International Multidisciplinary Research Journal

# Indían Streams Research Journal

Executive Editor Ashok Yakkaldevi Editor-in-Chief H.N.Jagtap

## **RNI MAHMUL/2011/38595**

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial board. Readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

## **Regional Editor**

Dr. T. Manichander

Mr. Dikonda Govardhan Krushanahari Professor and Researcher, Rayat shikshan sanstha's, Rajarshi Chhatrapati Shahu College, Kolhapur.

# International Advisory Board

Kamani Perera Regional Center For Strategic Studies, Sri Lanka

Janaki Sinnasamy Librarian, University of Malaya

Romona Mihaila Spiru Haret University, Romania

Delia Serbescu Spiru Haret University, Bucharest, Romania

Anurag Misra DBS College, Kanpur

Titus PopPhD, Partium Christian University, Oradea, Romania

Mohammad Hailat Dept. of Mathematical Sciences, University of South Carolina Aiken

Fabricio Moraes de Almeida Federal University of Rondonia, Brazil

George - Calin SERITAN Faculty of Philosophy and Socio-Political Hasan Baktir English Language and Literature Department, Kayseri

Ghayoor Abbas Chotana Dept of Chemistry, Lahore University of Management Sciences[PK]

Anna Maria Constantinovici AL. I. Cuza University, Romania

Ilie Pintea, Spiru Haret University, Romania

Director, B.C.U.D. Solapur University,

Director Managment Institute, Solapur

Head Education Dept. Mumbai University,

Head Humanities & Social Science

Xiaohua Yang PhD, USA

Rajendra Shendge

Solapur

R. R. Yalikar

Umesh Rajderkar

YCMOU,Nashik

S. R. Pandya

Mumbai

.....More

# **Editorial Board**

Pratap Vyamktrao Naikwade Iresh Swami ASP College Devrukh, Ratnagiri, MS India Ex - VC. Solapur University, Solapur

R. R. Patil Head Geology Department Solapur University, Solapur

Rama Bhosale Prin. and Jt. Director Higher Education, Panvel

Salve R. N. Department of Sociology, Shivaji University,Kolhapur

Govind P. Shinde Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai

Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College, Indapur, Pune

Awadhesh Kumar Shirotriya Secretary, Play India Play, Meerut(U.P.) N.S. Dhaygude Ex. Prin. Dayanand College, Solapur

Narendra Kadu Jt. Director Higher Education, Pune

K. M. Bhandarkar Praful Patel College of Education, Gondia

Sonal Singh Vikram University, Ujjain

Alka Darshan Shrivastava G. P. Patankar S. D. M. Degree College, Honavar, Karnataka Shaskiya Snatkottar Mahavidyalaya, Dhar

Maj. S. Bakhtiar Choudhary Director, Hyderabad AP India.

S.Parvathi Devi Ph.D.-University of Allahabad

Sonal Singh, Vikram University, Ujjain S.KANNAN Annamalai University, TN

Rahul Shriram Sudke

Satish Kumar Kalhotra Maulana Azad National Urdu University

Devi Ahilya Vishwavidyalaya, Indore

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India Cell : 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.org

### **ISSN No.2230-7850**

# Welcome to ISRJ

Abdullah Sabbagh Engineering Studies, Sydney

> Ecaterina Patrascu Spiru Haret University, Bucharest

Loredana Bosca Spiru Haret University, Romania

Sciences Al. I. Cuza University, Iasi



**ISRF** Indian Streams Research Journal



ISSN: 2230-7850

Impact Factor : 4.1625(UIF)

Volume - 6 | Issue - 11 | December - 2016

# **ROLE OF METACOGNITIVE STRATEGIES IN INCLUSIVE EDUCATION**

# Sarita Research Scholar, Department of Education, Panjab University, Chandigarh.

## **ABSTRACT**

nclusion is no doubt, very important but a challenging task. Metacognitive strategies play an important role to overcome these challenges. Moreover, positive attitude among teachers towards inclusive education also gear them to know about and implement these strategies. As inclusion means acceptance of diversities, teachers should be trained towards inclusive educational methodologies. It is often argued that teachers lack the necessary knowledge and skills to work with such students in inclusive classrooms. Also students may have the knowledge of the content but they don't know when and how that knowledge should be used. Using appropriate metacognitive strategies helps teachers to make learners develop an appropriate plan and execute it for



better learning. Metacognitive strategies includes effective practices like Think Alouds Method (for reading comprehension and problem solving), Organizational Tools (such as checklists, rubrics etc. for solving word problems) and Explicit Teacher Modeling (for Maths instructions) etc.

**KEYWORDS**:Inclusive Education, Metacognitive strategies, Think-Alouds Method, Organizational Tools, Explicit Teacher Modeling.

# **INTRODUCTION:**

**Inclusive Education** Inclusive education refers to an education system that accommodates all children regardless of their physical, intellectual, social, emotional, linguistic or other conditions. Education is the core of equality and empowerment and Inclusive education is one of the ways to achieve it. The term "inclusion" itself is perplexing with much debate and discussion regarding its meaning. To some, inclusion is another word for mainstreaming, which is familiar to us from decades. But, inclusion is different fundamentally and philosophically from mainstreaming. Under the concept of mainstreaming students with disabilities were taught in pull-out programs until their academic skills increased to the same, or very nearly the same, level as their same-age peers in the regular (general) classroom. The student with disabilities would then be "mainstreamed" back into the general education setting. Thus, the emphasis was on changing the child to better fit the "regular" system of education. But the concept of inclusion emphasizes on changing the system rather than the child. Supporters of inclusion emphasize that it isn't necessary for a student with disabilities to be "at grade level" in order to receive instruction in the general education setting. The argument is that our educational system, structure and practices need to shift and become more flexible, more inclusive, and more collaborative in order to better accommodate students with learning differences. It is evident

#### ROLE OF METACOGNITIVE STRATEGIES IN INCLUSIVE EDUCATION

that if the children with disabilities get equal opportunities and access to the information as the other children get, they can lead a better life.

Inclusive education means securing equal opportunities for the children with disabilities. The various challenges confronting the school system while including children with diverse abilities and from different backgrounds have to be met by adopting child centered pedagogy capable of successfully educating all children. Inclusion is the system of establishing heterogeneous classrooms, where every child strives to accomplish individual goals by participating in academic and social activities (Nagpal & Sangeeta, 2012).

A succinct definition of inclusive education described it as students with disabilities having full membership in age-appropriate classes in their neighbourhood schools, with appropriate supplementary aids and support services (Lipsky & Gartner, 1996, 1999).

According to Pinnock H. and Lewis I. (2008), inclusive education is a dynamic process that acknowledges that all children can learn, respects differences in children regardless of their age, gender, ethnicity, language, disability, etc., enables education structures, systems and methodologies to meet the needs of all children promotes an inclusive society.

Inclusive education is a pairing of philosophy and pedagogical practices that allow each student to feel respected, confident and safe so he or she can learn and develop to his or her full potential. It is based on a system of values and beliefs centered on the best interests of the student, which promotes social cohesion, belonging, active participation in learning, a complete school experience, and positive interactions with peers and others in the school community (Department of Education, New Brunswick, 2013).

In 1994, the UNESCO Salamanca Statement was agreed upon by representatives of 92 governments and 25 international organizations. According to the Salamanca Statement:

All governments should include the principle of inclusive education in their laws or policies.

All children should be able to enroll in regular schools, unless there are compelling reasons for doing otherwise. The Salamanca Statement committed countries to inclusive education. It emphasized that those with special educational needs must have access to regular schools which should accommodate them within a child-centered pedagogy capable of meeting these needs.

#### **CHALLENGES OF INCLUSION**

Various challenges are there for smooth functioning of inclusive education system such as:

- Large class sizes
- Low teacher-student ratio
- Lack of adequate transport
- Poor metacognitive skills of children with special needs
- Behavioral problems of children with special needs
- Lack of necessary knowledge and skills among teachers
- Attitude of parents of regular students towards inclusion

From the above mentioned challenges, some can be managed by the teachers by catering to the needs of the children in inclusive setting. Teachers can use different strategies to improve metacognitive skills of the students with special needs as due to poor metacognitive skills, children may face difficulties in academic and social aspects. A teacher can play an important role to help students to develop these skills by adopting appropriate metacognitive strategies such as Think Alouds Method (for reading comprehension and problem solving), Organizational Tools (such as checklists, rubrics etc. for solving word problems) and Explicit Teacher Modeling (for Maths instructions).

In order to know about these strategies in detail, let us first discuss why these are called metacognitive strategies.

#### What is Metacognition?

Metacognition means 'thinking about thinking' or 'thinking beyond thinking'. According to Flavell (1979), who coined the term, meta-cognition is a regulatory system that includes (a) knowledge, (b) experiences,

(c) goals, and (d) strategies. According to Schraw (1998), metacognition includes (a) Knowledge of cognition and (b) Regulation of cognition. Knowledge of cognition refers to one's knowledge or beliefs about the factors that control cognitive (knowledge) processes. It is divided into three types: person variables, task variables, and strategy variables. The person variables are the individual's knowledge and beliefs about himself as a thinker or learner, and what he believes about other people's thinking processes. For instance, you believe that you can learn better by doing than by listening to lectures. The task variables refer to knowledge or all the information about the nature of a proposed task. The strategy variables include knowledge about both cognitive and metacognitive strategies, as well as conditional knowledge about when and where it is appropriate to use such strategies. According to King (1999), "Metacognition involves the ability to think about own cognitions, and to know how to analyze, to draw conclusions, to learn from, and to put into practice what has been learned".

Meta-cognition refers to a level of thinking that involves active control over the process of thinking that is used in learning situations. Planning the way to approach a learning task, monitoring comprehension, and evaluating the progress towards the completion of a task: these are skills that are meta-cognitive in their nature. Metacognitive Strategies to cater the needs of children in Inclusive Classroom setting

In the field of education, teachers are viewed as the primary agents in the implementation of the philosophy of inclusive education. Their perceptions may influence their behaviour towards and acceptance of children with disabilities. Further, the attitude of mainstream educators may have some bearing on the success of inclusive educational programme. Inclusion requires teachers to accept their responsibility for creating schools in which all children can learn and feel they belong. In this act, teachers are crucial because of the central role they play in promoting participation and reducing underachievement, particularly with children who might be perceived as having difficulties in learning. Teachers who use metacognitive strategies can positively impact students with special needs by helping them to prepare an appropriate plan for learning information. As students use these processes more frequently, they become aware of how they learn and hence become more independent thinkers.

According to the Inclusive Schools Network (2014), "Metacognitive strategies refers to methods used to help students understand the way they learn; in other words, it means processes designed for students to 'think' about their 'thinking'." Some of the metacognitive strategies are as below.

(i) Think Alouds Method: It is a great method for reading comprehension and problem solving. Think-alouds method helps students to consciously monitor and reflect upon what they are learning. This strategy works well when teachers read a story or problem loudly and periodically stop to verbalize their thoughts. This allows students to follow the teacher's thinking process, which gives them the foundation they need for creating their own strategies and processes that can be useful for understanding what they are trying to comprehend.

(ii) Organizational Tools: These organizational tools (checklists, rubrics etc. for solving word problems) support students in the decision-making process because they serve as an aid for planning and self-evaluation. Typically they ask what students know and need to know to arrive at an answer, and emphasize the need to reread the problem and self-check responses.

(iii) Explicit Teacher Modeling: Explicit teacher modeling helps students to understand what is expected of them through a clear example/model of a skill or concept. When a teacher provides an easy to follow procedure for solving a problem, students have a memorable strategy to use for approaching a problem on their own. This is a good strategy for Maths instructions.

(iv)Provide Opportunities for Making Errors. When learners are given the opportunity to make errors while in training, such as during simulations, it stimulates reflection on the causes of their errors.

(v)Solve Problems with a Team: Cooperative problem solving can enhance metacognitive strategies by discussing possible approaches with team members and learning from each other.

(vi)Provide Access to Mentors. Many people learn best by interacting with peers who are slightly more advanced. Promote experiences where novices can observe the proficient use of a skill and then gain access to the metacognitive strategies of their mentors.

#### Role of Metacognitive Strategies in effective Implementation of Inclusive Education

Inclusive Education works best if different stakeholders (local civil society leaders, community leaders, religious leaders, local government representatives etc.) of society participate in implementing it. Mothers and fathers of the children can be invaluable as volunteer classroom assistants in schools and as members of school committees. Moreover, if they are encouraged, they can advocate for inclusive policies and practices. Schools can arrange regular awareness meetings for others in their community including children, parents, families, teachers and education officials. Inculcation of these metacognitive skills among would be teachers and inservice teachers that enable learners to become aware of how they learn and to evaluate and adapt these skills to become increasingly effective at learning also helps in implementation. Local organizations — including non-governmental organizations and disabled people's organizations can also contribute towards it. Each can play an important role in the effective implementation and development of Inclusive Education.

#### **CONCLUSION**

Many teachers never taught how to teach children with special needs, or generally how to teach in a child-friendly, active way. For the effective execution of inclusive education, in-service and pre-service teacher training programs may include inclusive education methodology. Short term workshops should be organized. Preparing teachers at the pre-service level to teach in inclusive settings is essential if our schools are to truly teach all students in inclusive, collaborative, and diverse settings. To accomplish that we must start designing and building an atmosphere of collaboration and inclusiveness at the pre-service level, as well as practices that demonstrate to prospective teachers the possibilities and promise of an inclusive world. Subjects covered can include participatory, child-centered teaching and learning methods, an introduction to sign language, and creating inclusive materials. Teaching methodology can include various learning strategies including metacognitive strategies which are helpful for making students comfortable in inclusive classrooms and learn according to their potentials. In a world that demands lifelong learning, providing all learners new and improved metacognitive strategies is a gift that can last forever.

#### REFERENCES

1.Connie, M. (2016). Metacognition and Learning: Strategies for Instructional Designs. Retrieved on March 10, 2017 from http://theelearningcoach.com/learning/metacognition-and-learning/.

2.Department of Education, New Brunswick (2013). Definition of Inclusive Education. Retrieved from https://inclusiveeducationcanada.files.wordpress.com/2013/07/definition-of-inclusive-education.pdf on 09-03-2017.

3.Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive-development inquiry. American Psychologist, 34(10), 906-911.

4.Hassan, A. E. H. & Ahmad, E. Y. E. (2015). Imapact of Metacognitive Strategies on Academic Achievement among Special Education Students in Jazan University. Retrieved on March 10-2017 from http://www.ijern.com/journal/2015/March-2015/50.pdf.

5.Inclusive Schools Network (2014). Metacognitive Strategies. Retrieved on February 13, 2017 from http://inclusiveschools.org/metacognitive-strategies/.

6.King, A. (1999). Transactive peer tutoring: Distributing cognition and metacognition. Educational Psychology Review, 10(1), 57-74.

7.Leonard Cheshire Disability (2017). Inclusive Education –An Introduction. Retrieved from https://www.leonardcheshire.org/sites/default/files/LCD\_InclusiveEd\_012713interactive.pdf on 09-03-2017.

8.Lipsky, D. K., & Gartner, A. (1996). Equity requires inclusion: The future for all students with disabilities. Disability and the dilemmas of education and justice, 145-155.

9.Lipsky, D. K., & Gartner, A. (1999). Inclusive education: a requirement of a democratic society. World Yearbook of Education 1999: Inclusive Education, 12-23.

10.Nagpal, R. & Sangeeta (2012). Inclusion in Education: Role of Teachers. Journal of Indian Education, 38(1), 61-72.

11.Pinnock, H. and I. Lewis. 2008. 'Making schools inclusive: How can change happen – Save the Children's experience, UK.

12.The Salamanca Statement and Framework for Action on Special Needs Education (1994). The Salamanca Statement on Principles, Policy and Practice in Special Needs Education. Retrieved from http://www.unesco.org/education/pdf/SALAMA\_E.PDF on 09-03-2017.

13.Whitworth, J. W. (1999). A Model for Inclusive Teacher Preparation, Electronic Journal for Inclusive Education, 1(2).



Sarita Research Scholar , Department of Education, Panjab University, Chandigarh.

# Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished Research Paper,Summary of Research Project,Theses,Books and Book Review for publication,you will be pleased to know that our journals are

# Associated and Indexed, India

- International Scientific Journal Consortium
- ★ OPEN J-GATE

# Associated and Indexed, USA

- Google Scholar
- EBSCO
- DOAJ
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database
- Directory Of Research Journal Indexing

Indian Streams Research Journal 258/34 Raviwar Peth Solapur-413005,Maharashtra Contact-9595359435 E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com Website : www.isrj.org