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Multiple Intelligences of the Students

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Abstract

This study was conducted with the aim to find out strength of self-perceived multiple intelligences of the students. Population of the study comprised 1585 students of 1st year of district Bannu. Using multistage sampling methods following proportion allocation technique, total 714 students were selected as a sample of the study. The multiple intelligences inventory, adapted from Armstrong (1994) Urdu version, was used as a research tool of the study. The central tendency and variability of the multiple intelligences of the sampled students were measured using Mean and SD respectively. Results of the study revealed that self-perceived bodily/kinesthetic, intrapersonal, interpersonal, naturalistic and verbal/linguistic intelligences are the most dominant intelligences of the students. It was recommended that teachers should teach in way so that students may develop all different type of intelligences.

Key terms: bodily/kinesthetic, intrapersonal, interpersonal, naturalistic, verbal/linguistic, logical/mathematical, intelligence.

Introduction

The most important contribution of education towards child advancement is to facilitate him or her where their abilities can better flourish and reach his pick of competencies. We assess every one in the context that he meets that limited criteria of achievement. A great attention must be given to help children to become aware of their potentials and develop them without paying less attention to their ranking. There are thousands of ways to get success and there are many abilities that would help an individual to be triumphant (Gardner, 1993).

Howard Gardner viewed intelligence as the capacity to solve problems or to fashion products that are valued in one or more cultural settings. Gardner argues that culture also plays a large role in the development of the intelligences. All societies value different types of intelligences. The cultural value placed upon the ability to perform certain tasks provides the motivation to become skilled in those areas. Thus, while particular intelligences might be highly evolved in many people of one culture, those same intelligences might not be as developed in the individuals of another.

Howard Gardner's work on intelligence has had a profound impact on thinking and practice of education, around the world. In the early days of the psychometrics and behaviorists eras it was generally believed that intelligence was a single entity that was inherited and human mind is initially a clean slate.

Human being can be trained to learn any thing that it was presented in an appropriate way. Now a days an increasing number of researchers believe precisely the opposite, that there exists a multitude of intelligences, quite independent of each other, each intelligence has its own strengths and constraints that the mind is for from unencumbered at birth, and that it is unexpectedly difficult to teach things that go against early naive.

Intelligence, Not a Single Entity

Howard Gardner has questioned the idea that intelligence is a single entity, which results from a single factor, and that it can be measured simply via IQ tests. He initially formulated a list of seven intelligences. His listing was provisional and later he added two more intelligences in this list. This theory is an account of human cognition in its fullness.

Multiple intelligences provided a new definition of human nature. Gardner differentiated learning from multiple intelligences. He said that every individual has multiple intelligences but with different degrees. Students must have extended opportunities to work on a topic. A person might excel in one or a few kinds and be below average in others. In extreme cases, we have autistic savants- superb in one, but null in others. It has been discovered that self-estimated intelligence can have self-fulfilling effects in relation to examination performance (Chamorro-remuzic, Furnham, & Moutafi, 2004).

Fostering Intelligence

Intelligence can be fostered just as seeds of identical genetic makeup grow better in a fertile field than in a barren field; just as men of equally good physique excel in athletic qualities if well-nourished and well-trained. Current trend views intelligence as comprising a variety of abilities and as being improvable by education. This should change the focus of research from trying to determine whether particular groups are naturally more intelligent than other groups. Now the focus should be on ways of helping all people to approach their potential. Results of this study are in consonance with some studies but also in contrast with some studies this may be due to the different procedures adopted in the studies or different context.

Multiple Intelligences Theory and its uses in education are getting greater importance at a very fast pace. Owing to different problems faced by the educator, such as individual differences and their styles of learning, they opted for Multiple Intelligences Theory. They face these difficulties and problems because they cannot develop a proper attachment to their most of the students. The result is that they are irritated and their students find the teaching, learning monotonous and boring. These difficulties are the outcome of uniform methods of their teaching: "there are currently thousands of MI teachers and ten thousands of students experiencing MI based class room instruction" (Campbell, 2000).

Nine Different Ways of Teaching

In teaching learning process, this theory is of many important usages; Armstrong (1994) asserts that in nine different ways, the teacher can present the content for the students. It helps the teachers to use different types of teaching strategies. Using Multiple Intelligence Theory model, many students can be involved and they promote many of their intelligences besides linguistic and logical intelligences and teacher can get in touch with as many numbers of his students as possible with their varying degree of intelligences that are used in a classroom environment (Jaber & Hussein, 2003). This theory is significant for the student as it provides him the opportunity to realize real life situations and to gaze at it from unusual idea. Through diverse living abilities, an individual can go back and relive the different life situations from the past (Awzy, 2004). Moreover, the use of this theory gives confidence to the students and enables them to be confident and to rely on themselves more, provides the ability to use latest skills, develop group learning cooperative learning, and increases their academic attainment (Thabet, 2005).

Statement of the Problem

To discover strengths of multiple intelligences of the students.

Objectives of the Study

1. To find out strengths of self-perceived verbal/linguistic, logical/mathematical, visual/spatial, musical, bodily/kinesthetic, interpersonal, intrapersonal and naturalistic intelligences of the students.

Significance of the Study

Results of the study will be significant both theoretically and practically. This study is of utmost importance for all the stakeholders i.e. learners, teachers, curriculum developers and parents. Understanding of multiple intelligences and their strength may provide us with opportunities to look differently at the students' instruction, curriculum and assessment.

Delimitation of the Study

This study was delimited to the first year student of eight Govt. Degree, Colleges of district Bannu.

Research Question

1. What are the strengths of multiple intelligences of the students?

Research Methodology

Population

Students enrolled in 1st year, in all government degree colleges, session 2010, in district Bannu constituted population of the study.

Sample

There were ten government degree colleges in district Bannu. Four male and three female degree colleges were randomly selected. Using convenient sampling techniques 379 male and 335 female all together 714 students were selected as a sample of the study.

Instrumentation

Multiple intelligence inventory based on Howard Gardner multiple intelligences theory, developed by Armstrong (1994) was used to measure students perceived multiple intelligences. This inventory contains 40 items five statement for measuring each intelligence.
This inventory was translated in Urdu with the help of English and Urdu expert in order to make it easier and understandable to the students.

For the reliability and validity and to remove language ambiguity the multiple intelligence inventory was personally distributed among 50 subjects as a pilot run. The subjects were part of the population but were not included in the selected sample of the study. Data was analyzed through SPSS–16. The reliability of forty items at Cronbach's alpha obtained was .784 which is quite reasonable.

Data Analysis

The collected data was entered in SPSS-16 and was analyzed using appropriate statistical tests. The central tendency and variability of the multiple intelligences of the sampled students was measured using Mean and SD respectively.

Table 1 Self-perceived bodily/kinesthetic intelligence (N=714)

S. NO	Statement	M	SD
1	Taking part in sports or in any kind of physical exercises.	3.11	1.37
2	Love to work with own hands.	4.15	1.03
3	Enjoying playing with the children.	3.91	1.11
4	Feeling really good when physically fit.	4.24	1.04
5	Considering own self as an athlete.	2.65	1.37
	Overall mean score	**3.61**	**1.19**

Table 2 Self-perceived intrapersonal intelligence (N=714)

S. NO	Statement	M	SD
1	Knowing own self well.	4.15	1.09
2	Over reaction to minor problems.	2.75	1.28
3	Keeping of a diary to record personal thoughts.	2.13	1.32
4	Knowing responsibilities and being responsible for own actions.	4.14	1.07
5	Straight forward in saying what is felt.	3.89	1.16
	Overall mean score	**3.41**	**1.18**

Table 3 Self-perceived interpersonal intelligence (N=714)

S. NO	Statement	M	SD
1	People do come to me for advice.	2.62	1.11
2	Having several very close friends.	3.65	1.18
3	Enjoying social events and parties.	3.41	1.27
4	Enjoying to be with different types of people.	3.08	1.34
5	Enjoying complementing others when they have done well.	4.24	1.07
	Overall mean score	**3.40**	**1.19**

Table 4 Self-perceived naturalistic intelligence (N=714)

S. NO	Statement	M	SD
1	Keeping or like pets.	2.55	1.42
2	Recognition and naming of many types of trees, flowers and plants.	2.89	1.14
3	Keeping informed own self about universe and evolution of life.	2.69	1.07
4	Enjoying learning about nature.	3.68	1.16
5	Enjoying natural scenes.	4.49	0.85
	Overall mean score	**3.26**	**1.13**

Table 5 Self-perceived verbal/linguistics intelligence (N= 714)

S. NO	Statement	M	SD
1	Understanding of oration on TV, Radio or of someone.	3.67	0.97
	Reading of everything: books, magazines, newspapers.	3.45	1.07
3	Holding own self in verbal arguments or debates.	2.91	1.16
4	Having a large vocabulary.	3.22	1.20
2	Talking a lot and enjoying telling stories.	2.96	1.31
	Overall mean score	**3.24**	**1.25**

Table 6 Self-perceived visual/spatial intelligence (N=714)

S. NO	Statement	M	SD
1	Having no problems in reading maps and navigating.	2.39	1.33
2	Enjoying playing ludo, carom board, cards etc.	2.53	1.47
3	Preferring materials which are heavily illustrated.	3.37	1.30
4	Knowing directions easily.	3.37	1.26
5	Enjoying tours and visiting different places.	4.07	1.23
	Overall mean score	**3.14**	**1.32**

Table 7 Self-perceived logical/mathematical intelligence (N=714)

S. NO	Statement	M	SD
1	Like Math and Science subjects.	3.20	1.45
2	Enjoying of logic problems and puzzles.	2.87	1.24
3	Taking of interest in new Scientific advances.	3.24	1.34
4	Using of numbers and numerical symbols easily.	2.72	1.28
5	Solving of a problem step by step and in a systematic manner.	3.17	1.23
	Overall mean score	**3.04**	**1.30**

Table 8 Self-perceived musical intelligence (N=714)

S. NO	Statement	M	SD
1	Playing of musical instrument.	1.51	0.97
2	Whistling or humming a tone.	2.13	1.24
3	Like musical background during work.	2.87	1.43
4	Having a very good sense of pitch, tempo and rhythm.	1.75	1.04
5	Music has a great importance in one's life.	2.19	1.20
	Overall mean score	**2.12**	**1.18**

Findings of the Study

- Table 1 shows students' self-perceived bodily/kinesthetic intelligence with the mean score 3.61 and SD= 1.19 is the 1st dominant intelligence.
- Table 2 shows students' self-perceived intrapersonal intelligence with the mean score 3.41 and SD= 1.18 is the 2nd dominant intelligence.
- Table 3 shows students' self-perceived interpersonal intelligence with the mean score 3.40 and SD= 1.19 is the 3rd dominant intelligence.
- Table 4 shows students' self-perceived naturalistic intelligence with the mean score 3.26 and SD= 1.13 is the 4th dominant intelligence.
- Table 5 shows students' self-perceived verbal/linguistics intelligence with the mean score 3.24 and SD= 1.25 is the 5th dominant intelligence.
- Table 6 shows students' self-perceived visual/spatial intelligence with the mean score 3.14 and SD= 1.32 is the 6th dominant intelligence.
- Table 7 shows students' self-perceived logical/mathematical intelligence with the means score 3.04 and SD= 1.30 which means that self-perceived logical/mathematical intelligence is the 7th dominant intelligence.
- Table 8 shows students' self-perceived musical intelligence with the mean score 2.12 and SD= 1.18 which means that self-perceived musical intelligence is the 8th dominant intelligence.

Conclusions of the Study

Self-perceived bodily/kinesthetic, intrapersonal, interpersonal, naturalistic and verbal/linguistic intelligences are the most dominant intelligences of the students.

Recommendations

- Teachers should teach in way so that students may develop all different type of intelligences.
- Multiple intelligences-based curriculums should be developed for students because it proves better for the students than any other type of curriculum.
- Teachers should allow considerable elements of students' choice when designing activities and tasks for the intelligences because students perform well in the tasks which appeal to their interests.

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References

Armstrong, T. (1994). Multiple Intelligences in the Classroom. Alexandria, VA: Association for Supervision and Curriculum Development.

Awzy and Ahmed, (2004). From the child's Intelligence to the Intelligences of the Child, a Psychological Comparison to Activate the Educational Process. Retrieved on May, 23, 2009, from: http://www.arabceps.com/sak

Campbell, L. M. (2000). The unspoken dialogue: Beliefs about intelligence, students, and instruction held by a sample of teachers familiar with the Theory of Multiple Intelligences." Ph.D, The Fielding Institute. UMI Dissertations. Retrieved on March, 15, 2001 from: http://wwwlib.umi.com/dissertations/preview_all/998044

Chamorro, P., T., Furnham, A., and Moutafi, T. (2004). The relationship between estimated and psychometric personality and intelligence scores. Journal of Research in Personality, 38, pp. 505–513.

Gardner, H. (1983). Frames of Mind. The Theory of Multiple Intelligences. Basic Books Inc, New York. USA. p. 84.

Gardner, H. (1993). Intelligence reframed: Multiple intelligences for the 21st century. New York, Basic Books.

Jaber & Hussein (2005). An Introduction to the Theory of Multiple Intelligence. Palestine: Alketab Aljamy Publishers.

Thabet (2005). Multiple Intelligence Theory. Retrieved on March, 11, 2008, from: http://www.gaza.net/edu/multinti lligences.htm

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