

**First International Multidisciplinary Conference on Teaching and Learning  
From Room To Zoom**

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## **Contextual Competence of Students in the COVID-19 Era: Importance and Methods**

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Adapting to the situations around, however difficult they may be, is the reason for man's survival. The decisions and the appropriate actions that man take are always dependent upon the context. What is right in one situation might be a cause of disappointment and frustration in another. Social, economic, cultural, religious and linguistic factors come into play especially in the case of a diverse nation like India.

Contextual competence is the ability to productively utilize the social, economic and cultural situations to one's benefit. It enables the person to behave better and adapt to the society. It goes beyond the normal ability to recognize the context. Intelligence to verify the context coupled with critical thinking and quick decision making qualify as contextual competence.

When does a child start developing contextual competence? Jean Piaget, the noted Swiss psychologist suggests that children move through four stages of mental development. In the final stage (The Formal Operational Stage) the children in the age group of twelve and above twelve begin to think abstractly. This allows them to understand the moral, philosophical, ethical, social and political issues. They become concerned about the world around them and their role in this world. Another psychologist, John Dewey suggests that constructive learning occurs only when children are exposed to multiple contexts.

The school becomes the single most important factor in the life of a young adolescent as he tries to make meaning out of varied contexts. The school, however homogenous it may be, offers students the chance to engage with peers from different cultures and understand their background. As a result, an unconscious increase of contextual competence takes place. The involvement in extension activities that brings one as close to the society as one can become is a major boost to this kind of development.

Sadly, the online education at the wake of the COVID-19 pandemic puts a period to the major involvement of students in different environs. The source of exposure to the outside world becomes the seventeen-inch screen. There is no sharing of lunch, gossips or the delight at making fun of each other. Social responsibility has become the key to the survival of the human race; meanwhile, our children are limited to an education that provides no impetus to social engagement. Can the hard or soft copy of the textbook and its interpretation by the teacher in the traditional sense act as a substitute to the social and cultural engagement? Can the online classes impart enough contextual competence so that the students get a preparation for life?

### **Analysis**

The Kerala Reader English, Class IX (Unit 1) textbook by SCERT is selected for the purpose of the study. The close textual analysis of the textbook is done to find out how contextual competence is dealt with. Unit I consists of three chapters: 'The Race' (short story), 'Learning the Game' (excerpt from autobiography), 'Bang the Drum' (poem). The story titled 'The Race' presents a young boy who faces various insults from others. He tries his luck in sports and slowly gains reputation as an athlete. 'Learning the Game,' an excerpt from 'Playing It My Way,' the autobiography of Sachin Tendulkar and it presents his formation days and the great influence of his coach. The poem 'Bang the Drum' explains how the spirit of Olympics motivates everyone to lead a better life.

In examining the chapters and their related activities, three of them were found to be related to the development of contextual competence.

### **Activity 1:**

Athletes of today have many good sponsorships and job opportunities. Many institutions provide facilities for continuing their education and training. Tarun applies for such a post. Based on the above news report, complete the template of Tarun's Curriculum Vitae. (Kerala Reader English 16)

The question directly focuses on the skill of writing a Curriculum Vitae. It also indirectly helps in the development of contextual competence. It explains how athletes are given priority in the education and job sector. It also shows a change in perspective of the Indian community towards sports.

### **Activity 2:**

A few screenshots of the last over of the final of the Tri-series Cup cricket match between India and Sri Lanka, held at Trinidad, on July 11, 2013 is given and the activity is to prepare a commentary based on the screenshots. The screenshots show how M.S. Dhoni wins the match for India by scoring fifteen runs in the last over. It depicts the nail biting last overs in cricket and invites the students who are not actually interested in cricket to watch a few matches. It helps to predict the importance given to cricket as a game in India over other games like hockey (which holds the status of the National Game). It also throws light on the significance of the game in the sub-continent as the match is between India and Sri Lanka.

### **Activity 3:**

Do you like songs related to sports? Your teacher can help you listen to Celine Dion's 'The Power of Dream' and Whitney Houston's 'One Moment in Time'. Discuss the role of the songs in sports events and games. Now write a theme song for your annual school sports meet or games championship. (Kerala Reader English 33)

This was the most relevant activity to develop contextual competence, that I could single out. The discussion regarding the role of songs in sports events will surely lead to official songs and promotional anthems released in association with the recent sports events. More significantly, it gives the students a chance to creatively engage in an activity with high context relevance – writing a theme song for the school sports meet.

Thus, a total of three activities that developed contextual competence could be pointed out. But, it is very evident regarding the first two activities that the textbook setters did not mean them as contextual competence developing activities. Only a subtle reference to the same could be found in both the cases. The third activity can increase the contextual competence in its true sense.

No specific genre wise difference could be found regarding the contextual competence as the unit as a whole did very little to promote the topic. Two activities were given in association with the story and one was related to the poem. The autobiography which could have been effectively used to promote contextual competence was completely neglected. Any activity related with it could have delivered a better response as Sachin is considered an idol among all cricket fans.

### **Suggestions**

The activities that could be incorporated by the teacher to focus on the development of contextual competence in this pandemic era are listed.

1. Athletes have many good sponsorships and job opportunities. Many institutions provide facilities for continuing their education and training. Search the newspaper to find at least one article detailing the sponsorship/job given to an athlete.
2. Tarun ('The Race') had to face many difficulties to succeed as an athlete. How much greater would be this struggle if the person is differently abled? Chelsea McClammer is one such person who showed great determination and discipline. Prepare a brief biography of this Paralympic athlete.
3. Have you heard about the Olympics conducted for the differently abled? It is called Paralympics. Find some pictures of it and name at least three events conducted in it.
4. From the autobiography of Sachin Tendulkar it is very clear that his coach Ramakant Achrekar had a great influence in his life. For his great contribution as a coach Achrekar was awarded the Dronacharya Award. Find out the name of the latest recipient of this prestigious award. Prepare a PowerPoint or Prezi presentation on the person and his contributions.
5. What is a blog? Find out a blog maintained by any celebrity of your state. Prepare a summary of any one article in it.
6. You are already familiar with the poem 'Bang the Drum'. Find out and note down the lyrics of the official anthem/theme song of any international sports event held in the twenty first century. Does the song succeed in motivating you?

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7. A lot of biopic movies related to sportspersons were released in the last few years. Watch any one of them of your choice and prepare a film review. [ A few of such movies are: Saina (2021), M.S. Dhoni (2016) and Mary Kom (2014)]
8. There were a lot of debate going on regarding the conduct of the Indian Premier League (IPL) tournament when COVID-19 was claiming the lives of thousands of Indians. If you were the BCCI president what decision would you have taken? Prepare a press release as the BCCI president regarding the conduct of the IPL.
9. Every day, we get to see a lot of news reports on IPL and other sporting events taking place across the world. The media has almost forgotten the raging farmers protest taking place in our capital city, Delhi. Farmer unions and their representatives have stated that they will not compromise. But, the media feels that it has lost the news value. Do you support this attitude of the media conglomerates? Figure out whether it is in accordance with the media ethics. Prepare a write up on this issue highlighting your opinion.

### Conclusion

Contextual competence is an important quality that needs to be inculcated at a young age. This is because it is closely linked with critical thinking and one's success in life. One's education is never complete if he/she cannot deal effectively with the society outside the four walls of the classroom. The relevance of contextual competence is greater as the microcosm of the society – the classroom remains inaccessible to the students.

The textbook setters must give due importance to include activities that develop competence by engaging the students in various contexts in each chapter. Once designed and published, a textbook stay for many years. This means that the contextual relevance of the activities could be lost. So, care has to be taken to revise the textbook every few years. The teacher can play a constructivist role even when the textbook lacks in promotion of contextual competence. He/she can easily design activities out of the textbook for the same. To do this, the teacher must update his/her knowledge continuously and maintain a constant touch with the community. A few examples of how this could be implemented is detailed in this study. A combined and persistent effort of all the stakeholders are required to develop a generation that does not turn down the pressing social, political and economic issues.

### References

- Piaget, Jean, et al. *The Psychology of the Child*. Basic Books, 2000.
- Dewey, John. *The School and Society / John Dewey*. Lightning Source UK Ltd, 2018.
- M, Rejish. *Professional Competencies Listed by NCTE (Professional Traits)*, 1 Jan. 2020, [rejimaruthora.blogspot.com/2016/08/professional-competencies-listed-by-ncte.html](http://rejimaruthora.blogspot.com/2016/08/professional-competencies-listed-by-ncte.html).

## **Relation of Indian Classical Dance and Formal Teaching Method in English through Bharatanatyam**

*Aditi Venkatesh Naik*

*Numerous researches have taken place in this field and it has been found that there is a correlation between students who dance. By getting dance education students develop the desire to do well, and also Learn to remember sequences, forms, relationships as well as structure. In accordance with the changing views on the value of English language, ELT has changed a lot in the recent years. Language, being a social creation, is used to reflect all aspects of society and its culture. Educationists emphasis the moral value and social identities linked with language use in the society. This paper stresses the importance of learning a second language like English within one's own social and cultural bounds. Many scholars have also proposed the necessitate to promote student's creative thinking, critical thinking and analytical thinking in ELT programs. This paper also attempts to make clear that when a dance form like Bharatanatyam (a representation of Indian culture and heritage) is collaborated with ELT, not only make the learners artistic but also critical and analytical thinkers.*

**Keywords:** ELT- English Language Teaching

### **Introduction:**

Theories can be learnt in a scientific manner while skills can be acquired only in an creative way. Learning a language is more a skill than a science because only by practice can it be perfected and no theories or grammar can help you acquire the language. The tradition of teaching a language, especially the English language has undergone tremendous changes throughout the twentieth century and the twenty first century is seeing modern technology play a fundamental role in ELT. It is a renowned fact that machines can never replace a human being. Though computers and multimedia facilitate the process of learning English to a greater extent, they can never replace a real human teacher. Mathematics or Physics can be effectively taught using technology, but the language acquisition of a learner is highly proportional to the performance and presentation of a teacher.

A teacher's performance, that is, the crucial abilities of a teacher in passing knowledge to the learners is very important in education. But think of a teacher teaching with a performance art as a tool! Having a performance art as a teaching tool in language learning makes teaching and learning a very interesting and exciting experience. Teaching of a language is itself a skill and an art, and when it is done in an artistic way accelerates the process of learning. There is absolute involvement of both the teacher and the taught.

This paper brings out a proposition that English language can be taught using a performing art like Bharatanatyam which is a symbol of Indian tradition and culture. Any dynamic art changes and develops on new lines with the passage of time. English and Bharatanatyam are two such art forms that can contribute mutually to each other. The researcher being a classical Bharatanatyam dancer and an experimental researcher found constructive results to help propagate the classical Indian art form while also helping teach and learn language subject like English and Sanskrit.

### **Bharatanatyam:**

Bharatanatyam is a dance form of Tamilnadu, the southern part of India. It was not created for mere pleasure, but to "embody the cosmic relationships and expressions (bhava) for all the worlds". Bharatanatyam is, according to Balasaraswathi, one of the exponents of this dance form, "a variety of Natya Yoga that reveals the spiritual through the physical and emotional body". There are three elements in Bharatanatyam --- Nritya, Nritya, and Natya. Nritya is the rhythmic constituent that interprets the language of rhythm with the help of body movements; Nritya is a combination of rhythm with expression, it conveys the poetic meanings with body and facial expressions; and Natya is the combination of Nritya and Nritya and the dramatisation of a theme. All the movements, states and activities can be expressed by Bharatanatyam. All the moods, emotions and passions of the soul can also be made explicit by Bharatanatyam.

Mythology says that Brahma created the Fifth Veda or the Panchama Veda which is the Natya Veda (Bharatanatyam), a quintessence of all the four Vedas. The Natya Veda combines Pathya (words) of the Rig Veda; Abhinaya (body language) of Yajur Veda; Geetham (music and chant) of Sama Veda; and rasam (emotions and sentiments) of Atharva Veda. Perhaps the Natya Veda is on our modern day Communicative Skills.

Lord Nataraja of Chidambaram is considered as the Lord of Dance. "Nata" means 'dance' and "raja" means 'king'. The pose of Nataraja reveals a lot. It is maths, physics and philosophy. It can also mean a lot in the process of language learning. The upper right hand of the Lord holds the drum of Creation and a symbol of primeval sound. To an English language learner, it is the production of sounds that is the speaking skills. The upper left hand of the Lord holds the Fire destroying the old universe and giving space for new ideologies to grow. Perhaps it symbolizes the state of refreshing our ideas and notions on the English language and accepting new knowledge and practices. The English language takes in and gives out a lot. It is capable of giving terms to newer concepts of life and science. It is an ever growing language. The lower right hand is in Abhaya-hasta or is Blessing. We may interpret that the English language is also a blessing and a tool to communicate worldwide. The lower left hand points towards the raised foot which signifies uplift and liberation. Lord Nataraja is seen to be dancing on a demon that is known as Muyalaka who is a symbol of ignorance and epilepsy. The Lord is crushing the demon under His feet signifying enlightenment.

Bharatanatyam is the expression of the heart and the soul. It is an extremely traditional art form known for its grace, purity and tenderness. It uplifts the dancer and the audience to a higher level of spiritual consciousness. The greatest blessing of Bharatanatyam is its ability to control the mind. In Bharatanatyam, actions are not avoided. There is much to do but it is the harmony of these various actions that leads to the concentration we seek in learning. The heaviness of the action is forgotten in the charm and grace of Bharatanatyam.

*Yatho hasthas thatho drishti  
 Yatho drishtis thatho manaha  
 Yatho manas thatho bhavaha  
 Yatho bhavas thatho rasaha*

-Adapted from Abhinaya Darpanam

*Meaning,*

Where the hand goes there goes the eyes  
 Where the eyes go there goes the mind  
 Where the mind goes there is the expression  
 When there is expression there is enjoyment.

The feet dances in tune to the rhythm of the music, the body gestures express the meaning of the message and the facial expressions convey the emotions and the feelings underlying the message. The face, the limbs and the feet together work in harmony during a dance performance and result in achieving concentration and effective learning. Any verbal message can be communicated non-verbally using a Bharatanatyam technique called Abhinaya. Abhinaya is facial expressions and body gestures.

### ***English Language Teaching (ELT):***

The communicative values and the academic or professional values of the English language make it a very important language that ought to be learnt if one has to be successful in today's global business. Though there are many English medium schools and higher institutions, the learners fail to master the language because of various reasons.

So long, English teachers have been teaching 'about' the English language rather than the actual use of it. Grammar lessons and the literature of England were validated enough to acquire the language. The learners were also trained mainly with the aim of clearing the exams and not for its communicative purpose. Today many educational researchers and teachers find that it is only the communicative value of the English language that is needed for today's youth to make him employable in the global job market. So, many innovative methods were formulated making the best use of technology to enhance the communicative skills of the learners in English.



Another reason for the failure of learning the English language is that it is being taught from the wrong end. We all know that the four language skills are very important in the learning of a language. They are Listening, Speaking, Reading and Writing (LSRW). Listening, though it may sound easy, is one of the toughest skills that can be acquired and the first skill that a language learner ought to learn. It serves as a strong foundation for the whole process of learning. But in India and perhaps also in other countries where English is being taught as a second or foreign language, the learners are introduced to the language from the wrong end, Writing. At the primary level, the students are taught to write the alphabets even before they even know that it is English! At the secondary and tertiary levels, the students are threatened with grammar rules that breed fear and aversion towards the language. Though computers and multimedia (inanimate tools) play a vital role in facilitating the communicative skills of the English language learners, a performing art can add colour and life to the process of language learning.

#### ***An Ideal New Pair:***

When a performing art like Bharatanatyam is used as a tool in ELT, it first gives a context for listening and is a visual representation of messages. It also gives a lot of scope to the learners to produce meaningful sentences in the target language forcing the learners to use their language resources and thus enhancing their linguistic abilities. It also provides a lot of situations that can be used to develop the reading and writing skills. In Bharatanatyam, the *mudras* or the hand gestures are expressions of various actions. Effective communication is when information is passed from a sender to a recipient using a medium. There are different media that are used to transmit a message such as visual, sound, and kinesthetic. Bharatanatyam makes use of all the three media thus captivating the learners' attention. The English Language Learners (ELL) now is able to easily recognize essential information and its relationship to supporting ideas. Both privately observable processes such as feelings and thinking and publicly observable processes such as actions are made explicit by a *Bharatanatyam* performance. Such explicit expressions make both the language and content more accessible to the learners.

Experiments were done in an Indian classroom by the researcher to prove that Bharatanatyam can be used as an effective tool in English language teaching. First, a Bharatanatyam piece was performed in the class and the students were asked to write the message conveyed in English. The lyrics were in Konkani, the mother tongue of most of the students, and hence they were able to perceive what was conveyed. But the problem was to put them in words. Good translators were able to do well though. By this translation exercise, learners were able to make the best use of their linguistic abilities. Then, the students were given the same performance without the lyrics and asked to interpret their own meaning. They need to give a different meaning. Here the creative capabilities of the students played a significant role in the learning process. The *mudras* used here are *Katakamukha*, *Alapadma*, *Chatura*, *Hamsasya*, *Soochi*, *Pataka*, *Sikhara*, and *Keelaka*. The *Katakamukha mudra* is used to refer to a bird and when it is changed to *Alapadma* it means 'to say'; the *Chatura mudra* is used here to show 'come near me'; *Hamsasya* is used here to denote 'the self and her secret'; *Soochi*, used here to mean 'the numerical-one' is also used to mean 'enchantment' by rotating the *Soochi mudra* finger; *Sikhara* is used to mean 'Lord *Muruga* with his weapon, the *Velayutham*'. The double hand gesture *Keelaka* is used to denote the Love between the Lovers.

Even a classic English literary piece can be depicted using Bharatanatyam *mudras* (gestures) and *bhavams* (expressions). As opposed to *Keelaka*, the double hand *mudra Paasam* is used. Here the learners associate the words and the message of the literary piece with the *mudras* and *bhavams* of the Bharatanatyam performance. The sounds of the language are visually represented in Bharatanatyam and the learner associates the sounds with the Visual representations and vice versa.

Concentration, discipline and hard work are essential for the performance of Bharatanatyam. In fact, through Bharatanatyam, a known and familiar art form to the learners in India, they are motivated to imbibe all these qualities in learning English. They have concentration from which they come to know that the beauty of the performance is only due to the disciplined synchronization of the rhythm, music and expression along with the involvement of the learner.

According to Boulton (1968), "there is an enormous difference between a play and any other form of literature. A play is not really a piece of literature for reading. It is the literature that walks and talks before our eyes". More than a play, a Bharatanatyam performance adds music, charm and grace to the meaning, thus, enchanting the

learners and their attention. As in a play, the text is translated into sights, sounds and actions that register into the mind of the learners easily. Bharatanatyam not only facilitates the language learning process, but it also makes the learners discover the richness of their tradition and culture and would have learnt to make use of their linguistic capabilities in their own cultural and social contexts.

Robbins rightly stated referring to drama which can be applied to Bharatanatyam as well: “Dramatic activities help students investigate a subject while finding its relationship to themselves and society, moreover, they make students counter with performance of social roles they have never experienced before, with the corresponding language and communicative styles”.

According to Celce Murcia (2001), it is easier for learners to be engaged in a lesson through a performance than through instructions or explanations. There is more involvement in the learning process. A Bharatanatyam performance breaks the monotony of a traditional classroom and there is a lot of involvement and meaningful interaction. The classroom is no longer a dull and boring place. It is full of actions that open up doors to creativity, criticism and analysis. The learners think on new lines, try to give new meanings and are good critics.

Berlinger (2000) notifies the effect of dramatic performances on teaching culture by considering story making, rehearsal and performance as inducements to make students think consecutively to show inner life of characters, to compare and contrast aspects of their own culture with those of the second one, and to interact with classmates, and through all these they use their second language. When a Bharatanatyam piece is performed in the class, the learners are able to easily translate the message conveyed as they are already familiar to the culture that is embodied in it. Similarly when an English message is conveyed, the learners are able to easily grasp the content and the language because they are visually expressed using a familiar art. Here, a new art, that is, the English language is learnt using an already familiar art, Bharatanatyam. So now, new scopes are provided to the learners to compare and analyse their own culture and language with that of a new culture and language and get a better understanding of it.

Generally, second language learning causes anxiety (Krashen, 1981). Bharatanatyam focuses on meaning through actions rather than on meaning through instructions; and Bharatanatyam is a very charming art that satisfies one's aesthetic sense thus liberating the learner from stressful condition and thus fully engaged in learning.

In a classroom where language is taught through performing art, the teacher is not the centre and the students are also equally involved. Hence the learners would take an egalitarian attitude towards the teacher and the classroom would become a friendly atmosphere where optimal learning occurs.

Great researchers like Steinberg (1986), Vygotsky (1986) and Baxter (1999) believed that learners are motivated to communicate and learn better through games, activities and performances. They become fully and personally engaged in the learning process. And Bharatanatyam is one such art that can set the learners to think creatively and critically.

Matsuzaki Carreira (2005) approves that the learners are helped by a performance to experience a deeper sense of sympathy which rarely takes place by mere passive viewing. In a Bharatanatyam performance, a message is conveyed in all its dimensions. So a learner is able to fully understand and sympathize with what is being communicated. Bharatanatyam is valuable for its own sake and for what it can add to a lesson. Teaching a lesson in this fashion engages the emotions of the learners in the learning process.

In an English class where Bharatanatyam is performed, a lot of learning takes place, but the burden that the learners feel in a conventional English classroom is nullified by the charisma of the Bharatanatyam performance. The learners gain a lot of confidence by their participation and engrossment in the arts.

#### **Limitations:**

No doubt, Bharatanatyam is a wonderful tool in the hands of an English teacher. But this tool, perhaps, cannot be used in all English classes. The learning of native sounds (phonetics) cannot be taught by Bharatanatyam performance since it has strong roots in the English culture; grammar and certain prose pieces in literature have not been attempted to be taught using Bharatanatyam.

#### **Conclusion:**



English language education doesn't stop in the mastery of reading, comprehension, vocabulary, grammar, interpretation, understanding communication skills or soft skills. A perfect learner learns how to learn, think, analyze and create. Learning should be filled with interest and involvement and should be collaborated as often as possible to make learning better and multi-faceted.

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#### **REFERENCES:**

1. Baxter, J. (1999). A Message From the Old World to the New: Teaching Classic Fiction Through Drama. *English Journal*, 89 (2), 119-124.
2. Balasaraswathi, T. T. Balasaraswathi on Bharatanatyam. Dancers' Paradise.
3. <http://www.carnatica.net/dance/index..>
4. Bharatanatyam. <http://www.bharatanatyam.co.uk>.
5. Boulton, M. (1968). *The anatomy of drama* (3<sup>rd</sup> ed). London: Routledge and Kegan Paul Ltd. Berlinger, (2000).
6. Celce Murcia, M. (2001). Teaching English As Second Or Foreign Language (3<sup>rd</sup> ed.). Boston: Heinle and Heinle.
7. Krashen, S.D. (1981). Second Language Acquisition And Second Language Learning. Oxford: Pergamon.
8. Matsuzaki Carriera, J. (2005). Discovering the Magic of Harry Potter: Adapting the Drama Method in an EFL Class for Upper Grade Primary Students. <http://www.jalt.org/pansig/2005/HTML/Matsuzaki.htm>.
9. Robbins, B. (1988). Creative Dramatics on the Language Arts Classroom.
10. <http://www.ed.gov/database/ERIC>
11. Steinberg, J. (1986) Games Language People Play. Ontario: Dominic Press Ltd.

## **SDG – 8: Decent Work and Economic Growth (Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all)**

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### **Abstract**

*This article explores the development of concepts related to the ‘quality of employment’ in the academic literature in terms of their definition, methodological progress and ongoing policy debates. Over time, these concepts have evolved from simple studies of job satisfaction towards more comprehensive measures of job and employment quality, including the International Labour Organization’s concept of ‘Decent Work’ launched in 1999. This article compares the parallel development of quality of employment measures in the European Union with the ILO’s Decent Work agenda and concludes that the former has advanced much further due to more consistent efforts to generate internationally comparable data on labour markets, which permit detailed measurements and international comparisons. In contrast, Decent Work remains a very broadly defined concept, which is impossible to measure across countries. We conclude by proposing three important differences between these two scenarios that have lead to such diverging paths: the lack of availability of internationally comparable data, the control over the research agenda by partisan social actors, and a prematurely mandated definition of Decent Work that is extremely vague and all-encompassing.*

**Key words:** Decent Work, Indicators, Quality of employment, Job quality, Job Satisfaction.

### **1. Introduction**

During the past two decades an increasing amount of public policy and academic attention has focused on different aspects of the quality of employment. Analysts have recognized that for many people, just having a job may not be enough to ensure even a basic standard of living. As the dual processes of globalisation and liberalization have generated continuous calls for labour market flexibilisation, employment conditions such as wages, job stability and career prospects have changed. Thus, the latter have become at least as important a subject of study as traditional indicators, such as employment or unemployment rates.

However, the literature on the subject is very diverse and spread between academic and institutional publications. Theoretical conceptualizations of the quality of employment have been diffuse, thus limiting their political effect. Only the International Labour Organization (ILO) has attempted a systematic definition of the quality of work through its concept ‘Decent Work’, which was officially launched in 1999. Amongst those institutions influenced by the ILO’s approach, the EU and some European governments stand out (see review in [Reinecke and White, 2004](#); [Alli, 2009](#); [Muñoz de Bustillo et al., 2011](#); [ILO, 2012](#)). However, the overall impact that the concepts ‘quality of employment’ or ‘Decent Work’ have had on both research and public policy is extremely limited compared to the influence achieved, for example, by the human development concept and, more specifically, by the Human Development Index (HDI) over a similar period.

The purpose of this article is to review existing debates around the quality of employment and related concepts, thus allowing for a clearer understanding of what constitutes good-quality jobs and the possibility of quantifying them. Placing the quality of employment high on the policy agenda has a much better chance of success if globally relevant operationalisations derived from cross-national comparative data are developed. Academic and institutional efforts undertaken so far provide valuable lessons for achieving such a goal. This article begins with a review of the academic and institutional literature that outlines conceptual developments over time and discusses how the relevant literature can be organised thematically. We summarise the literature that originates in the ‘quality of working life’ concepts of the 1960s and 1970s and then develops into a

debate on what constitutes a good job, which in turn spills over into methodological discussions of measurement and international comparison. In this latter area international institutions, particularly the EU, have made significant

contributions. We conclude that the quality of employment has attracted more systematic attention from both policy makers and researchers in recent years as internationally comparable data become available.

In this context, we ask what the ILO's concept of Decent Work has contributed

to the subject, and what its effect has been. We conclude that only in Europe, where comparable indicators from harmonised surveys have become the norm and constitute extremely valuable data for analysts, has significant progress been made. We consider that it is essential that this process of data collection and methodological consolidation be extended to other regions in the world where the quality of employment remains a neglected subject of study.

A note of caution to the reader is warranted: the account presented here does not tell one coherent story and does not come close to the elaboration of a coherent framework for understanding and measuring the quality of work because the concept's inherent complexity makes the related literature and the policy debate conceptually confusing. Instead, the review shows how bodies of independent literatures evolved in parallel, with only very slow convergence towards a set of solid and consistent foundations for future research. We review significant methodological innovations that have led to new theoretical developments in work and employment, although we argue that this process is far from complete. Central to this debate is the development of employment conditions, their distribution and their precarious nature within the context of the global political economy.

## **2. Theoretical approaches**

First steps towards the development of 'quality of working life' concepts and measures can be traced back to the late 1960s and 1970s. Their origins are linked to the research on the 'quality of life' indicators emerging at that time. The quality of life approach challenged the attempts to quantify living conditions relying solely on economic dimensions (such as gross domestic product [GDP] or unemployment) and consequently was seen as a better approach to understanding the human meaning and consequences of major social and technological changes occurring during a period of prosperity (Land, 1975). For most developed Western societies 'more' ceased to equal 'better' so that material prosperity was challenged by a concern with improving quality of life. This perspective, emerging in the mid-1960s in the USA, is often referred to as the social indicators movement, and it gained significant scientific influence (Noll, 2004). The publication of a book titled *Social Indicators* in 1966 signified the launch of the

Movement and advocated the development of a system of social accounts suitable for guiding policy decisions (Bauer, 1966). The nature of employment and quality of work were immediately included in the research agenda, focussing on non-pecuniary aspects of jobs and individuals' experiences of their working environments (Seashore, 1974; Biderman, 1975; Davis, 1977). However, from the outset it was clear that the quality of (working) life research lacked appropriate data and methodologies for measurement (Bauer, 1966). Discussions of quality of employment aspects also cropped up in other bodies of literature as globalisation and deindustrialization began to effect employment conditions in developed countries, particularly in the USA, where changes were more abrupt (Bluestone and Harrison, 1984; Loveman and Tilly, 1988; Rifkin, 1995). One of the first ways in which the academic literature approached the question of what constitutes a good job was by focussing on workers' own evaluations of their jobs (Yoshida and Torihara, 1977; Staines and Quinn, 1979) as a way of measuring labour market outcomes. Seashore (1974), for instance, defined good jobs as those possessing attributes that are valued by the worker and lead to job satisfaction. Wnuk-Lipinski (1977) saw job satisfaction as an important part of the quality of life and thus an end in itself. Based on this perspective, a number of criteria for assessing the quality of work were devised, encompassing both general measures of job satisfaction as well as specific measures of workers' contentment with an array of job facets (Land, 1975; Staines & Quinn, 1979; Kalleberg and Vaisey, 2005; Krueger *et al.*, 2002).

This highly subjective approach was not without its critics. Depending on workers' preferences, job characteristics may be valued quite differently (Taylor, 1977). Thus in the literature, attitudinal measures are complemented by a concern for 'objective' aspects of jobs. Despite no consensus ever having been reached as to what constitutes a good job, a range of theories indicate what objective features should be taken into account (Warr, 1987). To give a few examples of such theoretical perspectives, the neo-Marxist tradition emphasized the individual's self-development and autonomy, focussing on the alleged simplification of work tasks, de-skilling and the growing separation between head and hand or the planning and execution of work (Braverman, 1974). Since the start of the 1970s, occupational psychologists have also done much research on job quality, following the tradition of ergonomists. This approach focused on determinants of

subjective well-being and productivity at the level of task characteristics, such as variety, challenge, meaningful work, autonomy and teamwork (Hackman and Oldham, 1975). The policy focus of this work was single-firm-specific and aimed to bring about improvements in individual workplaces. Specialist surveys of job quality were

undertaken, and psychometric techniques were used to predict worker well-being, motivation or productivity. With the increasing capabilities of the workforce, a job-worker match (Rozen, 1982) and perceived skill utilisation (O'Brien and Feather, 1990) were also suggested as components of job quality.

In the 1980s, new health hazards and the replacement of physical effort by psychological stress directed attention to health outcomes and control over the work process (Karasek and Theorell, 1990; Dhondt *et al.*, 2002). These developments were taken up again by sociologists in their debates on varieties of capitalism and production regimes. They focused on aspects of work experience critical for the quality of employment that are affected by the nature of production regimes, thus putting emphasis on skill levels, the degree of job control, participation at work and job security (Hall and Soskice, 2001; Gallie, 2007). The increasing centrality of work-life balance issues in the 1990s also focused attention on the scheduling and duration of working time. International institutions have also made important theoretical efforts to conceptualize the quality of employment. Arguably the most pronounced example of institutional

Initiatives is the concept of Decent Work launched by the ILO and declared its institutional priority in 1999. It followed from the increased importance that aspects of the quality of employment were acquiring during the 1980s and 1990s as a result of the visible effect of globalisation and market liberalization on employment conditions. In the words of the ILO's former director-general, Juan Somavía: 'the primary goal of the ILO today is to promote opportunities for women and men to obtain decent work and productive work in conditions of freedom, equity, security and dignity' (ILO, 1999). Decent Work thus juxtaposes the generation of employment itself with the conditions under which it is generated as well as workers' rights and their voice in the community. This definition was formulated in a deliberately broad manner that took into account the priorities of the ILO's tripartite constituency: governments, employers and unions. It drew from the extensive literatures on 'precarious work' and 'nonstandard work' that had built up both inside (for example Rodgers and Rodgers, 1989) and outside of the ILO. Yet this literature fell short of the goal of an internationally comparable synthetic measure of job quality in two important ways. First, as Barbier (2004) argued, the term *precarious work* meant different things in different national and disciplinary contexts and was ineffectual for international comparative research; in 2008 the French National Council for Statistical Information (CNIS) even went as far as calling it a 'chaotic concept' for the same reason. Second, the literature on precarious work tends to focus on specific problems with certain jobs or sectors of the labour market related to job insecurity, but does not (except perhaps in the French literature) attempt a more comprehensive framework for job quality. The immediate question that arose from this all-encompassing definition based on the rights and entitlements of

workers was how such a broad approach could be operationalized. As we will see, this question remains largely unresolved. Almost in parallel to the ILO's launch of Decent Work, the EU began to focus more explicitly on the quality of jobs. The promotion of good working conditions and the provision of social security have long been core elements of the European social model. However, the quality of work was only institutionalized as the EU's employment policy objective in 2000 in the Lisbon Treaty. The goals set by the Lisbon development agenda included 'sustainable economic growth with more and better jobs', and a set of indicators was agreed on at the 2001 meeting of the European Council in Laeken (EUROPA, 2001). This overview of the quality of employment literature reveals the extent to which multiple and relatively diffuse concepts have developed in parallel. First, we must highlight the extent to which the terminology is confusing: expressions such as 'quality of working life' (predominantly linked to workers' own evaluations of one's job), 'job quality' or 'quality of work' (often focussing on the job content and work environment) and finally 'quality of employment' and 'Decent Work' (which include all of the above as well as other issues such as labour relations, rights, gender gaps and work-life balance) are often used interchangeably and without clear definitions. This reflects the complexity of the issue of quality of work: there are not only multiple facets of jobs that should be taken into account, but also multiple levels on which jobs can be analysed,

ranging from a particular work environment to broad labour market systems in which jobs are performed. It also reflects the fact that different academic disciplines have focused on different aspects of the quality of employment. Second, we must distinguish between the academic and institutional literature that has developed. Whilst the process of academic research has been organic and diffuse, international institutions such as the ILO and the EU have attempted to develop and operationalize these theoretical concepts for their own purposes within the constraints imposed by their constituents.

Finally, and as we will see, the theoretical literature that conceptualized the quality of employment is often intertwined with methodological discussions of its measurement. In fact, all theoretical approaches sooner or later have to confront the question of how the quality of employment can be measured. Without appropriate methodologies for measurement, the concept of the quality of employment itself leads nowhere.



### **3. Methodologies for measurement and international comparisons**

The literature on the measurement of the quality of employment has had to confront difficulties on multiple levels. First, successful measurements require reliable, and preferably also comparable, sources of data. As we will see in this section, theoretical and methodological advances on the subject of the quality of employment are closely related to data availability. Conversely, data availability and comparability further theoretical and conceptual progress. The availability of comparable data across European countries has thus generated a virtuous circle in which empirical evidence has expanded the theoretical understanding of labour markets, which in turn has increased the efforts invested in data gathering. A second problem that the measurement of the quality of employment has to confront is the question of which level of the labour market we are investigating. Whether we are interested in individual workers, jobs themselves, the regulatory environment or the labour market as a whole generates different data requirements and methodologies of measurement. Third, we must highlight the main problem with measuring the quality of employment: there is no simple set of variables that can undisputedly be thought of as summarizing what constitutes a good job. This point marks an important contrast with the highly successful launch of the human development indicators in 1990. Whilst it is difficult to argue that it is better to live a longer, healthier, more educated life with a higher level of disposable income, many labour market variables are disputable. This is a problem that the ILO as a tripartite institution in particular has had to confront:

whilst higher wages may be better for workers, employers would argue that they prevent employment generation. Although greater job stability may be preferred by some workers, others may prefer moving between jobs. The interests of workers, employers and public policy makers often clash, as do the interests of individual human beings and free markets. This conceptual confusion and political vested interests are real but not insurmountable. The experience of the HDI is that once attempts are made to measure these concepts, albeit imperfectly, then progress can be made in tackling the conceptual issues and deflecting political partisanship. The discussion that follows in this section demonstrates how each of these measurement difficulties has played out in the literature. We also show how successful analyses deal with these problems. We begin by examining how the literature has dealt with the problem of available data: this has led to a host of studies on one or two aspects of the quality of employment, whilst the number of studies that have attempted to develop a comprehensive framework taking account of multiple job characteristics is limited.

#### **3.1 Methodology and measurement in the academic literature**

The academic research that measures selected employment conditions that are conducive to a better quality of working life is built on a solid theoretical foundation and a large body of empirical work ([Adams \*et al.\*, 2000](#); [Rose, 2003](#); [Gallie \*et al.\*, 2004](#); [Olsen and Kalleberg, 2004](#); [Dex and Bond, 2005](#); [Green, 2006](#); [Kalleberg, 2011](#)). This generated a considerable understanding of the various job characteristics conducive to workers' well-being within national labour markets. However, despite this solid theoretical and empirical foundation, no consensus was reached as to what exactly constitutes a 'good job' or how best to operationalize the idea in a synthetic or compound measure. Again, the above-mentioned multiple and diverging focuses of different academic disciplines on the subject do not help in this regard. It is hardly surprising, then, that the translation of these complex and heterogeneous concepts into a policy-relevant, cross-country comparative analysis have taken so long to emerge. Moreover, the vast majority of existing indicators was developed based on single-country datasets. Consequently they tell us little about national comparisons. Where such studies have been done, they tend to be limited to the member states of the EU. Overall, these studies can be divided into roughly three groups: a first that uses self reported data and/or evaluations such as job satisfaction to estimate job quality, a second group that used objective data and a third one that uses a mixed approach.

The development of a measure of the overall quality of jobs based on evaluations of job satisfaction proved to be extremely problematic. [Agassi \(1982\)](#) argues convincingly that job satisfaction measures the relationship between the quality of an employee's current job and the employee's idea of what might reasonably be expected of a job. To this we must add the notion of adaptive preferences (as used by [Amartya Sen, 1999](#), and [Martha Nussbaum, 2000](#)), which conceptualizes the ability of people to adapt to unfavorable circumstances (including poor employment conditions), which distorts their ability to evaluate their job characteristics objectively (see also [Comin and Teschl, 2005](#)). Because expectations vary considerably between countries, it is often the case that a developed country has lower aggregate job satisfaction than does a developing country. The same process can explain why some less advantaged groups of workers (e.g., women) have higher satisfaction levels than workers with objectively better working conditions, if the more advantaged workers also have higher expectations of their jobs (see also [Muñoz de Bustillo \*et al.\*, 2011](#)). Whilst this is an interesting psychological phenomenon, it renders job satisfaction measures

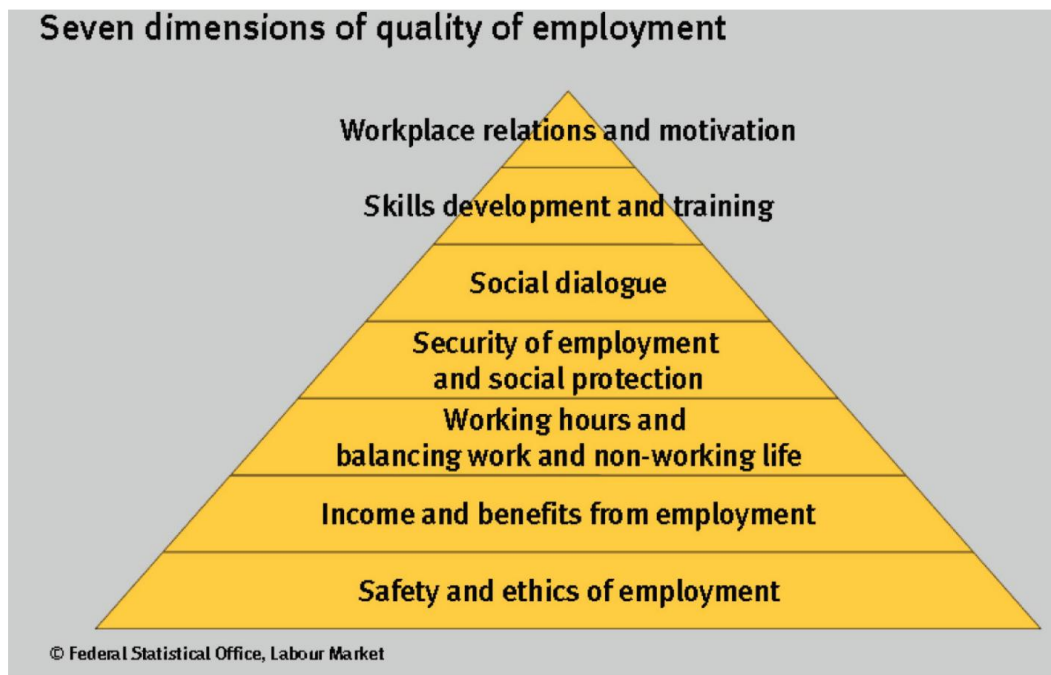
unsuitable for comparative research on job quality. The focus of many indices proposed in the literature is therefore on the intrinsic quality of jobs, that is, their objective characteristics. Some scales are quite simple and one-dimensional, for example, limited to skill utilisation (O'Brien and Feather, 1990), whilst others incorporate a variety of features conducive to workers' motivation, including skill variety, task identity, task significance, autonomy and job feedback (e.g., Long, 1993). Some proposals aim to go even further in the direction of objectivity of measures obtained by avoiding perceptual data from employees altogether. Thus, Hunter (2000) proposes looking at good job practices provided by the employer that are arguably conducive to workers' well-being, such as employer contributions to health plans, education, compensation plans, provision of child care programs or high wages and promotion opportunities. The endeavour to find the lowest common denominator for job quality free from any self-report bias led some authors to define good jobs in more narrow terms (Johnson and Corcoran, 2003: hours worked, salary and health benefits;

Sehnbruch, 2006, 2007: income, contractual status, tenure and vocational training;

Floro and Messier 2011: income, work hours, number of jobs, job security and nonwage benefits). Thus, despite the agreement that it is necessary to go beyond wages in the assessment of job quality, pay retained a prominent position as a reliable (although not comprehensive) variable that overcomes the dependence on individual characteristics, life situation or background (Rosenthal, 1989). There have been other suggestions of using administrative data as a proxy for particular features of job quality, for instance, aggregate statistics on accidents or fatalities at work as a proxy for dangerous work. A third approach was adopted by Jencks *et al.* (1988) in their Index of Job Desirability, which combines the objective job features that were expected to contribute to job quality with workers' assessment of their relative contribution. The authors started with a collection of 48 job features, from which they selected those affecting to the greatest extent, on average, workers' positive evaluations of their jobs. The purpose was to establish what objective characteristics of jobs are commonly perceived as good, overcoming the jobholder's subjectivity and personal values. Thus, having a desired job according to this index might be a matter of getting what employees want on average, even if this is not what is wanted by a particular job incumbent. This approach, however, is also problematic (and has not achieved much impact), because it depends on the assumption that all workers are familiar with the reference job. Variations of a mixed approach that integrate measures of 'objective' working conditions with measures of the impact they have on job satisfaction or overall job ratings can also be found in rare examples of cross-national studies outside the EU (Kalleberg and Vaisey, 2005; Tangian, 2009).

Amongst the most recent publications, two models represent particularly important and useful contributions. The first, by Körner *et al.* (2009), takes a broader perspective and encompasses other aspects of employment; the second, by Green and Mostafa (2012), is a model that explicitly focuses on job quality. These approaches are both conceptually more advanced than previous attempts to measure the quality of employment; their indicators use the basic needs approach as a theoretical foundation and also have the advantage of good international datasets to develop and refine their operationalisations, giving grounds for optimism that we are close to internationally agreed frameworks for the measurement of quality of employment. Körner *et al.*'s (2009) model consists of seven dimensions of the quality of employment, arranged in a pyramid resembling Maslow's hierarchy of needs, with the most basic dimensions at the bottom and the more aspirational dimensions at the top, as shown in Figure 1. However, this model also incorporates country-level statistics, such as accidents at work and measures of social protection. Thus this model measures quality of employment at the national level, making it impossible to compare workers within a country such as male and female workers or rural and urban workers unless very detailed sectoral data exists. The scheme has been piloted with German data to illustrate its application. Because it uses data from a number of different sources, some international and some national, it is not straightforward to replicate the indices in other countries, so it is primarily a tool for country-level case studies rather than international comparisons. By contrast the model of the quality of employment developed by Green and Mostafa (2012) is derived from a singular dataset. In fact, there have been a number of reports, commissioned by the European Foundation (an EU body) to compare particular features of job quality, based on the European Working Conditions Survey (EWCS) between all EU member states (Dhont, 2005; Pacelli *et al.*, 2008; Burchell *et al.*, 2009),



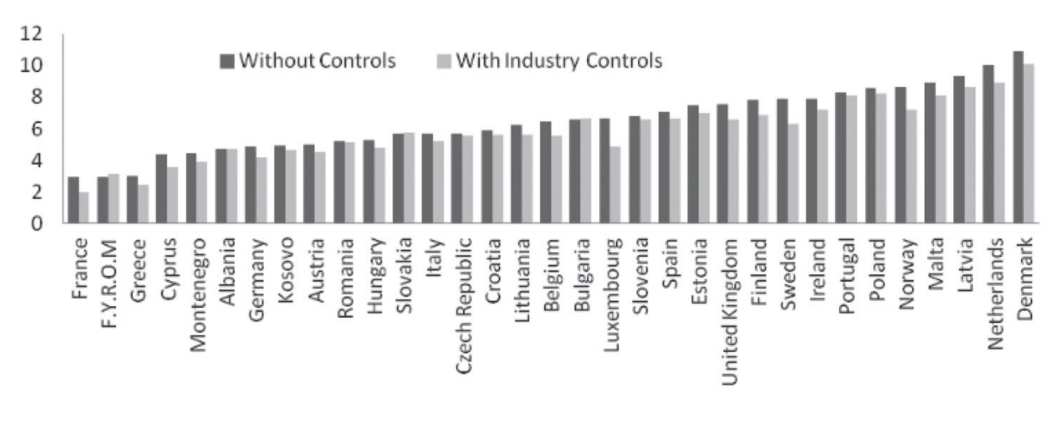


**Fig. 1.** Körner et al.'s (2009) quality of employment seven-layer model.

as well as general five-yearly overviews of working conditions in the EU member states (Parent-Thirion *et al.*, 2012). However, not until now has a report been commissioned explicitly to take a comparative overview on job quality between member states. In their report, Green and Mostafa use the 2010 EWCS to develop their measure, influenced from literatures in psychology, sociology and economics. The model consists of four dimensions of job quality: earnings, job prospects, working time quality and intrinsic quality of the job. Each respondent in the EWCS is given a score on each of these dimensions. Thus it is possible to compare average job quality for any subgroup within the dataset, for instance by country, gender or age. To illustrate the practical usefulness of this methodology, Figure 2 shows the average intrinsic job quality by country (relative to Turkish workers who scored the lowest on this dimension). This figure shows many expected findings, such as the high score for Denmark and the low score for Turkey. However it also reveals some surprises worthy of further investigation. For instance, the high job quality scores for Latvia and Poland were not predicted, nor was the fact that France would score so poorly. No doubt other researchers will want to check these findings, refine the model and improve it. The public availability of the single dataset from which the indices are derived allows researchers critical replications and improvements to the model. It also demonstrates that it is possible (with some careful thought) to use the same criteria to evaluate countries as different as Denmark, Italy, Kosovo and Turkey. As with the HDI, to have policy effect it is vital that the same index or indices are used in all countries however heterogeneous. Whilst the challenge outside of Europe will be even greater, it is not insurmountable.

### 3.2. Levels of analysis

As we can see from this discussion, one of the unresolved issues in the literature on quality of employment involves deciding what types of information should be included in measures of job quality. At the simplest and most individualistic level, some models are only involved in the attitudes of individuals (e.g., their job satisfaction) and ignore details of the job itself or the context of the job. At the other extreme, some models are concerned more with the macro-level context of jobs, such as the level of legal protection to workers provided by the state, welfare types that reduce the costs of job loss and the state of the labour market to account for the risk of job loss and unemployment.



**Fig. 2. Intrinsic job quality, by country relative to Turkey. Source: Green and Mostafa (2012)**

Although schemes incorporating these multiple levels of analysis are clearly more comprehensive, they also have important drawbacks. First, by incorporating aggregate data, which is often incompatible between countries, it makes international comparisons problematic, unlike Green and Mostafa's job quality indices, where such comparisons are straightforward. Second, by retaining the job as the unit of analysis, researchers are free to analyse job quality data in a number of different ways. For instance, job quality measures can be incorporated either as dependent or independent variables in a regression model of employees, and the unit of analysis can be aggregated upwards to regions, ethnic groups, or the national level. However, disaggregating national-level quality of employment data is at best problematic. In any case, indicators of job quality are a necessary pre-requisite for a more comprehensive measure of the quality of employment. Therefore, if one is proceeding incrementally, the obvious starting point is the construction of measures of job quality; these can then be extended into a measure of quality of employment as other types of data are added.

### 3.3 Two contrasting institutional approaches to the dilemma of measurement: the ILO's Decent Work

As already discussed, one of the main problems with measuring the quality of employment is the fact that it is difficult to reach universal agreement on what constitutes a good job. This poses particular difficulties for international bodies, where any progress is based on a compromise between the interests of employers, policy makers or employees. The literature reviewed in this section suggests that this is one of the main reasons institutional initiatives to build a universally applicable methodology for the measurement of quality of work have so far been unsuccessful. When the ILO launched its concept Decent Work in 1999, expectations amongst labour market analysts were raised, hoping that the concept would lead to new measurements, more extensive and internationally comparable data gathering, synthetic employment indicators and theoretical advances in our understanding of the functioning of labour markets. A first attempt to synthesize employment indicators was made by the ILO's Regional Office in Latin America and the Caribbean, which proposed a very basic indicator (see ILO, 2001). The index, applied in Latin America between the years 1990 and 2000, contained information about the evolution of the employment situation of 15 countries during the decade. It was composed of seven indicators related to employment (unemployment, informality), income (industrial wage, minimum wage and the wage gap between men and women) and workers' social protection (social security coverage and hours worked). Four new strategic dimensions were incorporated into this index in 2002: compliance with labour standards, quality of work, social protection and social dialogue. Thus, according to this new index, countries would record an improvement if they increased the ratification of work conventions, the unemployment rate decreased, the quality of jobs progressed (measure by the reduction of informality), the purchasing power of industrial and minimum wages was raised, the income gap between the genders fell, the coverage of social protection was increased, there was an increasing degree of unionization or the percentage of workers involved in labour disputes decreased (ILO, 2001, 2002; Lanari, 2005). These efforts were expanded in 2003 when the *International Labour Review*, an academic journal published by the ILO, dedicated a special edition to the measurement of Decent Work. Its contributing authors presented different methodologies of how Decent Work could be operationalized. For example, Anker *et al.* (2003) propose an extended range of indicators that would capture the concept. However, the authors recognize that the measurement of Decent Work is severely constrained by the availability of internationally comparable data on employment conditions. In the same volume,

Bescond *et al.* (2003) propose a different methodology based on seven different Decent Work indicators, whilst Bonnet *et al.* (2003) present the establishment of a family of Decent Work indicators from different sources that take into account various aspects of security. Overall, this special issue highlights several difficulties with the concept of Decent Work. First and foremost, as the authors themselves note, internationally comparable data on Decent Work issues across both developed and developing countries is almost non-existent. In fact, the results of the Bescond *et al.* article highlight that without comparable data, methodologies for the measurement of Decent Work make little sense if they end up showing that the Decent Work deficit of the Russian Federation is lower than in the UK, the USA or Japan, or that Spain and Italy have worse working conditions than Tanzania or Nepal. Second, the articles present different methodologies, all of which represent valid alternatives for measuring the Decent Work concept. However, given the absence of comparable data, none of the methodologies presented stand out as technically superior. Instead, the articles highlight the many different methodologies for measuring Decent Work that can be used and that the results produced by these methodologies may vary greatly. Finally, it is noteworthy that this is the only collection of articles published by the ILO that present such summary methodologies. This 2003 volume generated much internal debate within the ILO and much resistance from both governments

and employers to the practice of ranking labour markets. For a long time, this was the only publication that produced any kind of compound indicator of Decent Work, although the debate within the ILO with regard to the need for a compound

indicator persisted (see for example Ghai, 2006; Godfrey, 2006). After these initial efforts, progress on the measurement and definition of Decent Work stalled as employers (and to a certain extent also governments) objected to being classified or ranked according to yet another index, which would again highlight the weaknesses of certain countries. In 2008, the International Organization of Employers (IOE) stated that Decent Work does not set clear parameters and does not take into account the particular conditions of each labour market (Lanari, 2005; IOE, 2008). In addition, many labour market analysts objected to the idea that Decent Work could be summarised in a compound indicator. Whilst some experts were clearly convinced of the need for a comparative indicator that would operationalize Decent Work, others defended the idea that the concept was too complex for such a simplistic approach and that any standardised methodology would gloss over the details of very heterogeneous labour market situations that the disaggregate approach highlights (ILO, 2008). For example, many gender experts objected to the idea of summarizing Decent Work in a country-level composite indicator because this would de-emphasize the very disparate employment conditions of men and women. In response to these conceptual difficulties, the ILO carried out a tripartite meeting of experts in 2008 at which the institution's progress on implementing the Decent Work approach was reviewed. The meeting proposed a new set of 19 core indicators, 25 additional indicators and another 8 variables related to the socio-economic context of member countries. The meeting agreed on the need for establishing a consistent

methodology for the measurement of Decent Work based on indicators of quantity and quality whilst simultaneously emphasizing the need for improved data. The following year, in 2009, the ILO's new Statistics Department was launched with the brief to improve data collection and establish user-friendly country profiles, which would compile information for each country.

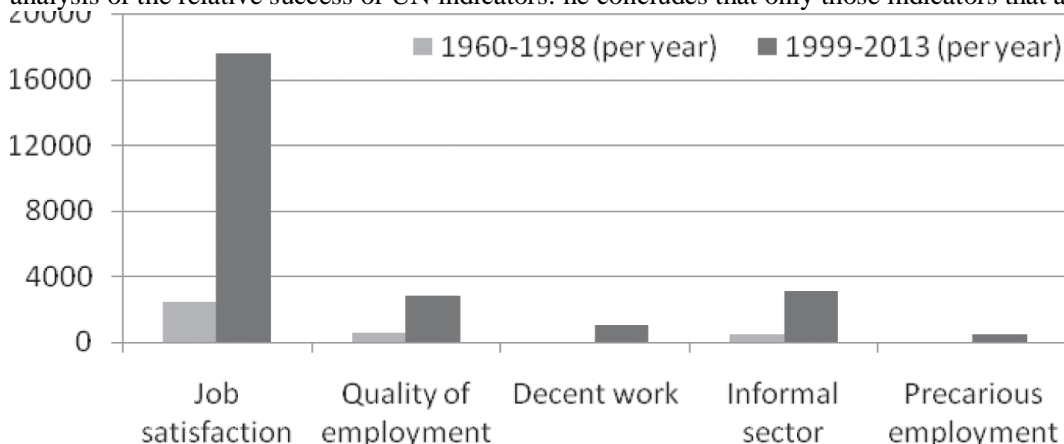
As this discussion illustrates, the ILO has still not produced a universally applicable methodology for the measurement of Decent Work. Lanari (2005) argues that the concept's main contribution has been its integrative vision as well as its claim to universal ethics. However, many critics view Decent Work as a term that has yet to be filled with content or that simply recycles previously existing ideas under a new name. The absence of internationally comparable data compounds this difficulty.

**3.4 Two contrasting institutional approaches to the dilemma of measurement:** the EU A somewhat different approach to the ILO's Decent Work was adopted by the EU, which focuses on job quality. As discussed in Section 2, the strategic goal of 'more and better jobs' was set in the Lisbon Treaty in 2000. To monitor the progress towards the reviewed principles of employment policy agenda, the European Council, meeting in Laeken in 2001, agreed on a portfolio of 18 statistical indicators. Despite the fact that the commission's initial proposal was quite comprehensive and defined quality of work based on 10 dimensions, it was also subject to a process of tripartite political negotiation, which resulted in a much narrower set of measures. Thus, the Laeken proposal ultimately did not go much beyond basic key indicators taken from national labour force surveys, such as unemployment, education and health. It left out many important dimensions (e.g., wages) and merged quite diverse phenomena, such as quantity of employment or mobility, and was therefore also the subject of much criticism (Dieckhoff and Gallie, 2007; Davoine *et al.*, 2008; Peña-Casas, 2009; Bothfeld and Leschke, 2012). Various subsequent initiatives to improve the Laeken proposal tried to incorporate alternative indicators of job quality. For instance, with the

renewed social agenda, a number of principles for good work were presented along with some more detailed measurement of the conditions of work (European Commission, 2008). However, many of the initial weaknesses remained, resulting in a disorganised aggregation of variables describing jobs, policies, participation rates and various forms of distributional inequalities. In parallel to the Laeken indicators, a dialogue has developed between major stakeholders (UNECE, ILO, Eurofound, trade unions, etc.) to elaborate a broader, multidimensional conceptual framework for the measurement of the quality of employment. Due to this effort, a wider scope of employment data from the EWCS, the European Social Survey or the EU Statistics on Income and Living Conditions has been incorporated into the production of employment statistics, and various new indices of job quality have been proposed and refined in an ongoing debate (see our literature review in Section 2, for example, Leschke *et al.*, 2008). Yet this dialogue also faced many obstacles similar to those of the Decent Work agenda, and after 12 years of having established the initial task force, the debate about the conceptualization of the quality of employment is still ongoing. Nevertheless, the improved data generation produced by these efforts has led to more in-depth and methodologically sophisticated studies of the quality of employment, such as those discussed in the previous section. In addition, recent models to encapsulate job quality into a smaller number of compound measures may be a considerable improvement on earlier attempts to draw together all job quality indicators into a tractable framework. These approaches to definitions and data gathering reveal the question of their relative success. What has been the impact of the ILO's Decent Work approach compared to other processes of data gathering?

#### 4. Impact and conclusions for policy makers

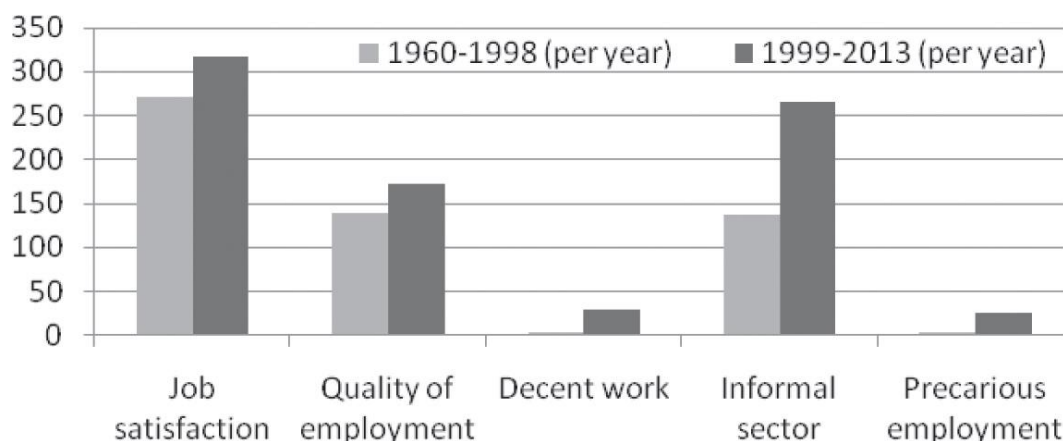
One way of answering this question is to examine the effect that each approach has had on the relevant literature through cyber metric searches. A simple Google Scholar search already gives an indication, even though it is an imperfect research tool. Unfortunately, searches in Google as well as in academic catalogues such as JSTOR cannot be filtered to the extent that would be desirable for research of this kind. For example, we cannot filter searches by regions or country or by academic subject. The results therefore include references that are not strictly relevant to our subject area, such as articles from the management sciences on job satisfaction. Despite these limitations, researchers are using these types of cyber metric searches as basic measures of impact (Ramos and Acosta, 2006). From Figure 3 we can see that the concept of job satisfaction is mentioned more frequently in the scholarly literature than the quality of employment and other terms. The most notable conclusion of Figures 3 and 4 is that the ILO's concept of Decent Work hardly gets mentioned at all in the academic literature, a fact that is discussed in more detail shortly. On the rare occasions that Decent Work is discussed, it mostly occurs in the ILO's own in-house journal, the International Labour Review. These results are replicated by searches on different levels. If we narrow the search universe to the academic journal articles listed by JSTOR, we obtain similar results (Figure 4). Whilst it is clear from Figure 4 that the terms relevant to the quality of employment have all been used in the academic publications over the past years, we can also see that 'Decent Work' has been used less than any of the other terms. We must therefore conclude that the extent to which Decent Work has penetrated the academic literature has been extremely limited. Although effect on academic literature is also not a perfect measure of overall impact, it does give us a good indication of the penetration achieved by a development concept such as Decent Work. After all, one of the objectives at an international development concept should achieve is further research and discussion by independent experts, many of whom are academics. Perhaps the most important point to bear in mind is Ward's analysis of the relative success of UN indicators: he concludes that only those indicators that are simple and



**Fig. 3.** Number of entries for each of the keywords in Google Scholar, per year for the two periods. Note:



Each term entered in parentheses to search for exact phrase. 'Quality of employment' includes quality of work, job quality and quality of employment



**Fig. 4.** Number of entries for each of the keywords in JSTOR, per year for the two periods.

Note: Each term entered in parentheses to search for exact phrase. 'Quality of employment' includes quality of work, job quality and quality of employment

easy to understand, that summarise only a few variables and that are internationally comparable are ultimately successful (Ward, 2004). So far in this article we have shown that concepts related to the quality of employment attract much research in the European context and are starting to be actively used by EU policy makers in determining the future directions of labour markets. However, this is hardly the case in other countries. How can we explain this difference?

We offer an explanation based on three overlapping ideas.

First, we argue that internationally comparable data on working conditions is central to progress. Twenty-five years ago there was very little internationally comparable micro-level data in Europe, making comparisons of labour markets or other aspects of quality of life costly and time-consuming. There were occasional attempts by researchers to collect comparable data from more than one country, but even then it was beyond the budgets and time horizons of individual research teams or agencies to collect data at more than one point in time.

This situation has changed dramatically in Europe. Starting with the standardization of various labour force surveys in EU member states, there followed a number of initiatives that have provided rich and dynamic data sources for researchers to explore ideas and test theories about labour markets. These datasets not only facilitate statistical comparisons of countries' labour markets, they also provide a fertile environment for rapid theoretical developments in the understanding of how labour markets operate and the drivers of job quality. Researchers can demonstrate the usefulness of their conceptual approaches by applying their theoretical frameworks to internationally comparable data, and other researchers can respond constructively with further analyses from the same or other datasets. Europe's progress in this regard illustrates an important point: why has the EU been able to generate internationally comparable survey data whilst the ILO has not? Also, why has Europe as a region produced such data whilst the USA, on the other hand, has been lagging since the 1970s? The main explanations for these differences are political; more specifically they are related to political will. In the case of the ILO, there has been no political will to undertake international employment surveys, and little progress has been made in persuading member governments to implement standardised labour force surveys that would permit the calculation of a broad range of internationally comparable indicators on employment conditions. Again, the ILO's tripartite structure is probably an important factor that hinders such efforts. In the case of the USA, a similar explanation of lack of political will can be put forward.

Second, the nature of the research communities examining quality of employment concepts is crucially important. The academic research community consists primarily of non-partisan researchers. Whilst interested in the policy implications of their research, they are not constrained to tell a particular story that might be viewed differently by the various social partners, namely, employers, trade unions and governments. This contrasts sharply with the ILO, which, being a tripartite organization in which employers' organizations, trade unions and governments are actively involved, is a highly politicized environment where each of these parties has a particular concern for the directions and conclusions of the research.

Third, the academic process of defining the quality of employment has been organic; for instance, many of the lessons of the social indicators movement in the USA were later taken up by comparative researchers in Europe. This evolution of ideas, although non-linear, has led to clear advances over the decades. Gradually, fuzzy and poorly defined concepts have solidified into forms that can inform policy. This contrasts sharply with the history of Decent Work. The latter was defined from the start, not as a working hypothesis but as a mission statement that came to define the role and values of the ILO. It was therefore expressed in terms of universal values such as freedom, fairness and dignity. Thus it was never clear which parts of Decent Work were fundamental assertions of the ILO's values and which parts were legitimate topics for research and development. Unfortunately the initial definition and articulations of Decent Work, although aspirational, were also conceptually confused. For instance, social dialogue might more appropriately be seen as a driver of Decent Work rather than part of its definition. Some aspects of Decent Work are aimed at the individual worker (e.g., child and forced labour), some at the level of the working environments (e.g., health and safety) and some at the aggregate level (e.g., social protection legislation). This has the further consequence that Decent Work cannot be operationalized at the level of the individual worker or the job, so perfectly reasonable and interesting questions such as gender gaps in job quality or the quality of employment for migrants cannot be addressed straightforwardly. However, whilst the nature of the academic research community and its research process are undoubtedly important, the search results shown here of the ILO's own concept of 'informal sector' demonstrate that the institution can be potentially very successful in promoting a concept related to employment. Unlike Decent Work, the ILO's definition of what constitutes the informal sector was accompanied by a simple and clear definition that is easy to understand, as well as by a process of data gathering and harmonization that allowed for internationally comparable research. The latter particularly required persuading national statistical institutes to adopt internationally standardised labour force survey questionnaires and definitions. The efforts that backed the adoption of the informal sector illustrate that the level of political will at the institutional level is crucial to a concept's success or failure.

Fortunately, it is obvious to see how we might extract ourselves from the current impasse in which Decent Work finds itself. Since the comparability of international employment data is still so limited, it would make sense to apply independent international employment surveys across regions to achieve harmonised datasets. If this data were then made available to the research community, it would provide researchers with the ability to compare job quality between countries, which would be the first stepping stones towards more comprehensive measures of the quality of employment. Only once this process is started might we see the sorts of attention to the improvement of people's working lives that could parallel the attention that the HDIs directed towards human development. We have argued that although a large number of theoretical positions and debates are both possible and desirable on the topic of quality of employment, the one thing that is most needed to facilitate both constructive debates and evidence-based policies is the availability of internationally standardised data on job quality. This goal is achievable and affordable and should lead to high-quality research on employment with a more international perspective in the next decade.

## **Bibliography**

- Adams, A., Lugsden, E., Chase, J., Arber, S. and Bond, S. 2000. Skill-mix changes and work intensification in nursing, *Work Employment Society*, vol. 14, no. 3, 541–555
- Agassi, J. B. 1982 *Comparing the Work Attitudes of Men and Women*, Aldershot, Gower
- Alli, B. 2009. *Fundamental Principles of Health and Safety at Work*, 2nd ed., Madrid, Ministry of Labour and Social Affairs, ILO
- Anker, R., Chernyshev, I., Egger, P. and Mehran, F. 2003. Measuring Decent Work with statistical indicators, *International Labour Review*, vol. 142, no. 2, 147
- Barbier, J.-C. 2004. Precarious Employment in Europe (ESOPE), 'Managing Labour Market Related Risks in Europe, Policy Implications', final policy report, European Commission
- Bauer, R.A. (ed.). 1966. *Social Indicators*, Cambridge, MA, MIT Press
- Bescond, D., Chataignier, A. and Mehran, F. 2003. Seven indicators to measure Decent Work, *International Labour Review*, vol. 142 no. 2, 179–211
- Biderman, A. 1975. Introduction, *American Behavioral Scientist*, vol. 18, no. 3, 301
- Bluestone, B. and Harrison, B. 1984. *The Deindustrialization of America: Plant Closings, Community Abandonment and the Dismanteling of Basic Industry*, New York, Basic Books



and Standing, G. 2003. A family of Decent Work indexes, *International Labour Review*, vol. 142, no. 2, 213–238

- Bothfeld, S., and Leschke, J. 2012. 'More and better jobs': is quality of work still an issue—and was it ever?, *Transfer: European Review of Labour and Research*, vol. 18, no. 3, 337–353
- Braverman, H. 1974. *Labor and Monopoly Capital*, New York, Monthly Review Press
- Burchell, B., Cartron, D., Csizmadia, P., Delcampe, S., Gollac, M., Illéssy, M., Lorenz, E., Makó, C., O'Brien, C. and Valeyre, A. 2009. 'Working Conditions in the European Union: Working Time and Work Intensity', European Foundation for the Improvement of Living and Working Conditions, Dublin
- CNIS 2008. 'Emploi, chômage, précarité? Mieux mesure pour mieux débattre et mieux agir, rapport du groupe de travail sur la définition d'indicateurs en matière d'emploi, de chômage, de sous emploi et de précarité de l'emploi', CNIS
- Comim, F. and Teschl, M. 2005. Adaptive preferences and capabilities: some preliminary conceptual explorations, *Journal of Social Economy*, vol. 63, no. 2, 229–247
- Davis, L. E. 1977. Enhancing the quality of working life, *International Labour Review*, vol. 116, no. 1, 53
- Davoine, L. Erhel, C. and Guergoat, M. 2008. 'A Taxonomy of European Labour Markets Using Quality Indicators', Université Paris 1 Pantheon-Sorbonne
- Dex, S. and Bond, S. 2005. Measuring work-life balance and its covariates, *Work, Employment & Society*, vol. 19, no. 3, 627–637
- Dhondt, S. 2005. 'Time Constraints and Autonomy at Work in the European Union (Summary)', European Foundation for the Improvement of Living and Working Conditions, Dublin
- Dhondt, S., Kraan, K. and Sloten, G. 2002. 'Work Organisation, Technology and Working Conditions', European Foundation for the Improvement of Living and Working Conditions, Luxembourg
- Dieckhoff, M., and Gallie, D. 2007. The renewed Lisbon Strategy and social exclusion policy, *Industrial Relations Journal*, vol. 38, no. 6, 480–502
- EUROPA—Press Releases. 2001. Employment and Social Affairs Council, <http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/01/408&format=HTML&aged=0&language=EN&guiLanguage=en>
- European Commission. 2008. *Employment in Europe 2008*, Luxembourg, Office for Official Publications of the European Communities Floro, M. S., and Messier, J. 2011. Is there a link between quality of employment and indebtedness?
- The case of urban low-income households in Ecuador, *Cambridge Journal of Economics*, vol. 35, no. 3, 499–526
- Gallie, D. 2007. Production regimes and the quality of employment in Europe, *Annual Review of Sociology*, vol. 33, no. 1, 85–104
- Gallie, D., Felstead, A., and Green, F. 2004. Changing patterns of task discretion in Britain, *Work Employment Society*, vol. 18, no. 2, 243–266
- Ghai, D. (ed). 2006. *Decent Work; Objectives and Strategies*, Geneva, International Institute for Labour Studies
- Godfrey, M. 2006. Employment dimensions of Decent Work: trade-offs and complementarities, in Ghai, D. (ed.), *Decent Work; Objectives and Strategies*, Geneva, International Institute for Labour Studies
- Green, F. 2006. *Demanding Work*, Princeton, NJ: Princeton University Press
- Green, F. and Mostafa, T. 2012. 'Quality of Work and Employment', European Foundation for the Improvement of Living and Working Conditions, Dublin
- Hackman, J. R. and Oldham, G. R. 1975. Development of the job diagnostic survey, *Journal of Applied Psychology*, vol. 60, no. 2, 159–170
- Hall, P. A. and Soskice, D. (eds.). 2001. *Varieties of Capitalism*, Oxford, Oxford University Press

- Hunter, L. W. 2000. What determines job quality in nursing homes?, *Industrial and Labor Relations Review*, vol. 53, no. 3, 463–481
- IOE (International Organization of Employers). 2008. ‘Trabajo Decente. Cómo llevarlo a la Práctica: el punto de vista de los empleadores’, available at [www.ioe-emp.org](http://www.ioe-emp.org)
- ILO. 1999. Report of the Director General: Decent Work, International Labour Conference, 87th session, Geneva.
- ILO. 2001. ‘Índice de desarrollo del Trabajo Decente 1990–2000’, ILO
- ILO. 2002. Nuevos indicadores para el índice de desarrollo del Trabajo Decente, *Panorama Laboral*, 63–69
- ILO. 2008. ‘The Measurement of Decent Work’, report of the director general, ILO, Geneva
- ILO. 2012. ‘The ILO and the EU, Partners for Decent Work and Social Justice; Impact of Ten Years of Cooperation’, ILO, Brussels
- Jencks, C., Perman, L. and Rainwater, L. 1988. What is a good job?, *American Journal of Sociology*, vol. 93, no. 6, 1322–1357
- Johnson, R. C. and Corcoran, M. E. 2003. The road to economic self-sufficiency, *Journal of Policy Analysis and Management*, vol. 22, no. 4, 615–639
- Kalleberg, A. L., and Vaisey, S. 2005. Pathways to a good job, *British Journal of Industrial Relations*, vol. 43, no. 3, 431–454
- Kalleberg, A. L. 2011. *The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s*, New York, Russell Sage Foundation
- Karasek, R. and Theorell, T. 1990. *Healthy Work*, New York, Basic Books
- Körner, T., Puch, K. and Wingerter, C. 2009. *Quality of Employment*, Wiesbaden, Federal Statistical Office of Germany
- Krueger, P., Brazil, K., Lohfeld, L., Edward, H. G., Lewis, D. and Tjam, E. 2002. Organization specific predictors of job satisfaction, *BMC Health Services Research*, vol. 2, no. 1, 6
- Lanari, M. E. 2005. *Trabajo Decente*, Buenos Aires, Ministerio del Trabajo
- Land, K. 1975. The role of quality of employment indicators in general social reporting systems, *American Behavioral Scientist*, vol. 18, no. 3, 304–332
- Leschke, J., Watt, A. and Finn, M. 2008. ‘Putting a Number on Job Quality? Constructing a European Job Quality Index’, ETUI-REHS Working Paper WP 2008.03, Brussels, ETUI
- Long, R. 1993. The impact of new office information technology on job quality of female and male employees, *Human Relations*, vol. 46, no. 8, 939–961
- Loveman, G. and Tilly, C. 1988. Good jobs or bad jobs: evaluating the American job creation experience, *International Labour Review*, vol. 127, no. 5
- Muñoz de Bustillo, R., Fernández-Macías, E., Antón, J. I., and Esteve, F. 2011. *Measuring More than Money*, Cheltenham, Edward Elgar
- Noll, H. H. 2004. Social indicators and quality of life research, pp. 151–182 in Genov, N. (ed.), *Advances in Sociological Knowledge*, Wiesbaden, VS Verlag für Sozialwissenschaften
- Nussbaum, M. 2000. *Women and Human Development: The Capabilities Approach*, Cambridge, Cambridge University Press
- O’Brien, G. E. and Feather, N. T. 1990. The relative effects of unemployment and quality of employment on the affect, work values and personal control of adolescents, *Journal of Occupational Psychology*, vol. 63, no. 2, 151–165
- Olsen, K. M. and Kalleberg, A. L. 2004. Non-standard work in two different employment regimes, *Work, Employment & Society*, vol. 18, no. 2, 321–348

- Pacelli, L., Devicienti, F., Maida, A., Morini, M., Poggi, A., and Vesan, P. 2008. 'Employment Security and Employability: A Contribution to the Flexicurity Debate', European Foundation for the Improvement of Living and Working Conditions, Dublin Parent-Thirion, A., Vermeylen, G., van Houten, G., Lyly-Yrjänäinen, M., Biletta, I., and Cabrita, J. 2012. 'Fifth European Working Conditions Survey—Overview Report', European Foundation for the Improvement of Living and Working Conditions, Dublin Peña-Casas, R. 2009. Monitoring quality of work and employment in the European Union.
- Conceptual frameworks and indicators, pp. 41–86 in Guillen, A. A. M. and Dahl, S.-Å. (eds.), *Quality of Work in the European Union: Concept, Data and Debates from a Transnational Perspective*, Brussels, Peter Lang Ramos, C. and Acosta, E. 2006. 'El Impacto de los Informes de Desarrollo Humano del PNUD en Chile', Universidad Alberto Hurtado Reinecke, G., and White, S. 2004. 'Policies for Small Enterprises: Creating the Right Environment for Good Jobs', ILO reports, 69, ILO/Ministry of Labour and Social Affairs, Madrid
- Rifkin, J. 1995. *The End of Work: The Decline of the Global Labor Force and the Dawn of the Post- Market Era*, New York, Putnam
- Rodgers, G. and Rodgers, J. (eds.). 1989. 'Precarious Jobs in Labour Market Regulation: The Growth of Atypical Employment in Western Europe', ILS, Geneva
- Rose, M. 2003. Good deal, bad deal?, *Work Employment Society*, vol. 17, no. 3, 503–530
- Rosenthal, N. H. 1989. More than wages at issue in job quality debate, *Monthly Labor Review*, vol. 112, 4–8
- Rozen, M. E. 1982. Job quality, labor market disequilibrium, and some macroeconomic implications, *Journal of Economic Issues* (Association for Evolutionary Economics), vol. 16, no. 3, 731
- Seashore, S. E. 1974. Job satisfaction as an indicator of the quality of employment, *Social Indicators Research*, vol. 1, no. 2, 135–168
- Sehnbruch, K. 2006. *The Chilean Labour Market: A Key to Understanding Latin American Labour Markets*, Basingstoke, Palgrave Macmillan
- Sehnbruch, K. 2007. From the quantity to the quality of employment, in Alkire, S., Comim, F. and Qizilbash, M. (eds.), *The Capability Approach in Human Development: Concepts, Applications and Measurement*, Cambridge, Cambridge University Press
- Sen, A. 1999. *Development as Freedom*, Oxford, Oxford University Press
- Staines, G. L. and Quinn, R. P. 1979. American workers evaluate the quality of their jobs, *Monthly Labor Review*, vol. 102, no. 1, 3
- Tangian, A. 2009. Decent Work, *European Review of Labour and Research*, vol. 15, nos 3–4, 527–556
- Taylor, J. C. 1977. Job satisfaction and quality of working life, *Journal of Occupational Psychology*, vol. 50, no. 4, 243–252
- Ward, M. 2004. *Quantifying the World*, Bloomington, Indiana University Press
- Warr, P. 1987. *Work, Unemployment and Mental Health*, Oxford, Clarendon Press
- Wnuk-Lipinski, E. 1977. Job satisfaction and the quality of working life, *International Labour Review*, vol. 115, no. 1, 53–64
- Yoshida, K. and Torihara, M. 1977. Redesigning jobs for a better quality of working life, *International Labour Review*, vol. 16, 139–152

## **Efficacy of Peer- Tutoring among Students with Special Educational Needs (SwSEs) to Enhance Social Interaction in Inclusive Classroom Settings**

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### **Abstract**

*The prime aim of the study is to perceive the efficacy of peer-tutoring among students with special educational needs (SwSEs) to enhance social interaction in inclusive classroom settings. In the modern era of inclusion, the major task for educators is to toil for the progress of academic and non-academic spaces among students with special educational needs. Peer-tutoring is the best approach to overawe the problems in educating SwSEs. The significant purpose of this study is to find out the means whether peer-tutoring supports the students to enhance their educational presentation in classrooms. Peer tutoring is considering as more a flexible, peer-*

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*facilitated approach that comprises students attending as educational tutors and tutees. Naturally, a greater presentation student is united with a lesser presentation student to analyze serious educational or behavioral perceptions. The tutors sensed that after their peer tutoring esteemed their self-confidence and self-esteem have established. There has been a developing concern about the position of social interaction for students with special needs in inclusive classroom settings. The efficacy of peer-tutoring pointing out that special needs students' advantage from having peer support which increases social interaction in schools. Children who involve in operative social interaction with peers are normally well comfortable and well-esteemed, which promotes the extensive-term encouraging results. Tutoring proposes a special condition for the SwSENs to get endure services from their peers and also perform as a tutor, during actions like leading competition to the normal students. The paper also highlights the significant role of educators to create a reachable atmosphere where the tutor and tutee can engage in peer- tutoring to enhance social interaction in inclusive classroom settings. Now the author looks forward to finding out the innovative ideas and methods to overawe the obstacles in all formulas in the surroundings and on achieving successful progress and development of social interaction among peers to make sure that each SwSENs can learn together in inclusive classroom settings.*

**Key Words:** Peer-Tutoring, Social Interaction, Students with Special Educational Needs, Inclusive education.

### **Introduction**

Peer-tutoring is one of the most dynamic techniques of programs available. As an instructional exercise it is more effective than vast group training. Computer assisted instruction, scheduled texts or personalized learning packages. It consents students to travel through a given subject of teaching at their own step with greatly flexible approach, structure and content modified to their exclusive needs as a learner. No other formula of programmed or produced instruction proposes a portion of the flexibility of a human tutor. Tutees, tutors, and a normal educator specified that they distinguish the unidirectional tutoring involvement as operative and socially required. Peer tutoring replicas are flexible and can be reformed to meet individual student or class learning requirements. The educational task should directive the suitable model based on content and learning intentions. Although there is some straight preparation and training, once students' progress an understanding of processes, groups or dyads can be improved reliant upon the related, action, or preferred learning results. Peer learning empowers the students to mature their skills to establish and plan learning actions, functioning in teamwork with others, giving and getting answer about their work and lastly evaluation of their own learning. Now the status of peer learning is growing and it has become the portion of many sequences in a wide variety of settings and disciplines in many nations of the world. (Boud, 1988). Through this the students learn to an excessive range by explaining their opinions to others. They also partake in such kind of actions in which they are able to learn from their peers. (Kaufman, Felder and Fuller, 1999). Common kinds of cooperative learning methods occur. One of such is Peer Tutoring. Peer tutoring is a student enabled education□ advance in which smaller learning groups work self-confident on learning tasks (Dufrene, Noell, Gilbertson & Duhon 2005). Peer tutoring has been exposed to progress radically students' time inspired in educational lessons and commitment (Egbockuku and Obiunu, 2006; Oludipe, 2007, Ogbuanyia, Bakare & Igweh, 2009). Peer tutoring have been establish to be actual operative within the school structure (Egbockuku and Obiunu, 2006). Peer tutoring can be noteworthy among the students of the same age group or students from diverse age ranges. The students learn from each other in an effective way in whole the planning. It is an active and encouraging learning participation in which one-student carry out as the tutor or teacher and the other one occupies as the tutee or student. Peer tutoring builds an occasion for the learners to develop their understanding and capability in an expressive way. In this practice the tutors strengthen their own learning through revising and rearticulating their information. On the further way, the learner or tutee become develops of good manners. Peer tutoring facilitates both tutor and tutee to increase confidence, the tutor by perceiving competency in his or her ability to support somebody and the tutee by ahead with progressive strengthening from the peers. Hence, peer tutoring has a very progressive efficacy on the procedure of learning.

Students frequently learn efficiently through peer learning mainly at a time when school means are inadequate and the response of staff is greater. Peer learning makes the occasion for the students to learn from each other by using their own skills. It allows students to have more exercise than traditional teaching. Students take more accountability in peer learning and learn how to learn successfully. (Johnson,1993). Peer- tutoring is a comprehensive learning approach. It shelters a wide-ranging of undertakings over which persons learn through diverse methods. These actions extended from a traditional proctor ideal in schools to the more advanced learning groups in organizations and institution of higher education. In proctor ideal the elder students perform as tutors and subordinate students as tutees. On the other hand in advanced learning groups students of the same age group or same level support each



other by creating corporations. (Griffiths, Houston and Lazenbatt, 1995). As peer learning includes an enormous range of events but here the study examines a two ways, reciprocal learning program. Peer learning should have related welfares and contain the involvement of understanding, concepts and experience between the partakers. Peer learning can be named as a method of poignant away from self-governing to dependent or shared learning (Boud, 1988). Peer tutoring is an operative teaching approach for all students. Maximum students find it motivating to work together with their peer group and they ask their inquiries deprived of any uncertainty and relaxed while learning beside with their peer group. In India peer tutoring have been used non-scientifically and therefore most of the students cannot practice this technique usefully. Therefore it becomes a part of drive and resourceful method in the teaching learning procedure. Educators can also get cleared of overload of teaching and students power. Further and more organized toil can be encouraged to increase the use of peer tutoring in inclusive classrooms. Peer tutoring is a teaching approach that uses students as tutors. The student pairs might work on educational, social, behavioral, practical or even social skills. There are many diverse ways to pair students, such as by capability level, skills learned, or age.. Peer tutoring has been widely investigated as an effective approach to occupy students and encourage educational success in inclusive classroom settings for SwSEns.

### **The Concept of Peer- Tutoring**

Peer tutoring is a very old preparation, noticeable back at least as distant as the ancient Greeks. Ancient descriptions of peer tutoring apparent the peer tutor as an alternate teacher, in a lined model of the program of knowledge, from teacher to tutor to tutee. Advanced, it was grasped that the peer tutoring cooperation was qualitatively different from that between a teacher and a student, and complex different welfares and shortcomings. At this point of progress, a description might have been: 'more able learners assisting less able students to learn in supportive working sets or small groups wisely prepared by an expert teacher'. Still, as improvement and investigation in diverse designs of peer tutoring advanced slowly in more current years, it became clear that peer tutoring is not necessarily only about transmission from the more able and practiced (who already have the knowledge and skills) to the less able (who have yet to attain them). As peer tutoring has advanced, outlining it has become more demanding, and a recent description appears as extensive as to be rather insipid: 'people from related social groups who are not specialized teachers facilitating each other to learn and learning themselves by teaching'. Peer tutoring if accurately inferred suggests fairness of status and worth, which is incorrect for many peer tutoring creativities which denote to meets between progressive and less advanced students (Saunders, 1992). Peer tutoring is an economically and academically effective interposition for persons with disabilities that can advantage both the tutor and tutee, socially and instructional by encouraging them to learn (Miller, Miller, Armentrout & Flannagan, 1995). One of the goals of the peer tutoring program was to circulate the tutors' concepts and skills in an outgoing and reassuring environment. Alternative was to progress tutors' forthcoming skills and team work capability in the school. These peer tutoring programs have been used efficiently to teach and increase study skills. In each of these extents important suggestion is conveyed about the overall attainment of the peer tutoring program as well as the particular practices that may need review in progressive situations.

Interaction between tutee and tutor was based on discussions; tutees inclined to focus on advanced outcomes, while tutors were more alarmed about their tutoring capability, communication ability, and interactive relations. Peer tutoring is one of the imperative techniques which have been used by the teachers to increase the promise and confidence level of their students. Over this way the learners are mutual in pairs which one substance as a tutor and the other as tutee or learner. (Rosewal et al. 1995). Peer tutoring is a type of peer-refereed, peer-aided learning, engaging difficult resolving and orderly teaching approaches to help the disabled student (Dineen, Clark, and Risley, 1977). Proper peer tutoring is distant more educational approach in which progressive students act as teachers or tutors and often they need some form of recompense from their students who learn from them. In many academes it is a deep-rooted exercise, where mutual learning is measured to be related. (Brookfield and Preskill, 1999). Investigation discoveries in foreign literature designate that peer tutoring is operative in improving attitude and behavior of young students (Hsiao-Chen, 2003; Ladyshewsky, 2001). The tutors are normally left to their strategies in concern to helping the tutee. Each standard of peer tutoring must be defined and taught straight to the tutors and tutees, when peer tutoring is regarded as a structure. Considering at the special effects on tutors, investigators create a small but important effect for academic results and self-concept, and a somewhat greater effect for attitudes toward subject matter (Hall& Stegila, 2003). The tutors are normally left to their strategies in concern to helping the tutee. Each standard of peer tutoring must be defined and taught straight to the tutors and tutees, when peer tutoring is regarded as a structure. Considering at the special effects on tutors, investigators create a small but important effect for academic results and self-concept, and a somewhat greater effect for attitudes toward subject matter (Hall&



Stegila, 2003). Peer tutoring, the greatest broadly recognized peer learning approach, is considered by particular role-taking as tutor or tutee in dyads, with a mutual, known and united objective. Peer tutoring states a various range of capabilities in the classroom (Duran & Monereo, 2005). The word peer tutoring is used for several tutoring actions but frequently it is mentioned to the students who commonly study or learn in sets to support each other. Peer tutoring generally leads to a well understanding of the educational ideas but it is more successful when the students having diverse capability stages work with each other. (Kunsch, Jitendra, & Sood, 2007). Peer tutoring comprises persons of the same social group or social standing instructing one added when one peer has more capability or acceptance than the others (Colvin, 2007; Hall & Stegila,). The students who learn in supportive learning groups obtain more knowledge and they take their tasks in a well way as linked to others. (Fernandez-Santander, 2008). Peer- tutoring as highlighted that the occasions for skill exercise and social interaction are mainly significant for at-risk students and students with disabilities.

### **Peer-Tutoring Models**

Peer tutoring outlooks as one of the techniques advanced and are in link with the background values of inclusive education. There are many diverse methods you can group students to tutor each other. It is significant that the teacher make firm that any resource being revised by tutor groups is precisely evaluated in these groups. Peer tutoring is not meant for hosting new resources or ideas. You need to screen for considerate on both ends. There are three main models of peer tutoring.

### **Reciprocal Peer-Tutoring (RPT)**

Reciprocal Peer Tutoring (RPT) is a planning of considerate learning that partaking students of corresponding academic locations concern replacing roles of tutor and learner. Reciprocal Peer Tutoring (RPT), as the name implies, is a form of cooperative learning, in which students function reciprocally as both tutor and tutee (Ogbuany, Bakare & Igweh, 2009 and Obiunu, 2008). This dual role according to Obiunu (2008) and Griffin & Griffin (1997), is beneficial because it enables students to gain from both the preparation and the instruction in which tutors engage and from the instructions that tutees receive. According to Ogbuany et al (2009), RPT helps teachers to manage with challenges such as inadequate educational time, manifold curricular necessity, and applicable social promotion among learners. In this grouping of peer tutoring the peers learn from each other by changing their situation from tutor to student. Together peers take chances at being the tutor however the other one actions as the student or learner. This approach offers a very good occasion to every student to act as a tutor which improves his self-assurance level. (Goodwin, 2001; Goodwin & Watkinson, 2000). RPT is a combined approach that implants assessment in a dignified learning procedure to enable student participation with sequence satisfaction and enhance attainment. RPT is a method of supportive learning, which has been established to be an operative method for growing students' speculative attainment (Sherman, 1991; Slavin, 1991). Two or more students substitute between performing as the tutor and tutee during each sitting, with reasonable time in each role. Often, progressive performance students are paired with lower effecting students. RPT uses a planned layout that reassures teaching considerable, monitoring answers, and assessing and inspiring peers. Both group and individual rewards may be received to encourage and get the most out of learning. Students in RPT may formulate the educational resources and are answerable for nursing and assessing their peers once they have designated a goal and reward as drawn by their teacher.

### **Class- Wise Peer-Tutoring (CWT)**

Class-wide peer tutoring (CWPT) breakdowns the entire class into different groups. It is one of the main types of peer tutoring in which all the students of the classroom very dynamically learn from each other for a comprehensive time dated. They perform as tutors as well as students or learners. So each student of the class includes himself in the allotted events and learns in an equal way. (Greenwood, Carta and Hall 1988). Study has shown that CWPT had particular the tutee further time to planning, to ask needs, and to learn the attention component (Hedin, 1987; Miller et al., 1994). In this model, the entire class would be distributed into sets, or small groups no bigger than five. The sets should comprise students with diverse capability levels. Class wise peer tutoring includes allotting the whole class into sets of two to five students with divergent capability levels. Students then perform as tutors, tutees, or together tutors and tutees. Usually, CWPT includes greatly organized processes, straight practice, modest teams, and placement of marks (Maheady, Harper, & Mallette, 2001). The whole class partakes in organized peer tutoring events two or more times per week for around 30 minutes (Harper & Maheady, 2007). Whereas the processes and practices in CWPT stay the same, student combinations or sets may modify weekly or once every two weeks. In CWPT, student combinations are fluid and may be based on accomplishment levels or student

compatibility. Unlike other methods of peer tutoring, CWPT denotes only to same-age students, not relating upper-score tutors from other classrooms, and is typically used to extend the previously taught understanding (Lee, 2003). CWPT is an indication-based teaching approach that includes planned relations between peers and embraces capacity for the education of students at risk who show rebellious behaviors. Class Wide Peer Tutoring in an educational approach advanced to help educators personalize education, while still providing students with abundant occasion to become strongly involved during education. In CWPT, class supporters are structured into student tutor sets. Each produces facts for affecting their role capably. Students' adjustment parts during the day, occasionally performance as the student and sometimes as the tutor. CWPT offers the occasion for students to prepare and master. Class Wide Peer Tutoring is an educational approach progressive to support educators adjusts programs, were still providing students with plenty of opportunities to become enthusiastically involved through teaching. In CWPT, class participants are prearranged into student tutor trusts. Each earns points for finalizing their role proficiently. CWPT proposes the occasion for students to design and master what they are learning while encouraging positive social interaction among SwSNEs. CWPT comprises features that improve its efficacy with students with disabilities and for school extensive presentation. It registers the benefit and effect of the classroom peer group in the instruction procedures in inclusive classroom settings.

### **Cross-Age Peer-Tutoring (CAPT)**

Cross-Age Peer-Tutoring (CAPT) eagerly takes in both tutors and tutees with disabilities in their instruction and gives them a sentiment of control over educational effects (Kalkowski, 1995). Cross-Age Peer- Tutoring has been reassuring with students without disabilities (Utley & Mortweet, 1997). By concerning students with disabilities in their instruction and giving them self- handling outfits students can simplify motivation into other parts. Students can exercise their skills to enhance in Individualized Education Plans (IEPs), thus captivating an energetic role in their viewpoint (Miller & Miller, 1995). Students can regulate true social skills while being scholastically involved (Barbetta & Miller, 1991). In this kind of tutoring the elder student perform as tutor and they teach the young students. The tutors have a greater educational training as paralleled to their students or learners in cross-age peer tutoring. This method is treasured for the students because they grow effective individual guidelines and response from their tutors. On the other hand the tutor grows respected teaching understanding. (Lieberman, Journal for Studies in Available and Dalrymple 1997). Peer tutoring ensues when tutors and tutees are the equivalent age. In cross-age tutoring, the tutor is elder than the tutee. Still, occasionally the term peer tutoring is used to contain both kinds. Lastly, some investigators suggest that there is no such object as a right "peer" tutor. Peer tutoring is frequently called "cross-age" tutoring, because the tutor is commonly two or more years elder than the tutee. In a modest sense, the appearance of "peer tutoring" is rather of an oxymoron. (Damon and Phelps, 1989). Cross-Age Tutoring recovers the social skills of the student decorative in the sessions (Foot, Shute, Morgan & Barron, 1990; Utley & Mortweet, 1997). Cross-Age Tutoring can improve self-confidence among older students who offer personalized training to tutees, and outcome in a more supportive classroom and enhanced school environment (Gaustad, 1993; Gerber & Kaufman, 1981; Kalkowski, 2001; Schrader & Valus, 1990; Topping, 1988; Utley & Mortweet, 1997). Younger students are paired with an elder student. The elder student is there to typical noble behavioral, practical, adaptive or social skills. Elder students are combined with younger students to teach or analysis a skill. The locations of tutor and tutee do not revision. The elder student helps as the tutor and the younger student is the tutee. The elder student and younger student can have comparable or divergent skill levels, with the association being one of an accommodating or professional communication. Tutors help to model fitting behavior, ask inquiries, and reassure improved study routines. This process is also used for students with special educational needs as they may undertake as tutors for younger students.

### **Same-age Peer Tutoring (SAPT)**

Peers who are within one or two years of age are paired to consider key notions. Students may have equivalent capability levels or a more advanced student can be paired with a less open-minded student. Students who have linked abilities should have an equivalent understanding of the content substantial and concepts. When combining students with diverse levels, the roles of tutor and tutee may be interchanged, accepting the lower performing student to test the higher-performing student. Answers should be delivered to the student who is lower-achieving when acting as a tutor to support with any inadequacies in contented knowledge. Same-age peer tutoring, like class extensive peer tutoring, can be completed within the students' classroom or tutoring can be established across different classes. Processes are more flexible than traditional class widespread peer tutoring structures.

### **Peer Support Enhances Social Interaction in Inclusive Classroom Settings**

The investigators suggest that singular peer support delivered normal standing, expressive, and social provisions which were observed as beneficial. Partakers valued having somebody to trust, a friend, and someone to socialize with. We, though, found that individuals' potentials of peer support did not always comport with accessible services. Partakers regarded peer support as particularly valuable because of the occasion for a non-treatment based, standardizing relationship. We accomplish that peer support complements rather than displaces needed traditional mental health facilities. According to key authors peer endure participates both sensitive support and compound or useful support (Gartner & Riessman, 1984) and is proposed to be likewise helpful through a collective practice of giving and function (Mead & MacNeil, 2006). In Peer Support we capture each other since we've "been there," mutual equivalent participation, and can classic for each other an outlook to learn and progress. However, for peer support to come to be an evidence-based preparation, we need to regulate more about its instruments of action and how peer specialists use their lived participation to encourage recovery in others (Davidson, Chinman, Sells, & Rowe, 2006). Today, peer support is occur settled many various service supply models where persons with a "lived experience" with psychiatric difficulties deliver setting up to others with a psychiatric situation (Chinman et al., 2014; Lloyd-Evans et al., 2014). Peer support services and programs use a display of program replications and have a diversity of funding streams, but they incline to have parallel missions, standards, and goals (Campbell, 2005). Most studies of individual, one-on-one provision of peer support absence any information about potential applications of action, or about the extent, occurrence, quality or greatness of the peer support facilities (Fisher, E. B., Earp, J. A., Maman, S., & Zolotor, A., 2010). Peer support services and programs have prospered in the past two decades, but we have an insufficient experimental reverential of the nature of the peer support association, the usual actions engaged in, or a sense of what is supposed as supportive by receivers. The preparation of peer support seems to give course to young people's desire to be a dynamic resident in their school. Peer support structures are classically varied as flexible structures within which children and young people are proficient to intend sensitive and social support to parallel learners (Cowie, 2011; Cowie & Smith, 2010). Peer support incorporates a variety of activities and communications between people who share similar involvements between a peer support operative and person in or looking for recapture encourages association and motivates confidence. In addition to providing the many kinds of support incorporated in the peer support role, they conduct a diversity of outreach and commitment undertakings to promote peer support activities to help students with special educational needs in inclusive classroom settings.

### **Benefits of Peer Tutoring to CwSNEs in Inclusive Classroom Settings**

The phase of the basic for children with special education needs is continued in inclusive classroom settings. The overhead studies discovered that opinion plays a key role in several features of incapacity and also terrified the focus light on parent; teachers, siblings and peers can deliver better provision for children with SENs in different life circumstances containing everyday living, education and future development. In endurance to offer supports for students and teachers in inclusive classrooms, teachers are occasionally consigned to different students who absence the social and educational skills to partake in the classroom individually. Peer tutoring is a natural support for students with and without disabilities and can sustain as an participation for both peer tutors and tutees. The welfares of peer tutoring are various for inclusive education and for students in together social and educational spaces. Children with Special Educational Needs is the most downgraded group in the society in order to give them effective training we need to give primacy to basic educational learning henceforth as a special educator we keep on presenting effective approaches for person with special educational needs. Investigations on Peer tutoring can be an in effect technique for children with SWSNEs as it maintains in helpful for social skill, cooperating skill and they get common benefit from each other. As one child completes the goal all other realize goals. Peer tutoring is also the form of cooperative learning. It also lessens problem of teacher as he has to teach a lot of skill individually to the students. One child who obtains mastery over the skill starts teaching other student who has not yet learned the skill. In peer tutoring children are paired with other student after demonstrating teaching meetings to the peer tutor in inclusive classroom settings.

A peer-tutoring platform can benefit both the tutor and the tutee easily and scholastically (Carter, Clark, Cushing, & Kennedy, 2005). Peer tutoring interests both tutors and tutees on a social basis and instructionally. The communication that occurs between peer tutor and tutee supports with their rational and their social progress. They must listen, clarify inquiry, explain, précis, and/or streamline when occupied together. Associates may not have

entirely assumed an idea until talking about it out loud. Disturb is another piece that, academically, makes peer tutoring so operative. Peer associates can form a innocent connection that supports the tutee to be open about their confusion of notions, which can lead to earlier interference from their tutor. The pair may also progress a mutual responsibility that keeps them interested and on undertaking (Topping, 2005). All students in an inclusive school, with and without disabilities, obtain provisions as needed for them to flourish. Education takes place normally in the regular education classroom, but may also happen in small groups in other settings in the school such as a learning center, library, or other normally used parts (Halvorsen & Neary, 2008). It has been generating that peer supports for students with disabilities within inclusive classrooms are functioning for several reasons comprising: better social interactions, communication, positive attitudes towards school, admission to general education program and better mastery skills (Carter et. al., 2005). A new study examined not only whether social interactions improved when peer supports were hosted, but also evaluated the kinds of social exchanges that resulted during the peer continued programs and whether there was a bond between surprising social associations and educational support (Carter, Sisco, Melekoglu, & Kurkowski, 2007). It has been generating that peer supports for students with disabilities within inclusive classrooms are functioning for several reasons comprising: better social interactions, communication, positive attitudes towards school, admission to general education program and better mastery skills (Carter et. al., 2005). Hence, researcher attempted to find out the basic for peer tutoring to build sustain for children with special educational needs in inclusive setting. Children with SENs must get special education in the same platforms as their non-disabled peers. But what and how well they are educated should be the crucial matters. Besides, for some students with SENs inclusion is not practical, and they should be educated efficiently in special classes or institutes. There is no additional for educators 'use of their best decision about the specific case'. Special education should be concentrated on providing the most genuine education potential for students with SENs person by person. The verity is that such education can sometimes but not continually be conveyed in regular classrooms together with children without disabilities. Besides, research does not sustain the idea of one best settlement for all students with disabilities in inclusive classroom settings.

### Conclusion

Peer tutoring is an extremely effective way for the students to learn from each other. It does not only advantage the students in educationally but also benefits the students in increasing their communication and social skills. Through peer tutoring the students can improve their self-assurance level and they become dynamic. Peer tutoring is a two-way procedure and it is correspondingly advantageous for the tutors and the beginners. Prepared peer tutoring can be shown more operative and favorable for the peers as associated to well-organized peer tutoring actions. Hence it is determined that peer tutoring is a very operative approach for learning. Peer tutoring is an operative instructional approach for inclusive classrooms of SwSENs learners because it indorses educational achievements as well as social interaction improvement. Programs can be positively executed at the classroom-level or on a broader measure at the schools. Peer tutoring is principally beneficial in inclusive classrooms because it consents educators to discourse an extensive series of learning requirements and occupies all students instantaneously. Irrespective of capability level, students can participate in and learn from the lesson. Besides, the cooperative learning feature of the approach reassures constructive social interaction between students in a classroom. By comprising traditional educational approaches beside with peer tutoring, educators can develop the capability alterations integral in an inclusive classroom, and endorse accessible and effective learning for all.

### Reference

1. Anderson, G., & Boud, D. (1996). Extending the role of peer learning in university courses. *Research and development in higher education*, 19(1), 15-19.
2. Bakare, J., & Orji, C. T. (2019). Effects of reciprocal peer tutoring and direct learning environment on sophomores' academic achievement in electronic and computer fundamentals. *Education and Information Technologies*, 24(2), 1035-1055.
3. Brookfield, S., & Preskill, S. (1999). *Discussion as a way of teaching: Tools and techniques for university teachers*. McGraw-Hill Education (UK).
4. Boud, D., Cohen, R., & Sampson, J. (2014). *Peer learning in higher education: Learning from and with each other*. Routledge.
5. Campbell, J. (2005). The historical and philosophical development of peer-run support programs. *On our own, together: Peer programs for people with mental illness*, 17, 66.



6. Carter, E. W., Cushing, L. S., Clark, N. M., & Kennedy, C. H. (2005). Effects of peer support interventions on students' access to the general curriculum and social interactions. *Research and practice for persons with severe disabilities*, 30(1), 15-25.
7. Carter, E. W., & Hughes, C. (2005). Increasing social interaction among adolescents with intellectual disabilities and their general education peers: Effective interventions. *Research and Practice for Persons with Severe Disabilities*, 30(4), 179-193.
8. Carter, E. W., Sisco, L. G., Melekoglu, M. A., & Kurkowski, C. (2007). Peer supports as an alternative to individually assigned paraprofessionals in inclusive high school classrooms. *Research and Practice for Persons with Severe Disabilities*, 32(4), 213-227.
9. Carter, E. W., & Hughes, C. (2005). Increasing social interaction among adolescents with intellectual disabilities and their general education peers: Effective interventions. *Research and Practice for Persons with Severe Disabilities*, 30(4), 179-193.
10. Colvin, J. W. (2007). Peer tutoring and social dynamics in higher education. *Mentoring & tutoring*, 15(2), 165-181.
11. Cowie, H. (2011). Peer support as an intervention to counteract school bullying: Listen to the children. *Children & Society*, 25(4), 287-292.
12. Dabholkar, P. A., Bobbitt, L. M., & Lee, E. J. (2003). Understanding consumer motivation and behavior related to self-scanning in retailing. *International Journal of Service Industry Management*.
13. Damon, W., & Phelps, E. (1989). Critical distinctions among three approaches to peer education. *International journal of educational research*, 13(1), 9-19.
14. Dineen, J. P., Clark, H. B., & Risley, T. R. (1977). Peer tutoring among elementary students: educational benefits to the tutor 1. *Journal of applied behavior analysis*, 10(2), 231-238.
15. Dufrene, B. A., Noell, G. H., Gilbertson, D. N., & Duhon, G. J. (2005). Monitoring implementation of reciprocal peer tutoring: Identifying and intervening with students who do not maintain accurate implementation. *School Psychology Review*, 34(1), 74-86.
16. Duran, D., & Monereo, C. (2005). Styles and sequences of cooperative interaction in fixed and reciprocal peer tutoring. *Learning and Instruction*, 15(3), 179-199.
17. Fisher, E. B., Earp, J. A., Maman, S., & Zolotor, A. (2010). Cross-cultural and international adaptation of peer support for diabetes management. *Family practice*, 27(suppl\_1), i6-i16.
18. Fernández-Santander, A. (2008). Cooperative learning combined with short periods of lecturing: A good alternative in teaching biochemistry. *Biochemistry and Molecular Biology Education*, 36(1), 34-38.
19. Foot, H. C., Morgan, M. J., & Shute, R. H. (1990). *Children helping children* (Vol. 9). John Wiley & Sons.
20. Gaustad, J. (1993). Peer and cross-age tutoring.
21. Gartner, A. (1998). Mutual tutoring: Embedding and extending peer-assisted learning. *Peer-assisted learning*, 281-289.
22. Griffiths, S., Houston, K., & Lazenbatt, A. (1995). *Enhancing Student Learning Through Peer Tutoring in Higher Education: A Compendium Resource Pack with Case Study Contributions.. Implementing*. University of Ulster.
23. Goodwin, B. (2001). *How the leopard changed its spots: The evolution of complexity* (Vol. 24). Princeton University Press.
24. Greenwood, C. R., Carta, J. J., & Hall, R. V. (1988). The use of peer tutoring strategies in classroom management and educational instruction. *School Psychology Review*, 17(2), 258-275.
25. Hall, T., & Stegila, A. (2003). Peer mediated instruction and intervention. *Wakefield, MA: National Center on Accessing the General Curriculum. Retrieved February, 8, 2007*.
26. Harper, G. F., & Maheady, L. (2007). Peer-mediated teaching and students with learning disabilities. *Intervention in school and clinic*, 43(2), 101-107.
27. Hedin, A. E. (1987). MSIS-86 thermospheric model. *Journal of Geophysical Research: Space Physics*, 92(A5), 4649-4662.
28. Johnson, M. K., Hashtroudi, S., & Lindsay, D. S. (1993). Source monitoring. *Psychological bulletin*, 114(1), 3.
29. Johnson, S., Lamb, D., Marston, L., Osborn, D., Mason, O., Henderson, C., ... & Sullivan, S. (2018). Peer-supported self-management for people discharged from a mental health crisis team: a randomised controlled trial. *The Lancet*, 392(10145), 409-418.
30. Kalkowski, P. (1995). Peer and cross-age tutoring. *School Improvement Research Series*, 18, 1-27.

31. Kaufman, D. M., & Holmes, D. B. (1996). Tutoring in problem-based learning: perceptions of teachers and students. *Medical education*, 30(5), 371-377.
32. Kunsch, C. A., Jitendra, A. K., & Sood, S. (2007). The effects of peer-mediated instruction in mathematics for students with learning problems: A research synthesis. *Learning Disabilities Research & Practice*, 22(1), 1-12.
33. Ladyshevsky, R. K. (2013). The role of peers in feedback processes. *Feedback in Higher and professional education: understanding it and doing it well*, 74.
34. Latner, J. D., Rosewall, J. K., & Simmonds, M. B. (2007). Childhood obesity stigma: association with television, videogame, and magazine exposure. *Body image*, 4(2), 147-155.
35. Lieberman, L. J., Dunn, J. M., Van der Mars, H., & McCubbin, J. (2000). Peer tutors' effects on activity levels of deaf students in inclusive elementary physical education. *Adapted Physical Activity Quarterly*, 17(1), 20-39.
36. Maheady, L., Harper, G. F., & Mallette, B. (2001). Peer-mediated instruction and interventions and students with mild disabilities. *Remedial and Special Education*, 22(1), 4-14.
37. Mahar, M. T., Murphy, S. K., Rowe, D. A., Golden, J., Shields, A. T., & Raedeke, T. D. (2006). Effects of a classroom-based program on physical activity and on-task behavior. *Medicine & Science in Sports & Exercise*, 38(12), 2086-2094.
38. Mead, S., & MacNeil, C. (2006). Peer support: What makes it unique. *International Journal of Psychosocial Rehabilitation*, 10(2), 29-37.
39. Miller, H. G., & Singh, V. (1994). Potential field tilt—a new concept for location of potential field sources. *Journal of Applied Geophysics*, 32(2-3), 213-217.
40. Miller, S. R., Miller, P. F., Armentrout, J. A., & Flannagan, J. W. (1995). Cross-age peer tutoring: A strategy for promoting self-determination in students with severe emotional disabilities/behavior disorders. *Preventing School Failure: Alternative Education for Children and Youth*, 39(4), 32-37.
41. Miller, S. R., Miller, P. F., Armentrout, J. A., & Flannagan, J. W. (1995). Cross-age peer tutoring: A strategy for promoting self-determination in students with severe emotional disabilities/behavior disorders. *Preventing School Failure: Alternative Education for Children and Youth*, 39(4), 32-37.
42. Miller, A. D., Barbetta, P. M., Drevno, G. E., Martz, S. A., & Heron, T. E. (1996). Math peer tutoring for students with specific learning disabilities. In *Learning Disability Forum* (Vol. 21, No. 3, pp. 21-28).
43. Neary, A. J. (2008). *U.S. Patent No. 7,318,944*. Washington, DC: U.S. Patent and Trademark Office.
44. Obiunu, J. J. (2008). The effects of reciprocal peer tutoring on the enhancement of career decision making process among secondary school adolescents. *Educational Research and Reviews*, 3(7), 236-241.
45. Ogbuanya, T. C., Bakare, J. A., & Igweh, A. U. (2009). Reciprocal Peer Tutoring and Academic Achievement of Students in Electronic Technology in Technical Colleges in Southwestern, Nigeria. In *A Paper presented at annual conference of Nigerian Vocational Association held at University of Nigeria, Nsukka on 22nd–25th*.
46. Ogbuanya, T. C. (2009). Energy and technology of home appliances. *Enugu: Cheston Ltd*.
47. Rittschof, K. A., & Griffin, B. W. (2001). Reciprocal peer tutoring: Re-examining the value of a co-operative learning technique to college students and instructors. *Educational psychology*, 21(3), 313-331.
48. Saunders, D. (1992). Peer tutoring in higher education. *Studies in Higher Education*, 17(2), 211-218.
49. Sherman, L. W. (1991). Cooperative Learning in Post-Secondary Education: Implications from Social Psychology for Active Learning Experiences.
50. Topping, K. J. (2005). Trends in peer learning. *Educational psychology*, 25(6), 631-645.
51. Utley, C. A., Mortweet, S. L., & Greenwood, C. R. (1997). Peer-mediated instruction and interventions: Focus on exceptional children. *Denver, CO: Love*.



## **An Evaluation of English Reading Habits among Secondary and Senior Secondary Students in Goa**

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### ***Abstract***

*The digitalization of education as well as increasing usage of social media among the youths of the world, has challenged the original language skills and traditional habits of increasing quality in education. This study aims at evaluating reading habits of secondary and senior secondary students from Goa. The investigator tried to evaluate children's nurturing reading habit at home, to evaluate English reading skills development at school, to evaluate efforts taken by secondary and senior secondary students to develop and enhance reading skills through self-motivation, to find out resources used by the previous teachers for developing reading skill and*

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*these happen to be the objectives of the study. Descriptive survey method was used with survey questionnaire as the research tool. Random sampling technique was used for selecting the sample which included 50 rural and semi urban secondary and senior secondary students from Goa. Findings revolve around the efforts taken by parents to nurture reading habit of the students, reading assignments allotted by the school teacher, resources used by the teacher for reading skill development, library usage, resources available for students with less reading ability, and recommendations by the students themselves for nurturing reading habit in the growing child was prepared. One of the important recommendations given by the students includes 'Blinkist', a mobile application having non-fiction audio books and also it summarizes every book in a nutshell. The developmental planning in the growth of Reading habit among students need to be investigated further.*

**Keywords:** language skills, reading, self motivation, resources, library usage.

## **Introduction**

Reading, one of the four language skills, is a very important component in communication. It helps in Increasing Vocabulary, Improving Concentration, Better Communication, Improving Memory, it can be a source of motivation, Expanding knowledge, Building Confidence, Improving Writing Skills, improving Imagination and Creativity, and reducing Stress. This study aims at evaluating reading habits of secondary and senior secondary students from Goa. For this purpose, the investigator undertook 50 students from rural and semi urban areas. The increasing usage of digital media among students compelled the investigator to go through the reading survey among Goan students.

Thus, referring back to the research works at national level, the investigator has the following objectives.

1. To evaluate children's nurturing reading habit at home
2. To evaluate english reading skills development at school
3. To evaluate efforts taken by secondary and senior secondary students to develop and enhance reading skills through self-motivation.
4. To find out resources used by the previous teachers for developing reading skill.

## **Research Methodology**

In order to evaluate the reading habits of the secondary and senior secondary students in Goa, a Descriptive survey method was used with survey questionnaire as the research tool. Random sampling technique was used for selecting the sample which included 50 rural and semi urban secondary and senior secondary students from Goa. A questionnaire dealing with the topics such as efforts taken by parents to nurture reading habit of the students, resources used by the teacher for reading skill development, library usage, resources available for students with less reading ability, and recommendations by the students themselves for nurturing reading habit in the growing child was prepared.

## **Findings-**

The responses of the survey questionnaire indicated the following results.

1. 30% of the respondents experienced that their parents made reading a daily habit to nurture reading practice whereas 32% said that their parents used to read books in front of them, 8% of the respondents were taken to the library by their parents more often, 56% of the respondents were provided with the reading resources available at home by their parents. 32% of the respondents were assigned reading homework by their teacher at school level every day, 92% of the respondents were provided with the textbooks by their teacher for developing reading skill, 16% were provided with the workbooks, 24% of the respondents were provided with the children's newspapers or magazines, 12% were given computer instruction for reading resources, 10% were introduced to reading materials on internet websites, 26% of the respondents were provided with children's books, 22% of the respondents were provided with the materials from other subjects. 6% of the respondents had a reading specialist available in their school to deal with students who have difficulty with reading, 20% of the respondents said that the teacher used to conduct special remedial reading class, 4% of the respondents had a special adult assistant to help those students in

reading, whereas 70% of the respondents had none other than the teacher himself/ herself. 64% of the respondents prefer to read by themselves, 58% of the respondents like listening to stories, and 46% of the respondents like talking about what they've read. 12% of the respondents prefer reading picture books almost every day. 8% of the respondents read novels almost every day, 16% of the respondents read it about once a week, 28% of the respondents read it about once a month, whereas 48% of the respondents never read novels. 8% of the respondents read non-fiction books almost every day, 20% of the respondents read them about once a week, 36% about once a month, whereas 36% of the respondents never read any non-fiction books. Only 4% of the total respondents read magazines almost every day, 28% of the respondents read them about once a week, 28% of them read about once a month, whereas 40% of the respondents never read any magazine. 42% of the respondents read newspapers almost every day, 30% of them read it about once a week, 14% about once a month, whereas 14% of the respondents never read the newspapers. 72% of the total respondents read articles on social media (Facebook, Twitter, Instagram, etc.) almost every day, 14% of the respondents read them about once a week, 12% of the respondents read them about once a month, whereas only 2% of the total respondents never read the articles on social media. 20% of the respondents use digital reading applications such as Kindle, Google play books, Scribd etc almost every day, 12% of them use the applications about once a week, 12% about once a month, and almost 56% of the respondents never use such applications. 40% of the respondents read for personal reasons (Fun and relaxation) almost every day at home, 26% read for about once a week, 18% of the respondents about once a month, whereas 16% of the respondents never read for any personal reasons. 14% of the respondents read for school reasons (To find things out for school or college) almost every day at home, 56% of the respondents read for school reasons about once a week, 20% of the respondents read for about once a month, whereas 10% of the total respondents never read at home for any academic reason. 46% of the total respondents prefer fantasy to read in the leisure period, whereas 72% of the respondents prefer to read about adventure/mystery. 22% of the respondents read in languages other than English, 46% of the respondents prefer to read science fiction, 58% of the respondents prefer Horror/ Suspense stories, 34% of the respondents prefer biographies to read, 40% of the respondents prefer humour, 50% of them prefer history whereas 34% of the respondents prefer to read about sports. 96% of the respondents choose to read by themselves.

### **Recommendations-**

The following are the recommendations suggested by the students themselves while conducting the survey. As per them, students should listen to stories online which will ultimately help them to read new books. Newspaper reading helps more and students should also try and find books of their interest which will definitely make them feel like reading more. Students should create a journal of their reading. In school, students should be given assignments based on reference books. Every day, the teachers should share their reading experience with students and make them understand how important and interesting this habit is and try to develop interest among the students towards reading activity. 'Blinkist' is a mobile application having non-fiction audio books and also it summarizes every book in a nutshell. Secondly one can participate in quiz competitions which will encourage reading and gaining some knowledge.

### **Conclusion-**

Development of the reading habit among children depends upon parents and teachers at the same level. Home environment, maintenance of reading culture at home by family members, providing reading opportunities at home and educational institutions, conducting activities related to reading, and many more efforts taken collectively by parents, teachers and the students themselves will be a great contribution in increasing reading habits among youth. As can be seen from the above findings, parents wholeheartedly contribute in developing reading skill of the students. An evaluation of efforts taken by primary as well as secondary school and the language teachers need to be conducted in further researches.

## **A STUDY OF TRANSFORMATIONAL LEADERSHIP TOWARDS EFFECTIVE MANAGEMENT -FROM INCEPTION TO MATURITY OF AN ORGANISATION.**

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*In this paper the author looks at leadership as the most important factor for effective management. She analyses the definition and characteristics of leadership through Lord Rama of Ramayana, the epic to understand the journey of transformational model of a leader from the birth and inception of an organisation. The author links these characteristics to the four elements of a transformational leader, and differentiates between a transformational and pseudo-transformational leader. Finally, She enumerates the steps to metamorphose from a mere human being to a transformational leader for effective management who will perform all five functions, i.e., Planning, Organizing, Staffing, Directing, and Controlling to achieve goals of the organisation and overcome the barriers of dissent and negativity utilising the philosophy of Vedanta . .*

### **1.1 INTRODUCTION:**

Effective management of an organisation always needs efficient leadership. Leadership has always been perceived as a crown worn by competent people or incompetent ones thus giving rise to the concept of good leadership and bad leadership. Leadership has also been associated for long with the concept of power . There is authority linked to

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leadership which is coupled with usage of power in appropriate or inappropriate manner thereby producing a good leader or a bad leader respectively.

What does the word leadership mean? How can it be practised? Is there an ideal model of leadership that exists? Is leadership bounded by culture and regional specificity or is it universal? What kind of leadership is required in the journey of a leader right from the initiation of an organisation to the maintenance of it and finally catapulting into the next level? It also questions the internal renovation needs to be done in the leader herself to continue with the journey and the steps through which any human being can become a transformational leader?

## **1.2.WHAT IS LEADERSHIP?**

The above questions give the overall view as well as the depth of leadership. Let us start with the first question what is Leadership? The dictionary meaning of leadership gives a number of synonyms like management, control, guidance, headship, direction and governance. The leader has to manage the perfect balance between the services offered and the people who will offer them. The leader has to control her own self to check misuse or overuse of the power bestowed on account of the position as well as to control the petty feelings of superiority. The leader has to continuously provide guidance subtly or overtly as per the demands of the situation to her team in relation to the services offered. Leadership is synonymous to headship that is having a clear-cut vision and providing direction to the team to achieve the organisational goal. Governance explains more the process or method of delivering leadership.

## **1.3WHO IS A LEADER?**

Before we go into the question of the importance of leadership and how that impacts change from the initiation to the maintenance of the organisation let us understand the fundamental characteristics of a leader and try and answer the question who is a leader?

Let's understand the characteristics by studying Lord Rama of the epic Ramayana who can be considered as a true leader. The leader being a human being may start the journey with his/her personal goal like Lord Rama who led an entire army to satisfy his personal goal, that of saving his wife Sita from Ravana, But, certain characteristics of him stand out to amplify the aspects of a true leader.

- *Chalking out a plan and managed resources from nowhere:*

This is a principal demand from a true leader. A leader must set a vision, set goals for the organisation, create a plan and initially explore resources that would give shape to his/her plan. It is very important for the leader here to identify the sources which would support her vision to outline the dotted path for the organisation to join and construct the road to walk on. At this stage the leader's role is akin to a creator, who visits the future and realises what the vision could mould into and accordingly decide on the resources.

- *The leader himself/herself must be an embodiment of responsibility and accountability.:*

The leader needs to lead by setting example not by mere words but through own actions. The workforce must experience that force which propels the leader to "arise, awake, and stop not till the goal is achieved" (Swami Vivekananda) This fervour in the leader acts as motivation, where the entire team would be motivated towards a higher cause. This will ignite the power within to meet the organisational goal.

- *The leader requires to be a motivator to establish a higher cause beyond the realms of monetary gains :*

Through his/her action and words the leader tries to infuse in the team a propelling force for the team members to make a sincere effort to fulfil goals and meet objectives set by themselves and not only by their leader. A true leader makes each team member believe that "All the power is within you, you can do anything and everything, believe in that. Don't believe you are weak, stand up and express the divinity within you" (Swami Vivekananda)

- *The leader has the ability to empower:*

Lord Rama had a team of monkeys and empowered them to fight the battle of Lanka. The monkeys in the epic signify people who are at different levels, have different skill sets and are yet to gain expertise in the key work area. Lord Rama as a leader identified potential among his men/monkeys and empowered them to deliver. A leader's principal job is to empower in order to create an environment where the work force will do the work taking responsibility and being accountable. A leader can empower only when he/ she truly believes in the team members. The leader rises to the occasion by not bringing himself/herself as the centre of attention, but allowing



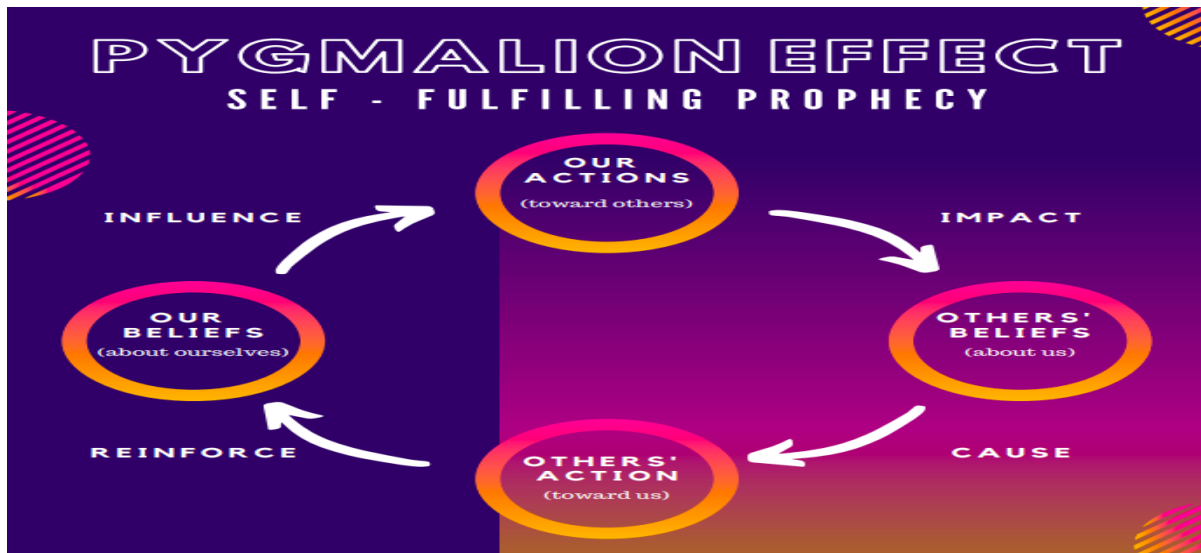
each team member to blossom as per their capabilities. Thus in making each one realise his or her greatness lies the greatness of the cause or organisation.

- *Leader needs to exhibit his leadership through a lot of collaborative discussion.*

A number of decisions are taken after holding core team meetings with his team mates where he shows faith in the team member's knowledge level and expertise. Therefore an important character of a leader is the ability to build up a cohesive team, which takes decisions. This empowerment by entrusting responsibilities in the team mates is connected to the most important characteristic of the leader-the power of self-restraint.

- *Leader must have self restraint:*

Self-restraint to not control, not dominate but to listen, to participate, to rationally weigh environments, people and their responses to environments all the time. As Swami Vivekananda puts it "It is the tremendous manifestation of power-this tremendous restraint; self-restraint is a manifestation of greater power than all outgoing action. "This self-restraint promotes a participative environment rather than an authoritative one. This ability in the leader is unique where the leader believes in the team mates' capacities, communicates to him or her and this promulgates enhanced performances. This is management parlance can be called "Pygmalion Effect"



(Source:<https://medium.com/be-unique/the-pygmalion-effect-explains-why-many-talents-are-ignored-66b9cf37d09>)

- *Therefore the principal characteristic of a leader is to allow collective decision making, while continuously matching the decision to the organisational goal.*

The leader imbibes the characteristics of the strainer, filtering those decisions related to self-satiating goals or task avoidance goals or goals that would halt the progress or growth. Collective decision making may be blurred with "group think". The leader must have strategies like taking individual decision from each mate then collectively analysing it along with it encourage decisions that are against the tide so as to understand how it may be perceived by the outer world. The leader has to encourage dissent to allow free flow of thoughts. Once a decision is taken, the leader has to stand tall. In order to do that, the leader does not have to be infallible or invincible. She has to stand by the decision taken by the team, accept failure if it comes in and collect the broken shards and move on.

- *The most important characteristic thus becomes the ability to sacrifice one's own self-interest and desires.*

It is important to keep the interest of the organisation as paramount. Lord Rama who began his journey as a leader to satisfy his own goal at the end sacrifices the beloved of his life Sita to uphold the principles of his organisation.

- *the general characteristics of a leader:*

A leader is naturally, honest, has high integrity, respects fellow human beings, and takes criticism as his/ her way to progress. A leader has to delve deeply into any subject topic which may influence or impact his/her present or future course of actions.

#### **1.4. THE JOURNEY OF A LEADER FROM INITIATION OF AN ORGANISATION TO CONTINUATION:**

This paper discusses the journey of a leader who ushers in a new ideal into the system and begins the journey not only of himself/herself but of the organisation. This journey has no precedence to be followed neither an established model to imbibe. A leader in this scenario, sows the seed of vision, waters the sapling of idea with realistic, feasible achievable goals, pumps in the inspiration and belief in the people within and outside the team thereby creating circle of support to provide correct nutrition to the soil, to, gives appropriate shade or light to protect the vision, sprays insecticides, deweeds, and watches the land transform. The leader's journey is as simple as that.

The leader is practising transformational leadership. This leader exhibits four distinct elements. (Sarowardy, Halder, Phillips, 2019)



(Source: [https://www.researchgate.net/figure/Four-elements-of-transformational-leaders-20-Source\\_fig1\\_335853497](https://www.researchgate.net/figure/Four-elements-of-transformational-leaders-20-Source_fig1_335853497))

#### **Let's try and explain each element-**

1. **Idealised Influence** can be achieved when the leader himself/herself is a strong role model through one's hard work and dedication, working objectively, diligently and the work culture that the leader wants others to follow is being practised by him/her first. Along with this a high level of ethics need to be followed not in mere words but in the day to day life in his/her course of living, in every interaction that he/she has. It is equally important to have a common mission and goal for each one's attainment resulting in each one's progress.

2. **Inspirational Motivation:** Through idealised influence, the leader has already managed to earn respect. When a person who is respected, puts faith in others, can inspire by motivating others through her words and actions, the organisation moves ahead by leaps and bounds.

3. **Intellectual stimulation** actively involves stirring thinking in each team member. It also involves considering every problem that arises in a day to day manner as a tool to generate solutions, as a tool to think differently in a variety of ways to arrive at a conclusion.

It also involves encouraging out of the box thinking and developing risk taking ability where the team member is not afraid of making mistakes as the leader supports the member all through. This also helps greatly in capacity

building of teammates where rather than offering solution as a leader; solutions are generated by the team facilitated by the leader.

**4. Individual Considerations:** Involves coaching and helping teammates. By understanding each one's capabilities and limitations and building on the capacities to maximise growth potential the organisation reaps the benefit of each of its workers putting in their best efforts. The leader here acts as a true guide and a listener where she provides required support to the varied needs of each team member and considers each person in the team as an individual with his or her own set of belief system and capabilities. The team mate is not a cog in the wheel but is a contributing member is realised by the leader and accordingly factors hindering contributions and aspects promoting growth are taken care of by the leader. This once again increases the work output by reducing stress of the individual.

#### **1.4 apseudo transformational leader :**

It's essential to understand that transformational leadership can be for good or for evil. In the study of transformational leadership one cannot help to think of charismatic Adolf Hitler who personified transformational leadership. Bass (1998) coined the word pseudo transformational leader because he used his influence for causes, universally understood to be evil (Northouse, 2013). using the crisis of Great Depression. which "may set the stage for transformational leaders to be effective" (PSU WC, L10, P4) Does Hitler exhibit all the four elements of transformational leadership as discussed above ?Let us study each:

##### ***Idealized Influence :***

Can be equated to charisma which is the "special personality characteristic that gives a person superhuman or exceptional powers" that has the ability to captivate (PSU WC, L10, P4). and Hitler was bursting with charisma (Northouse, 2013) "Hitler told millions of Germans that they were Aryans and therefore "special" and racially "better" people than everyone else, something that helped cement the charismatic connection between leader and led" (Hitler,A.1939)

##### ***Inspirational Motivation***

Part of the motivation of those surrounding Hitler was due to his memoir *Mien Kampf*, which in English means "my struggle." It was these two volumes that his cronies would come to understand his views on race, politics, and what he deemed the historical right of the German people due to which members of Nazi political party committed heinous crimes.

##### ***Intellectual Stimulation***

These creative innovations from intellectual stimulation were a direct result of the policies put in place by Hitler (Northouse, 2013). Some examples of innovations created in the Third Reich are, rocketry, aviation, highway design, and the Volkswagen.

##### ***Individualized Consideration***

The individualized consideration factor requires that the leader listen and foster an environment to allow those under them to develop (Northouse, 2013). Hitler's on the other hand told his generals that he would "annihilate anyone who stood in his way" and "suppress any opposition with brutal force" (Shirer, 1990). His lack of trust for those around him ensured that the Reich would fail in a time that it needed to be strong. So Hitler though a true leader failed as he lacked the last but a very important character that of individual consideration which is based on India's (Advaita) Vedanta philosophy based on interconnectedness, interdependence and acceptance.

#### **1.5.WHAT INTERNAL RENOVATION NEEDS TO BE DONE WITHIN THE LEADER TO CONTINUE WITH THE JOURNEY?**

One must remember "Transformational Leadership is a leadership process that is systematic and consisting of purposeful and organised search for changes. This strategic transformation of organisations is not something that occurs solely through the idiosyncratic behaviour of charismatic geniuses as witnessed in Hitler . It is a discipline with a set of predictable steps.

Every human being through right practices can become a transformational leader. Vedanta philosophy talks about three qualities of human nature which are Sattva, Rajas and Tamas. Tamas is the inactive, ignorant and sleepy, a state of stupor and heedlessness. Rajas is the active, dashing state, a state of passion. And Sattva is the calm peaceful state, a state of knowledge and wisdom. (Venkat,1990)

A human being to become a transformational leader must move from being a Tamasik to a Sattvik being. The process has very simple guidelines and these are as follows:

**Firstly**, one should work or do karma. This Karma can be done according to Vedanta philosophy in three different ways:

1. sharirik(physically),
2. Vachik(verbally)and
3. Manasik(mentally).

It is essential to perform Karma or work. This Karma can be *karma* (good work) that will benefit all, *akarma* that is just neutral and has neither good nor bad effect on individual or society and is just a passage of time and finally *bikarma* that has been done with evil intention. A leader needs to practice karma all the time by working physically towards the good of others, uttering words for the good of others and thinking good of others.

**Secondly**, The Gita also says "Karmanyev Adhikaraste, Ma faleshu Kadachana." which means only on ones work/duty or karma one has the right and not on the fruits of it ever. It also says "Ma karmafal hetu bhuh ,ma te sangha astu akarmani" which implies that one should never perform for the desire of fruits and at the same time never be attached to inaction(during performance of work/Duty)

**Thirdly**, a transformational leader has to perform five MahaYajnas daily. These are

1. Deva Yajna, offering and thinking of the Supreme being ,
2. Rishi Yajna reading books or scriptures for enhancement of both intellectual and affective domain.
3. Pitri Yajna; offering gratitude to parents, ancestors, forefathers,
4. Mri or Manushya yajna where he offers to underprivileged and
5. Bhuta Yajna where he offers food to animals, or cares for plants.

These practices make the leader realise the interconnectedness and have practical wisdom to gradually realise what a mere speck he/she is in the backdrop of the Universe.

**Fourthly**, A leader must possess the practical wisdom as specified in Vedanta to reject unwise behaviour in the form of compulsive decision-making, short-termism, selfishness, grandiosity, and malfeasance (Oktaviani, Rooney, McKenna, & Zacher, 2015). One can't help but think of the great Ozymandias of Egypt who said ,  
"My name is Ozymandias, king of kings:  
Look on my works, ye Mighty, and despair!"

And now only, "Two vast and trunkless legs of stone  
Stand in the desert" "Nothing beside remains. Round the decay Of that colossal wreck, boundless and bare The  
lone and level sands stretch far away." (P.B.Shelly, 1818). Thus the leader must possess the wisdom to inculcate

practices through which one remains mindful , but non-judgemental where he acts ethically and with lucid social skill in accord with rules and duties set out in the Dharma without conceit or pride.

**Finally**, a transformational leader needs to be a Sattvic performer as "The Sattvic Performer performs actions, not because he is attached to actions, but with a view to set an example to the world. For, whatsoever a great man does, that alone the other men do; whatever he sets up as the standard, that the world follows" (Bhagwad Gita, III. 20-21).

As per Vedanta the world is in a state of constant flux and that, all that we perceive keep changing continuously. So through the Sattvic performers acts a change has to come in to his environment towards the betterment. He cannot remain a mere follower of existing practices.

A human being can reach the stage of a sattvic performer by cultivating the ability to self-analyse, delve deeply into every action and move from the stage of tamas, to rajas to sattva.

#### ***1.5a. Discarding fear and selfishness:***

This journey can only be achieved, if there is no fear attached, if the leader remains true to the cause fearlessly and he/ she knows that because he/she is on the guided path there can be no fear. If mistakes are accepted as experiences towards betterment, there is no fear of failure, if attachment to one's name, fame, position, power, authority is non-existent and only karma is being pursued, again there is no fear.

As Swami Vivekananda, the modern prophet of Vedanta puts it, "If there is one word that you find coming out like a bomb from the Upanishads, bursting like a bomb-shell upon masses of ignorance, it is the word fearlessness. Either in this world or in the world of religion, it is true that fear is the sure cause of degradation and sin. It is fear that brings misery, fear that brings death, fear that breeds evil."

Along with the fear selfish thoughts and self-centeredness are also discarded. There is an acceptance of one's sphere of responsibilities, mindfulness of the challenges that exist and following a path of ethics and humility and accepting Vedanta's philosophy 'I am part of a web of interdependent relationships'. As Swami Vivekananda puts it, "Ask nothing, want nothing in return. Give what you have to give; it will come back to you –but do not think of that now, it will come back multiplied a thousand fold-but the attention must not be on that "That is the evolution from personal goal to collective goal.

This gives in us a sense of power. Vedanta, therefore, says that when we become a Satvic performer, we are endowed by three *shaktis* or powers—

1. the power to know, that is develop an insight ,
2. power to desire, that is a will to perform acts driven by compassion and
3. power to do, that is act purposefully towards contribution to the whole

This philosophy does not talk about discarding worldly pleasures. According to Vedanta, the basic human pursuits are categorized as *Artha* (wealth, security, influence, power, fame, etc.) and *Kāma* (various forms of pleasure). The leader recognises the necessity and significance of *Artha* and *Kāma* to fulfill essential individual needs.

#### ***1.5b Embracing Dharma- disassociation, ethics and compassionate concern:***

But to be a transformational leader , one must realise as per Vedanta that *Artha* and *Kama* are situated within the overall context of a third pursuit, *Dharma* (ethics or a compassionate concern for others) (Dayananda, 2013),

.A transformational leader thus follows the path of Vedanta changing the attitude of disunion, confrontation, domination, aggression, and alienation leading to disharmony, dissatisfaction and non-acceptance within the organisation and self, to a sense of belonging, participation, collaboration, and satisfaction.

A leader needs to also accept that all situations cannot be controlled or changed. The delusion of omnipotence that is associated with megalomania and grandiosity that creates foolishness is the antithesis of Vedanta's wisdom (.Sternberg, 2004). So a transformational leader would never desire to be an OZYMENDIAS, and will only focus on practising the Dharma, as specified in Vedanta. Simply speaking, the leader would only perform what he/she can do or undo to fulfil his/her roles and responsibilities, ethically, in each situation, to bring their behavior into harmony with *Dharma* (Dayananda, 2013).

*Dharma* is the matrix of ethical values that supports and binds together the relationships we have with others (Dayananda, 2006). The *Mahabharata* defines *Dharma* with three words (Chaturvedi, 2007);

1. *ahimsa* (safety),
2. *dharana* (supportiveness) and
3. *prabhava* (nurturing).

A transformational leader must self cleanse oneself from petty egotism, highhandedness and domination to be able to provide an environment of complete security for his/her team members, supporting them wholeheartedly and nurturing their capabilities.



Therefore the leader following Vedanta philosophy who believes all beings are but spark of that one Divinity has a very positive approach towards all human beings, has faith in the innate ability and motivation of his/ her people and work towards the empowerment of them.

### **1.6.WHAT HAPPENS WHEN THERE IS DISSENT, NEGATIVE CRITICISM, SELFISH GOAL DRIVEN INTERESTS?**

There is again a systematic path that needs to be followed here. According to the Vedanta, infinite potential is there in every being, and a being varies from another only in the degree of manifestation of the divinity.

**Step 1:** The leader first needs to question himself/herself, whether she is supporting, sustaining, bringing together, and respecting all living beings and the environment (*Bhagavad Gita* 2,50 in Dayananda, 2012) because the Sattvic performer has imbibed this knowledge and hence spontaneously has a great regard for all human beings. Or is his/ her own actions in relation to each stakeholder is *adharma* (unjust) or *anacara* (oppressive).

**Step 2:** the leader should not hate anyone. As per Swami Vivekananda the difference between weakness and power, darkness and light is only quantitative and not qualitative. Everyone is a part of a universal being. So the leader should not criticise but attempt to help if possible. If it is not possible, restrain yourself from supporting any further, send blessings but allow that person to follow his/her own path. Criticising others is an useless expenditure of energy and should never be followed by you.(Swami Vivekananda,1903)

**Step 3:**the leader needs to practice the wisdom of acceptance saying “We often find that things do not turn out the way we want even though we try very hard to achieve our desired outcomes (. Baltes &Staudinger, 2000). Using this perspective, we are able to receive the results of our actions with an attitude of *samatvam*, non-entitled, composed or equanimous (mindful) acceptance when things do not go our way (Dayananda, 2000). So there emerges a leader with this attitude which influences the behavior and work of others in group efforts towards achievement of specified goals in a given situation .

Thus the leader is freed from the emotions of anger, resentment, vengeance and stop being judgemental. It is easy for the leader then to perform all five functions i.e., Planning, Organizing, Staffing, Directing, and Controlling to achieve goals. He/She becomes illuminated to act in an intentional, compassionate, and holistic manner (Majmudar & Tahora, 2012) where she reassesses her objectives, estimates resources and continues with her path of meeting those practising Dharma throughout.

So, when success beckons they know that many interconnected factors and people have contributed to that .Freed of arrogance and conceit the leader accepts with equal humility and gratitude acknowledging that success is a mere part of a greater plan.

### **REFERENCES:**

- Baltes, P. B., & Staudinger, U. M. (2000). Wisdom: A metaheuristic (pragmatic) to orchestrate mind and virtue toward excellence. *American Psychologist*, 55(1), 122
- Bass, B. M. (1998). The Ethics of Transformational Leadership. In J. Ciulla (ed.), *Ethics: The heart of leadership* (pp.169-192). Westport, CT: Praeger
- Chaturvedi, B. (2007). *The Mahabharata—An inquiry in the human condition*. New Delhi: Orient Longman Private Limited (Śānti-parva 109,10-11-12; Vana-parva, 207,77).
- Hitler .A.Hitler speaks. (2013). [Web Graphic]. Retrieved from <http://www.history.co.uk/explore-history/ww2/nazi-germany/photo-gallery.html>
- Majmudar, N., & Tahora, S. (2012). *Living the vision of oneness*. Paris: Discover Vedanta Publications.
- Northouse, P. (2013). *Leadership: Theory and practice*. (6 ed.). Thousand Oaks, California: Sage Publishing.
- Oktaviani, F., Rooney, D., McKenna, B., & Zacher, H. (2015). Family, feudalism and selfishness: Looking at Indonesian leadership through a wisdom

- lens. *Leadership*. <https://doi.org/10.1177/1742715015574319>.
- Pennsylvania State University World Campus (2013). PSYCH 485: Leadership in Work Settings. Lesson 10: Transformational Leadership. Retrieved from: [https://courses.worldcampus.psu.edu/sp13/psych485/002/content/10\\_lesson/04\\_page.html](https://courses.worldcampus.psu.edu/sp13/psych485/002/content/10_lesson/04_page.html)
- Sarowardy. M. Hasan, Halder. Deb Proshad, Phillips. Sharon Campbell, From Managerial to Transformational Leadership, American Journal of Operations Research, 2019, 9, 219-234, <http://www.scirp.org/journal/ajor>
- Shelly,P.B. Ozymandias of Egypt,retrieved from <https://www.wussu.com/poems/pbsooe.htm>
- Shirer, W. (1990). *The rise and fall of the third reich*. New York: MJF Books
- Swami Dayananda Saraswati. (2000). *Talks and essays*. Rishikesh: Sri
- Gangadhareshwar Trust.
- Swami Dayananda Saraswati. (2006). *Living intelligently*. Chennai: Arsha
- Vidya Research & Publication Trust.
- Swami Dayananda Saraswati. (2012). *Srimad Bhagavad Gita*. Chennai: Arsha Vidya Research and Publication Trust.
- Swami Dayananda Saraswati. (2013). *Sadhana and Sadhya*. Chennai: Arsha
- Vidya Research & Publication Trust.
- Swami Vivekananda, 1903 translated from Shami Bibekanandar Bani o Rochona, Prokashok Shami Gyanatmananda, Udbodhon Karyalay 1487 publishing right –Belur Math.
- Swami Vivekananda, Inspiration, The luminous Thoughts of Swami Vivekananda, Ramakrishna Math, Pune-30, Swami Vivekananda's 150<sup>th</sup> Birth Anniversary Commemorative Release.
- Swami Vivekananda, Perpetual Calendar, Ramakrishna Math, Hyderabad.
- Venkat R. K. Transformational Leadership and Vedanta Philosophy, The Economic Times
- Bombay, 11 January 1990, p. 7.
- [https://www.managementstudyguide.com/leader\\_versus\\_manager.htm#google\\_vignette](https://www.managementstudyguide.com/leader_versus_manager.htm#google_vignette)

## **Impact of Blended Constructivist Pedagogical Teaching Practices on achievement in Mathematics of Science Stream Students of goa state**

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### **Abstract**

*In this fast-track, modern and digital world, Blended Constructivist Pedagogical Teaching Practices can become “Win–Win” strategy in teaching learning. This is well appropriate and instrumental specially during post-pandemic instructional academic years in future, from secondary education to higher education. In this experimental study researcher’s attempt is to provide evidence on “impact of Blended Constructivist Pedagogical Teaching Practices on achievement in mathematics subject of Science Stream of Goa state”. Also analysed how successful implementation of this teaching practice improves attitude of student towards learning Mathematical Concepts. In this present experimental study two groups were formed of 11th grade Science Stream students in randomized manner i.e. Control Group (50 Students) and Experimental Group (50 students). Researcher taught same concepts of Mathematics in Traditional Pedagogical Teaching Practices to Controlled Group and with Blended Constructivist Pedagogical Teaching Practices to Experimental Group. Researcher practiced this intervention for six weeks. Pre-Test and Questionnaire Survey Test were administered before intervention, after six weeks Post-Test and Questionnaire Survey Test were administered to both the groups. After data Analysis researcher found that use of Blended Constructivist Pedagogical Teaching Practices able to boost level of achievement in Mathematics Subject and also inculcate positive attitude towards learning Mathematical Concepts. In this study researcher noticed positive relationship between Blended Constructivist Pedagogical Teaching Practices and achievement in Mathematics subject of students pursuing Science Stream. Whereas, Traditional Pedagogical Teaching Practices shows relatively less Level of Achievement and attitude of students towards learning Mathematical Concepts due to its pessimistic and Teacher-Centred approach, use of traditional and dry abstract methods of teaching. This present study researcher put more emphasis on Student-Centric and Experiential Learning Approach in blended form. Optimum use of digital learning and face-to face learning methodologies using Constructivist epistemology was highlighted as more outcome oriented in education system of 21st century.*

### **Introduction**

Constructivism is considered as an epistemological basis of analytical subjects like Science and Mathematics at Secondary and Higher Secondary level of School Education. The method and procedures used for constructing Scientific and Mathematical Conceptual Knowledge by teachers, inside and outside classroom considered as very important. It helps for development of Problem Solving Ability, Critical Thinking and Scientific Temperament of the young minds. To create motivated and independent learner of the 21st century. It becomes important for all Schools and Higher Educational Institutes to adopt Constructivist Pedagogical Teaching Practices in their classrooms. Constructivist Theory lay its emphasis on Learner-Centred and Experiential Learning. Where entire

focus is on Activity Based Learning related to real-life situations. Teacher's role is to facilitate learning and monitoring progress of student's activity and to guide them for linking new learning experiences with their Prior Knowledge, Insights and Beliefs. This role of teacher helps learner to become Self-regulatory, self-mediated and self-disciplined. Metacognition is the effective approach used by Constructivist Learner to achieve his/her target by evaluating and monitoring his on-going task from planning to execution and then reflecting over their observations during incubation stage. "A student who is intrinsically motivated undertakes an activity for its own sake, for the enjoyment it provides the learning. It permits, or the feeling of accomplishment it evokes" (Lepper, 1988, P. 290). Hence intrinsically motivated learner can able to generate new, innovative ideas or knowledge successfully, then inactive, passive and demotivated learners.

### **Rationale of the study**

Constructivism is the popular and innovative concept in contemporary Science Education. In the 21st century all Committees and Commissions highlights scope and implementation of the Constructivist Approach from foundational level of education. Successful implementation of this approach in today's classroom helps students to build or develop their capacity of being "Active Little Scientist", As students actively construct new knowledge based on Experiential Learning by sharing their ideas in socially inclusive classrooms. The basic idea of this present study is to observe and understand impact of Blended Constructivist Pedagogical Teaching Practices on Achievement in Mathematics Subject of Science Stream Students of Goa State.

### **Statement of the study**

"Impact of Blended Constructivist Pedagogical Teaching Practices on Achievement in Mathematics Subject of Science Stream Students of Goa State"

### **Operational Definitions**

#### **Constructivism**

An approach to learning that holds that people actively construct or make their own knowledge and that reality is determined by the experiences of the learner' (Elliott et al., 2000, p. 256).

#### **Constructivist Pedagogical Teaching**

The theory of knowledge, especially with regard to its methods, validity, and scope, and the distinction between justified belief and opinion. It is a teaching method or art, science or practice of teaching using Constructivist Theory. The approach in which Knowledge and skills are imparted in an Educational Context.

#### **Blended Learning**

A style of imparting education in which students learn via electronic and online media as well as offline face-to-face class activities in a planned pedagogical valued manner.

#### **Achievement in Mathematics Subject**

Achievement in Mathematics can be measured through scores taken from semester exam or formative exam. Question paper consist of open ended real-life situational problems, categorised into short answer questions as well as long answer questions. It is based on marks distribution according to question paper's Blue Print structure. In the present study Achievement in Mathematics is defined as the total marks obtained by the students in an examination for particular academic year.

### **OBJECTIVES OF THE STUDY** □

- ✓ To study whether there exists significant difference in Blended
- ✓ Constructivist Pedagogical Teaching Practices with respect to level of Achievement in Mathematics of Science Stream Students of Goa State. □
- ✓ To study whether there exists significant difference in Traditional Pedagogical Teaching Practices with respect to level of Achievement in Mathematics of Science Stream Students of Goa State. □
- ✓ To study whether there exists significant difference in Blended Constructivist Pedagogical Teaching Practices with respect to attitude of students of Science Stream Students of Goa State towards Learning Mathematical Concepts. □
- ✓ To study whether there exists significant difference in Traditional Pedagogical Teaching Practices with respect to attitude of students of Science Stream Students of Goa State towards Learning Mathematical Concepts. □

- ✓ To study whether there exists significant relationship between Blended Constructivist Pedagogical Teaching Practices and level of Achievement in Mathematics of Science Stream Students of Goa State.

### DELIMITATIONS OF THE STUDY

1. The present study is delimited to North Goa District of goa state only.
2. The present study is delimited to Goa Board Students only.
3. The present study is delimited to 11th Grade students only.
4. The present study is delimited to General Science Stream only.

### METHODOLOGY

#### POPULATION AND SAMPLE

The population under study was General Science Stream 11th Grade Students from Higher Secondary School in Goa State. The sample for the study taken as hundred General Science Stream 11th Grade Students from city based Higher Secondary School in Goa State. Fifty students (inclusive of Male, Female, Rural, Urban etc.) were taken in Controlled Group and Traditional Pedagogical Teaching Method was used for teaching learning. On the other hand, another fifty students (inclusive of Male, Female, Rural, Urban etc.) were taken as Experimental group and Blended Constructivist Pedagogical Teaching Practices were used in teaching learning. Initially questionnaire survey and Pre-Test were administered, after intervention given to Experimental group an Achievement Test (Post – Test) and questionnaire survey were given to assess Level of Achievement in Mathematics Subject and Attitude of Students towards learning Mathematical Concepts.

### RESEARCH DESIGN

In order to experiment the Blended Constructivist Pedagogical Teaching Practices, total 100 students belong to the 11th Grade, General Science Stream were selected on random basis from one city based Goan Higher Secondary School. In this experimental study both groups were under treatment for six weeks. During this study Controlled Group and Experimental Group were intervened separately in two different classrooms. Same content from mathematics syllabus was taught by Traditional Pedagogical Teaching Method to Controlled Group and by Blended Constructivist Pedagogical Teaching Practices for Experimental Group. It is necessary to note that before starting treatment a Pre-Test conducted for both the groups. It is also necessarily given a questionnaire survey test to keep check of the attitude of the students in learning Mathematical Concept from both the groups. After completion of an intervention, Researcher administered Achievement Test (Post – Test) & Questionnaire Survey Test to assess Level of Achievement in Mathematics Subject and attitude of students towards learning Mathematical Concepts. Available data from both the tests were used for Data Analysis.

### STATISTICAL TECHNIQUES USED

Under this study Researcher considered two Dependent Variables I.e. Achievement in Mathematics Subject and The attitude of the student towards learning Mathematical Concepts. The Independent Variable for the study will be Constructivist and Traditional Pedagogical Teaching Practices

To investigate research problem Pre-Test and Post-Test scores were taken as raw Data. Using SPSS (Statistical Package for Social Sciences) software, Paired Sample Test Score Difference & t-test (Karl Pearson's Correlation Coefficient) were calculated to test hypothesis and to generate results.

### DATA ANALYSIS

EXPERIMENTAL GROUP (ACHIEVEMENT)	PAIRED DIFFERENCE				t	df	Sig (2-tailed)
	Mean	S.D	Std. Error Mean	95% Confidence			
				interval of the Difference			
				Lower	Upper		



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Difference of Post-Test & Pre-Test Score	4.62	4.32	3.23	2.34	7.82	3.62	49	0.01
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**Table 1**

From above table (Table 1). It is clearly indicating that there exists significant difference between Blended Constructivist Pedagogical Teaching Practices and level of achievement in mathematics subject of Science Stream student of Goa state

EXPERIMENTAL GROUP (ATTITUDE)	PAIRED DIFFERENCE					t	df	Sig (2-tailed)
	Mean	S.D	Std. Error Mean	95% Confidence interval of the Difference				
				Lower	Upper			
Difference of Post- Test & Pre-Test Score	4.00	3.97	2.03	2.96	8.03	3.01	49	0.02

**Table 2**

From above table (Table 2). It is clearly indicating that there exists significant difference between Blended Constructivist Pedagogical Teaching Practices and level of attitude towards learning mathematical concept of Science Stream students of Goa state

CONTROLLED GROUP (ACHIEVEMENT )	PAIRED DIFFERENCE					t	df	Sig (2-tailed)
	Mean	S.D	Std. Error Mean	95% Confidence interval of the Difference				
				Lower	Upper			
Difference of Post- Test & Pre-Test Score	2.03	2.31	1.23	1.03	3.78	1.73	49	0.57

**Table 3**

From above table (Table 3). It is clearly indicating that there does not exists any significant difference between Traditional Pedagogical Teaching Practices and level of achievement in mathematics subject of Science Stream students of Goa state.

CONTROLLED GROUP (ATTITUDE)	PAIRED DIFFERENCE					t	df	Sig (2-tailed)
	Mean	S.D	Std. Error Mean	95% Confidence  interval of the  Difference				
				Lower	Upper			
Difference of Post- Test & Pre-Test Score	1.96	1.90	0.92	1.04	3.50	0.93	49	0.59

**Table 4**

From above table (Table 4). It is clearly indicating that there does not exist any significant difference between Traditional Pedagogical Teaching Practices and level of attitude towards learning mathematical concept of Science Stream students of Goa state.

Calculated R-value ( $r = 0.193$ ) and is significant at 0.01 level of Significance, therefore researcher fails to accept null hypothesis. Hence there exists significant relationship between Blended Constructivist Pedagogical Teaching Practices and level of Achievement in mathematics of science stream students of Goa state

## CONCLUSION

In this experimental research study researcher tested “Impact of Blended Constructivist Pedagogical Teaching Practices on Achievement in Mathematics Subject of Science Stream Student of Goa State” and also collected evidences to check how same Teaching Method can influence attitude of the students pursuing Science Stream towards learning Mathematical Concepts. Using scores obtained through Pre-Test and Post-Test of Controlled group (50 students) and Experimental group (50 students). Researcher analysed data using SPSS software. By testing hypothesis researcher tried to interpret data and concluded that impact of Blended Constructivist Pedagogical Teaching Practices increases level achievement in Mathematics Subject of Science Stream Student of Goa State, hence positive improvement also noticed by researcher in attitude of students towards learning Mathematical Concepts. In other hand Traditional Pedagogical Teaching Practices do not add much in Level of Achievement in Mathematics Subject of Science Stream Students of Goa State in comparison with Blended Constructivist Pedagogical Teaching Practices due to Pessimistic and Teacher-Centred Approach. Students develop disliking behaviour towards Mathematics Subject which shows negative impact on attitude of students towards learning Mathematical Concepts. Researcher also noticed positive relationship between Blended Constructivist Pedagogical Teaching Practices and Level of Achievement in Mathematics Subject of Science Stream Students of Goa State. From this present Experimental Study researcher concluded that Blended Constructivist Pedagogical Teaching Practices can become very effective and instrumental to cater diverse needs of students in Meaning Making Process, Concept Formation, Drill and Practice of real-life related problems to attain mastery over the Concepts of Mathematics Subject. If teacher facilitate learning by providing scaffolding and encourage Guided Participation of students in activities to construct new knowledge and link it with their Prior Knowledge, Insights and Beliefs in Socially Inclusive Classroom Setting, no longer Mathematics Subject will remain as dry and complex subject. Combination of Blended Learning with Constructivist Pedagogical Teaching Practices will surely become most popular Method of Teaching in this digitalised world, with lots of reforms in ICT to cater educational needs of students.

## BIBLIOGRAPHY

- Arends, R. I. (1998). *Resource handbook. Learning to teach* (4th ed.). Boston, MA: McGraw-Hill.
- Brooks, J., & Brooks, M. (1993). In search of understanding: the case for constructivist classrooms, ASCD. *NDT Resource Center database*.
- Copple, C., & Bredekamp, S. (2009). [\*Developmentally appropriate practice in early childhood programs\*](#). Washington, DC: National Association for the Education of Young Children.
- Dewey, J. (1938) *Experience and Education*. New York: Collier Books.
- Driscoll, M. (2000). *Psychology of Learning for Instruction*. Boston: Allyn & Bacon
- Elliott, S.N., Kratochwill, T.R., Littlefield Cook, J. & Travers, J. (2000). *Educational psychology: Effective teaching, effective learning* (3rd ed.). Boston, MA: McGraw-Hill College.
- Ernest, P. (1994). Varieties of constructivism: Their metaphors, epistemologies and pedagogical implications. *Hiroshima Journal of Mathematics Education*, 2(1994), 2.
- Fox, R. (2001). [\*Constructivism examined\*](#). *Oxford review of education*, 27(1), 23-35.
- Honebein, P. C. (1996). [\*Seven goals for the design of constructivist learning environments\*](#). *Constructivist learning environments: Case studies in instructional design*, 11-24.
- Oliver, K. M. (2000). Methods for developing constructivism learning on the web. *Educational Technology*, 40 (6)
- Phillips, D. C. (1995). [\*The good, the bad, and the ugly: The many faces of constructivism\*](#). *Educational researcher*, 24(7), 5-12.
- <https://eflmagazine.com/constructivist-theory-connection-and-rubrics>
- Tam, M. (2000). Constructivism, Instructional Design, and Technology: Implications for Transforming Distance Learning. *Educational Technology and Society*, 3 (2).
- Teaching Guide for GSIs. Learning: Theory and Research (2016). Retrieved from <http://gsi.berkeley.edu/media/Learning.pdf>
- von Glasersfeld, E. V. (1974). [\*Piaget and the radical constructivist epistemology\*](#). *Epistemology and education*, 1-24.
- von Glasersfeld, E. (1994). A radical constructivist view of basic mathematical concepts. *Constructing mathematical knowledge: Epistemology and mathematics education*, 5-7.
- Vygotsky, L. S. (1978). [\*Mind in society: The development of higher psychological processes\*](#). Cambridge, MA: Harvard University Press.
- <https://www.simplypsychology.org/constructivism.html>