even while applying for the admission to higher education the students indicate their expressed preference (claimed choice) besides the merit which may be on the biased basis. Roy (1975) has found out,

> In making a choice for specizlizations the students were incluenced by their expressed interests in the subjects, presence of good staff, their friend's choice, to get a good job and for further studies.

Hence the investigator wished to develop an instrument to find out inventoried interests of higher secondary stundents which can be helpful to the students for choosing a right stream of study out of the available streams of study in Gujarat. This inventory will be of a considerable help as an objective and better method of selection for the students who are best suited for various streams of study.

1.3.3. Academic attainment does provide a basis to judge the pupil's intellectual ability. Besides knowledge of a person for a particular field of study, interests are also equally important to be analysed for the appropriate discriminations of students.

1.3.4 Many studies have been conducted in India and abroad on developing interest inventories under the area of evaluation and measurement. While reviewing the researches done in India in the Educational Testing and Measurement, Buch (1974, 1980, 1985) in his trend reports of first second and third edition, has very clearly mentioned,

> Most of the studies are adoption of foreign instruments - - - relatively little work is done on Interest Measurement. Majority of studies fall in the area of Intelligence Testing, and construction of Interest Inventories have been neglected. Adoption of tests which are generally avaialble now, may not be equally good and usable - - - Some what similar trend can be seen in investigations conducted or financed by research institutions. The Number of studies in test development is not encouraging. From 1950 to 1981 only 10 vocational Aptitude tests are published, most of the so-called scholastic Aptitude tests are achievement tests, and very few aptitude tests have a long-term predictive validity. Only 27% (13) interest inventories had been published decade-wise. In the context of

validity the problem of relevant criterion bias continues to haunt the test construction. How much biased the external criterion is an unknown factor. Not much is done in context of construct validity. In light of the surveys he has strongly recommended that construction of Interest Inventories need to be developed.

1.3.5 Bhasin (1980) brought out a few implications that follow from the review on Interest Measure that - - -

> Verbal tools of interest , measurement in regional languages are scarce and there is a need to develop standardised instrument, verbal tools are easy to communicate and possess their own merits in the assessment of human attributes. He further pointed out because the resources, manpower, requirement and rate of development of different states are different, such a tool may effectively demonstrate there regional differences in the vocational interests of our growing adolescents.

Optimization of human resources lies in the matching of right man to the right job' Plato Wrote (427-347 BC) in the Republic II,

> No two persons are born a like, but each differs from each in natural endowments, one being suited one for occupation and another for another.

Interest being an affective domain which still remains rather unexplored at secondary and higher secondary level in Gujarat, it is essential at this moment that teachers equip themselves with adequately systematized data and measure for interests.

1.3.6 Our country is also facing a grave problem of population explosion which hampers the national development and target for

educational achievements of national in the real sense are not fulfilled, Increasing Student Population on one hand, and teaching resources available on the other hand leads to a need for proper selection of students for appropriate education. However, good the instructional material and quality of instruction may be, it is not worth its use, if students do not have receptive frame of mind which depends largely on their abilities and interests.

1.3.7 Not only an experimental and diagnostic investigation into the interests of XIIth grade students is essential, but an affective guidance is also needed to spot out the most qualified and mature students with the potential abilities and interests required for a specific field of study. Effective guidance is only possible when all accurate and comprehensive information regarding interests besides the abilities and aptitude is available. The most general clue to an understanding of interest measurement is found in the old age that birds of a feather flock together. Our problem then, becomes one of giving psychological meaning to the characteristic feathers and flocks, and of understanding the motive forces leading to the various groupings.

Interests having such a significant place in education, the investigator had thought to construct an objective, reliable and valid verbal interest inventory for higher secondary students of Gujarat which not only will be helpful to make a proper curricular choice at University level, but will be also an asset for the school

teachers to guide their students where by much wasted efforts by the teacher and teaching institutions will be saved.

## 1.4 Title Of The Investigation :

A Study on "construction and standardisation of an Interest Inventory for higher secondary school students of Gujarat."

## 1.5 Objectives Of The Study :

[1] To construct a verbal academic Interest Inventory for the twelfth grade higher secondary school students of Gujart State, for discrimination to diversified fields of study at University level.

[2] To standardise the Interest Inventory.

## 1.6 Operational Definitios :

(i) Interest :

Operationally interests have been designated as vocational or educational. It is a type of activity. Interests in the present investigation are referred as inventoried interests measured in terms of like, indifference and dislike of an activity.

(ii) Interest Inventory :

It is a list of statements having some resembalance or concern with a field of study. The subject is required to go through the list indicating the preference, liking or otherwise, about the content contained in each item. Each alternative response bares an experimentally predetermined weight. The weights corresponding to all the responses given are summated on one interest variable to get a total score.

(iii) Standardisation :

Standardisation here means a uniform procedure in test construction dealing with psychological measure of interests, administration, scoring and interpreting the test to predict the future educational career based on content and objectives common to many schools through out the state, dealing with large segments of information developed with the help of expert professionals, using items that have been tried out, analysed and revised before becoming the part of the test with high reliability, validity and norms for various groups that are broadly representative of performance throughtout the state, which make it possible to take decisions for large number of students, and their comparisons.

## 1.7 Limitations Of The Study :

[1] The investigation was limited to the XIIth grade students of Urban and rural higher secondary schools of Gujarat. It was limited to the particular time of testing as the test could be administered just before their final board examination, when they had completed the courses offered in schools.

[2] The study was limited to the students who studied in Gujarati medium schools.

[3] Interests were measured on the basis of seven formats (Sub-test) stated by (SCII) Strong Compbell Interest Inventory (1974) pertaining to ten selected fields of study available in Gujarat at Undergraduate level in various Universities and colleges. The seven (sub-test) formats were identified as under :

i) Occupations
ii) School subjects
iii) Amusements
iv) Activities
v) Types of people
vi) Preference between two activities and
vii) Self-reporting Personality Characteristics.

The ten fields of study were determined as :

i) Agriculture

ii) Arts

iii) Commerce

iv) Fine Arts

v) Home Science

vi) Medical

vii) Performing Arts

viii) Science

ix) Social Work and

x) Technology and Engineering.

[4] Basic Interests specified by Strong (1964) for men and women were incorporated while developing items on interest inventory such as Academic, Creative, Household, Vocational, mechanical, scientific, physically strenous, adventurous, selling activities, certain forms of entermainment and miscellaneous.

[5] Only the final year college students at graduate and post-graduate level of ten selected faculties were administered the inventory to obtain the criterion scores on respective educational scales.

## 1.8 Scope Of The Study :

An interest inventory can be effectively used in a variety of ways as explained below :

[1] COUNSELLING THE INDIVIDUAL STUDENT OR EMPLOYEE :

Interest inventory would perform one or both of two major functions : first telling people something about themselves and their relationship to the world of work that will lead them to greater self understanding and to better decisions about their future plan and second providing information to people who would make decision about others such as counselors, teachers, administrators, admission committees, personnel managers, supervisors, so that their decisions and dispositions might beteer consider the unique and required qualities of each individual.

An interest inventory can be employed at various stages to assemble information that can help the respondent to develop a general strategy toward approaching career decisions. It can be utilised as -

(a) An aid in making educational and occupational choices.

(b) A vehicle in discussions between students and counsellor because test scores provide a focus that moves the

conversations quickly and it does provide a suitable climate for making wise decisions to the areas of most concern to the student.

(c) A useful aid in discussions between student and parent, about personal development and career choice. Many parents do not have an ability to guide and exposure to the world of work, due to which they are not in a position to open up guidance -discussions and may ask to join the traditional career; Instead student can easily convince the parents with the help of results on interest inventory and in such settings, useful decisions can often be reached.

d) A selection device in the hands of those who make employment decisions. This will allow an objective method of selection being a better strategy than basing the decision on the bias views.

e) A guide in helping someone modify a self development plan already embarked upon. Many times it happens that a young man or woman with some ambitious career goal may find his or her score on interest in a particular field is low being a second choice, indicating that his/her interests do not correspond closely with those of employed people. But if one is intent to pursue that particular

field, one may with this information in hand, decide to concentrate more on related courses in the hope of stimulating greater interest in those areas.

f) An aid in helping people understand their job dissatisfactions. An interest inventory can give some directions to the people who are dissatisfied with jobs as they are in certain positions that fail to allow them any outlet for their dominant interests, or because they are in such settings where they have very little incommon with their fellow workers. Many times an interest profile can indentify the problem by showing the individual how she or he is different.

II) Interest Inventories are of great value for conducting Research on groups by studying -

a) the characteristics interests of particular education or occupations.

b) the change in groups

c) change in institutions

d) General Societal trends

e) change within an individual - case studies

f) cross cultural influences.

III) Interest studies can also provide information to help to find certain questions and about some potential research uses. Such as -

a) Identifying homogeneous types on which to conduct further research.
b) Helping to understand influences on career development.
c) Carrying out a census of interest patterns.
d) studying interpersonal relationships.
e) studying the behavioural type composition of groups.
f) Helping to design jobs around the interest of people.

If a person's aptitude could be measured or atleast estimated before one begins a course of training, much wasted efforts could be served and economize both learning and teaching processes. No human asset is wasted when appropriate persons aspire to particular skilled trade or future educational career.

The question thus arises whether a student is able enough to decide about the courses offered at higher education. If one has that decision making ability whether it is appropriate selection for future success or not? If one is unable to decide what way one can be helped for a better choice? Answers to these questions will have important implications. Modification in the criteria for selecting students for further education at University level can be made as a result of using such Interest Inventory.

## LITERATURE CITED


1. BHASIN P.S.S. Analytical study of Inventoried interests, Baroda CASE, Faculty of Education and Psychology, Thesis (Ph.D) unpublished Research Report, 1980, 217 p.

2. BUCH M.P. ed., Survey of research in education, Baroda, Centre for Advanced Study in Education, (1978-83) Faculty of Education and Psychology, M.S. University, 1980, 1985, pp. 72, 464, 476-77,78, 503.

3. _____ Survey of research in education, M.S. University Baroda, 1974, pp. 212-220.

4. CHARLES D. G. The doctrine of interest and its concrete application, Macmillan & Co. Ltd., New York, 48 p.

5. CALCUTTA UNIVERSITY COMMISSION REPORT, Calcutta, 20, Vol. II, Govt. Printing Press, pp. 3, 13-17, 141.

6. DRAFT NATIONAL POLICY ON EDUCATION, New Delhi, Ministry of Education and Culture, 1979, pp. 20-25. Mimeographed.

7. DRAPER D.C. Education for work. In J. F. Thompson, Foundations of vocational, education prentic Hall, New Jersey, 1970, 217 p.

8. GEORGE BRUCE. Secondary school examinations - Facts and commentary. Pergaman Press, Oxford, Londoan, 1969, 67 p.

9. MCCANE., How the predictive criteria of a aptitude, interest and courses taken at the Home High School relate to student success in programme Indian Meridian Area, vocational technical school, Oklahama State University, 1989 p.

10. NAIK J.P. The education commission and after, Pune, I.I.E., 1979, Mimeographed.

11. NATIONAL POLICY ON EDUCATION REPORT, New Delhi, Ministry of Education and Social Welfare, 1968, Mimeographed.

12. _____ New Delhi, Ministry of Human Resource Development, May 1986, pp. 2, 3, 67-76.

13. PATEL S.P. New Education Policy and Vocationalization of Education, UNIVERSITY NEWS (Special Issue) ed. Suriender Singh, U.B.S.. Pub. Distri. Ltd., Vol. XXV, No. 50, 1987.

14. RAMMERS, H. H. and others. A practical instruction to measurement and evaluation, 2nd ed., Harper and Row, New York, 1960, p. 370.

15. ROUSSEAU - History of Education, New York, Monroe p., Macmillan & Co. Ltd., 1909, 556 p.

16. ROY, ASORPHI. Opinion of students and Teachers of Faculty of Home Science, Baroda, regarding specialization, Dept. of Edu. Ext. M.S. University, Baroda. Thesis (Ph.D) Unpublished Research Report, 1975, p. 168.

17. STRONG, E.K. (Jr.) Vocational interests of men and women, Standard University Press, Standford, California, U.S.A., 1964, pp. 1-8, 241-244, 726-727.

18. THE EDUCATION COMMISSION - Education and national development, Ministry of Education, Govt. of India, 1964-66, 1st ed., p. 7.

19. THOMPSON J. F. Foundations of vocational education. Prentice Hall, New Jersey, 1973, 216 p.

20. ULLAH SALAMAT. Examinations in India - their defects and remedies, Jamia Millia Islamia, New Delhi, 4 p.

21. UNESCO. Technical and vocaitonal education in Higher Secondary Education and its vocationalization, NCERT, New Delhi, 1976, 9 p.

22. WILLIAMSON E. G. and DARLEY J.C. Trends in the occupational choices of High School Seniors, Jounal of Applied Psychology, 19, 1935, 369 p.

23. _____ How to Counsel Students, Mcgraw Hill Book Co., 1939, 428 p.

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