

**KEYWORDS:** 

## Introduction

Giftedness refers to the individual who possess above average ability, task commitment and creativity. Giftedness is a threefold dimension where the three dimensions overlap is said to be the gifted and talented students. US Department of Education (1993) defines giftedness as "children and youth with outstanding talent who perform or show the potential for performing at remarkably high level of accomplishment when compared with others of their age, experience or environment". This definition of giftedness is the broadest and most comprehensive one. It speaks of talent, which includes all areas of child's life academic, artistic, athletic and social. National Association for Gifted Children (NAGC) definition states that gifted individuals are those who demonstrate outstanding levels of aptitude (defined as an exceptional ability to reason and learn) or competence (documented performance or achievement in top 10% of rarer) in one or more domains. Domains include any structured area of activity with its own symbol system (e.g. mathematics, music, language) and/or set of sensory motor skills (e.g. painting, dance, sports). Gifted child means any child who is naturally endowed with a high degree of general mental ability or extraordinary ability in a specific sphere of activity or knowledge. The designation of giftedness is largely a matter of administrative convenience. In most countries the prevailing definition is an intelligence quotient (IQ) of 130 or above. Increasingly, however, schools use multiple measures of giftedness and assess a wide variety of talents, including verbal, mathematical, spatial-visual, musical, and interpersonal abilities.

According to Mares (1997) in Porter (1999), to teach perseverance, it's important to consider tasks that are "neither too easy nor too difficult so that the children can rise to an attainable challenge. (p.171.9). The desirable characteristics for teachers of the gifted children are:

- Mature and experienced self confident
- Highly intelligent
- A vocational interests that intellectual in nature
- High achievement needs; desire for intellectual growth
- Favorable attitude toward gifted children
- Systematic, imaginative, flexible and creative
- Sense of humor
- Willingness to be a facilitator rather than a director or learning
- Hard working
- Wide background of general knowledge
- Belief in and understanding of individual differences

Special educators encounter many of the same challenges as beginning general education teachers (Boyer & Lee, 2001). Moreover, a good special educator must acquire knowledge and skills needed to help every member of an increasingly diverse students' population achieving higher academic standards (Heng & Tam, 2006). They need for strong teachers preparation programs to provide training in the knowledge, performance and skills necessary for working with students with special needs (Brownell et al., 2005). The present study also aims to impart knowledge and teaching competency among prospective teachers on giftedness.

## **Title of the Study**

Teaching Competency based Self Instructional Module on Giftedness for Prospective Teachers

### **Objectives of the Study**

To find out the significant difference in the knowledge of prospective teachers on giftedness at pre and post stage after implementation of Teaching Competency based Self Instructional Module on Giftedness.

To find out the significant difference in the teaching competency of prospective teachers on giftedness at pre and post stage after implementation of Teaching Competency based Self Instructional Module on Giftedness

To find out the gap closure on the knowledge and teaching competency of prospective teachers on giftedness.

## Hypothesis of the Study

There exist significant difference in the knowledge of prospective teachers on giftedness at pre and post stage after implementation of Teaching Competency based Self Instructional Module on Giftedness

There exist significant difference in the teaching competency of prospective teachers on giftedness at pre and post stage after implementation of Teaching Competency based Self Instructional Module on Giftedness

There exist gap in the knowledge and teaching competency of prospective teachers on giftedness at pre and post stages.

### Methodology

Experimental Method was adopted in the present study. 35 prospective teachers who possess low level of knowledge on giftedness was selected for the present study. Teaching Competency based Self Instructional Module on giftedness was given to the selected prospective teachers for a period of three months. Their pre and post level of knowledge on giftedness and teaching competency to handle gifted children were score and analysed.

### **Results and Discussion**

The teaching competency based self instructional module on giftedness was given to the selected prospective teachers and the results were analysed and tabulated below.

Mean and Standard Deviation, Correlation and Correlated 't' value of

Prospective Teachers Knowledge on Giftedness at Pre and Post Stage

The objective was to find out the significant difference in the knowledge on giftedness of prospective teachers. The data were analyzed and the results are given in table 1

# Table 1: Mean and Standard Deviation, Correlation and Correlated 't' value of prospective teachers Knowledge on Giftedness at Pre and Post stage

Group	Mean	SD	r	Correlated 't' value
Pre test	23.68	1.32	0.70	
Post test	65.82	6.96	0.72	40.98**

Note : \*\* Significant at 0.01 level

From the above table, the correlated t-value 40.98 is significant at 0.01 level which shows that there is a significant difference in pre-test and post test achievement scores of prospective teachers. Hence the stated hypothesis, "there is a significant difference in the mean scores of prospective teacher's knowledge on Giftedness at pre and post stage" is accepted. This result shows that there at the teaching competency based self instructional module to handle gifted children was found to be effective. To sum up, the mean scores of knowledge on giftedness of prospective teachers at the pre and post assessment stages significantly. They differ in their knowledge through the treatment to handle gifted children by this "Self Instructional Modular Package".

Mean and Standard Deviation, Correlation and Correlated 't' value of Prospective Teachers, Teaching Competency Scores of Pre and Post Assessment Stages

The objective was to find out the significant difference in the teaching competency to handle children with giftedness of prospective teachers. The data were analyzed and the results are given in table 2

# Table 2: Mean and Standard Deviation, Correlation andCorrelated 't' value of Prospective Teachers Teachingcompetency Scores at Pre and Post assessment Stages

Group	Mean	SD	r	Calculated 't' value
Pretest	32.85	8.48	0.54	13.64 **
Posttest	60.31	14.11		

Note: \*\*Significant at 0.01 level

From the above table, the correlated t-value 13.64 is significant at 0.01 level which shows that there is significant difference in pre and post test teaching competency scores of prospective teachers. Hence the stated hypothesis, "there is a significant difference in the teaching competency mean scores of prospective teacher's at pre and post stage is accepted. It means that the teaching competency based self instructional modular package is effective in developing teaching competency among prospective teachers. To sum up, the mean scores of teaching competency among prospective teachers at the pre and post assessment stages differ significantly. This reveals that prospective teachers have improved their teaching competency to handle gifted children through teaching competency based "self instructional modular package on gifted children."

## **Gap Closure Analysis**

Gap Closure analysis is the comparison of actual performance with potential performance. Gap analysis provides a foundation for measuring investment of time, money and human resources required to achieve a particular outcome. GAP analysis has also been used as a means of classifying how well an intervention meets the targeted outcome, need or set of requirements.

Gap closure refers to the % of the gap closed (after treat) as indicated by the difference between the post test mean and pre test mean. Gap closure shows the extent, to which the treatment was effective. A refers to the gap between complete mastery and the initial achievement (H,, S 1995), Merlin Sasikala, 2014).

Gap Closure Analysis on Knowledge of Prospective Teachers on Giftedness

GapClosure=

PostMeanScore – Pr eMeanSco	re
PerfectScare - PreMeanScore	0

	Mean	Gap Closure	
Pre Test	23.68	EE 01	
Post Test	65.82	55.21	

The gap closure value 55.21 % refers the mastery of the prospective teachers from the initial assessment. This refers the gap closed from the initial performance towards mastery. The prospective teachers had gained more than 55% of knowledge by the implementation of teaching competency based self instructional package on giftedness. This shows the effectiveness of the treatment given to the prospective teachers to develop knowledge on giftedness. The graphical representation of the gap closure is given below.



## Gap Closure Analysis on Teaching Competency of Prospective Teachers on Giftedness

### GapClosure=

PostMeanScore - Pr eMeanScore

PerfectScare - PreMeanScore

	Mean	Gap Closure	
Pre Test	32.85	41.10	
Post Test	60.31		

The gap closure value 41.10% refers the mastery of the prospective teachers from the initial assessment. This refers the gap closed from the initial performance towards mastery. The prospective teachers had gained more than 55% of teaching competency by the implementation of teaching competency based self instructional package on giftedness. This shows the effectiveness of the treatment given to the prospective teachers to develop teaching competency to handle children with giftedness. The graphical representation of the gap closure is given below.



### Conclusion

The present study will be a limelight in the field of special education teacher preparation programme. The teaching competency based self instructional module on giftedness was found to effective which evinced the need to impart knowledge on giftedness and the required skills / competencies to handle children with giftedness.

#### Reference

- Boyer. L and Lee. C (2001). Converting Challenge to Success; Supporting a new Teachers of Student with Autism. Journal of Special Education 35, 75-83.
- Brownell. M, Ross.D, Colon E and Mccallum C. (2005). Critical features of Special Education teacher preparation. Journal of Special Education, 38,242 – 252.
- Heng. M and Tam.K (2006). Special Education in General Teacher Education Programs in Singapore. Teacher Education and Special Education, 29,149-156.
- 4. Mares. L (1991). Young Gifted Children. Melborne =: Hawker Brownlow Education
- Porter Louise (1999). Gifted Young Children: A guide for Teachers and Parents. Bukingham: Open University Press 16.
- US Department of Education, Office of Educational Research and Improvement OERI. (1993). National Excellence: A Case for developing America's Talent. Washington, D.C; US Government Printing Office.