EXPEDIENCY SUBSUMED IN EDUCATION

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ABSTRACT

In India the world renowned teaching methodologies are not emphatically employed in classrooms. It is time to see the lacking scenario in dept to make the use of them common everywhere.

KEYWORDS: Assumption Busting, Brain-Storming, Reverse Brain- Storming, Concept Mapping, Story Boarding on Walls, Incubation, Random Input, Questioning ,Slip Writing, Laddering, Brain-Sketching, Mystery Spot, education, teaching methodologies, school, James Frederick Ferrier, 'know that' & 'Know how', Van Leeuwen and Jewitt, COPE, Solan Consortium's Solan-C award

INDRODUCTION

Education is the best equalizer; if there is flaw in it then staggering growth of that country is obvious. The problems are at the philosophic level in the teaching field and they can be removed with the bold steps of research in the direction. Findings in the direction are groundbreaking and the fact is amazing that solutions are available but docility is a shed where Indian education system is dying. The time is to rehabilitate the Indian education system for the growth of the country.

The education system in India is under various changes provided new thoughts along with identifying hidden ignored basics of social development. It is very strange to see deficient system of delivering lifeless conceptualizing of fundamentals which just solves problems but never defines those problems with adequate time and it requires rapt attention.

In connection to this thought, as it is doubtful whether we can easily calculate the average of two same big digits without giving a pretty thought to it; No one teaches in school to take even the two same biggest digits as 1:1 and the average is also 1. It may be possible to see students know this trick because of extravagant schooling which may have already sensed investing time in identifying the problem and its possible aspects rather than spending time in mugging solutions. This article extend its serious concern majorly to the lower-middle-class students and respective mediocre learning centers. The life sets out of such a student with struggle and full on insulting experiences which complete the required near-to-life schooling or graduation in the first five or six years of career at workpalce. It means the early period of work in a n organization gives the ral school to a candiddate because out actual scholls fails in doing it. The flaw-ridden education system, for which students are privileged, leaves our generations unskilled, untrained and finally discouraged. When massive advancement is in resources and inventions like visual thesaurus, online research papers on rent (as at the website of oxford university press) and electricity generation from urinals, we can't afford watching hollow skeleton of education system.

To reinforce the fundamentals of career building, we need empirical move in the direction of practicing them. In basics, the term 'epistemology' is important; it was introduced by Scottish philosopher James Frederick Ferrier. Its contents are **'know that'** and **'Know how'**; the earlier is propositional and the latter is practical as an actual horse-ride is totally different experience than its conceptualization or classroom theorization in Physics. It is somehow the ignorance of philosophy which brings regression (returning to a less developed state) because we fail in distinguishing **'know that'** and **'know how'**. In his paper *On Denoting* and his later book *Problems of Philosophy* Bertrand Russell stressed the distinction between *'knowledge by description'* and *'knowledge by acquaintance'*. Gilbert Ryle is also concentrates differences between these variables in *The Concept of Mind,* as in *Personal Knowledge*, Michael Polanyi argues for same; applying the example that the discussion on act of balancing a bicycle cannot substitute the practical knowledge of real ride but it is important to understand how both are established and grounded; this position is essentially Ryle's argument that a failure to acknowledge the distinction between **'knowledge that'** and **'knowledge how'** lead to an infinite **regress**'.[2] This regression is the area of exploration in the context of learning and the given allusion about it makes us realize the importance of **'Epistemology'**.

Dealing with the role of a teacher, it is best to choose the dynamic role of a facilitator. Facilitation in the four calssroom walls or now more than these of it does not impel to go linear with strong explanations but to move holistically albeit dynamically. It is to take care of abstract issue of **'student response'** for everything tangible and non-tangible things in a classroom. The scene may like a facilitator notices the distraction of five students, digression of other fives, and reluctance of other sevens; Facilitation is to observe and feel the requirement of physical modals or visual aids, reducing size of the piece of chalk, visibility of front row students' ball pens, temperature of the room, providing assignments, expecting questions by students and the instinct of giving fresh and yet unexplored information for interest generation at the exact time when they are silentsly demanded by studetn learning. Overall there are all the things which are directly or indirectly associated in **'**the process of converting **'know that'** to **'know how'** to the possible extant**'**.

Moving from facilitator to facilitation, facilitation can't afford any classroom to be sole teacher-centric or student-centric. Many researchers support the idea of giving responsibility of classroom to students; It is mentioned in one of the research that 'There are three main styles of teaching didactic, propounded and facilitative. 'Didactic' is teacher-centered……but radical pedagogies have changed the teaching process completely and students are left with their own set objectives to think about all the information which they already know in relation with the learning topics……The Socratic method also focuses on non-authoritarian teaching'.[3] These lines clarify the extreme stands where we keep classrooms student-centric or teacher-centric, and this closed-end can't be successful in ever switching and fluctuating situations of classroom.

The use of inappropriate tools also lead us toward failure as using tools like 'visual aids' or 'texts' should never go with confined approach to restrain the multiplicity of the concept. Anything which mars the dynamism of any aspect of the mutual process of exchanging information is unethical unanimously though it may be the adoption of latest technology.

It reflects that we enjoy dealing with extreme sides; as earlier mentioned, some of us go for student-centric lectures ignoring the presence of a facilitator or vice-versa. To outlaw the use of even any latest device or aid knowing its hidden spoiling approach is unforgettable first step of delivering knowledge in present scenario.

In case of visual aids, if they are applied, and in the case of text, if it is evoking contrast and multiple approaches, then they are useful to be employed to counter balance the determining constituents of the information for a learner.

'Clearly applied visual studies with their focus on concrete problems potentially make a positive contribution. Equally 'texts' that contrast different approaches and are representative of multi-disciplinary approach, such as Van Leeuwen and Jewitt's (2000) *'Handbook of Visual Analysis'*, is beneficial to theoretical and methodological development'.[4]

Once we look forward to access new technology in teaching then a lot more devices and more than this, online approaches go under notice; To exemplify the statement, we can think of social science research software, SPSS (version 13),COPE (Committee on Publication Ethics: it is a forum for editors and publishers of peer reviewed journals to discuss all aspects of publication ethics) as this also advises editors on how to handle cases of research and publication misconduct, EUROPASS for making professional CV; Online visual thesaurus to show word-maps.

These details instruct the stake-holders in the field of education 'to be more critical consumer of their research project through fruits and frustration of it'[5] using the latest available tools.

A report, *'Best Practices in Online Teaching Strategies (July 2009)'* by Hanover Research Council details Solan Consortium's Solan-C award which is annually given to those who do outstanding work in the field of online teaching.

In 2003, the Consortium presented Bill Pelz, a Professor of Psychology at Herkimer Country Community College, with an award for his Principles of Effective Online Pedagogy. He gave three principles to teach well and out of them **the first is 'to let the student do the work'** (Student led discussions / Student find and discuss web resources / Student grade their own homework / Case study analysis); **the second rule is 'interactivity is the heart and soul of effective asynchronous learning'** and this is not the interaction between a teacher and student but the interaction of all the stakeholders whether living and non-living entities; It is among students, teachers, syllabi, concepts, books, internet, publishers, and all the accessories which are used in this art of learning like chalk, marker, pencil, sharpener, notebook, books; **the third is to 'strive for presence'**, according to Pelz there are three forms of presence for which we strive, '**Social'** (Affective: Emotions, Feeling & Mood /Interactive: Evidence of reading, attending, understanding, thinking about others' responses. /Cohesive: sense of belongingness), '**Cognitive'** (sustaining discourse through factual, conceptual, and theoretical knowledge discussion and the response depends on the source, clarity, accuracy and comprehensiveness of the knowledge), and '**Teaching'** (Facilitating the Discussion: Encouraging, Acknowledging, Reinforcing) and Direct Instruction (presenting content and questions).

The **'Center for Excellence in Learning and Teaching'** of Iowa State University gives a detailed data on creative teaching; it reflects that 'In order to teach creativity, one *must* teach creatively; that is, it will take a great deal of creative effort to bring out the most creative thinking in your classes. Of course, creativity is not the only required element for creative instructors. ***They must also know their fields*** and ***know how to create an appropriate learning environment***.

When will it be most important for you to offer direct instruction? When is discovery most important? What are your expectations and how can you best communicate them?'[7] To work creative is through knowing your field well and to recognize the need of applying perfect technique quickly whenever it is needed. It is all about dynamism which is in control of those who are veterans in their respective field.

There are some result-rendering techniques which can revolutionize the classroom; these techniques are 'Assumption Busting', 'Brain-Storming and Negative(Reverse) Brain-Storming', 'Concept Mapping', 'Story Boarding on Walls, Random Input', 'Questioning', 'Slip Writing', 'Laddering', 'Exaggeration', 'Brain-Sketching & Reverse Brain Sketching', 'Mystery Spot' etc..

Assumption Busting: An unquestioned assumed truth which helps those students who run-out of ideas.

Brain-Storming: Lateral thinking tool helps in finding creative solutions by producing new thoughts which look strange but they are improved on.

Reverse Brain- Storming: It analyses a short list of ideas unlike brainstorming which takes a lot more ideas messed up. It also thinks about the possibility of failure.

Concept Mapping: It is to make nodes and to link them with other nodes; revision is a key element in concept making because finding the cross connections unfolds mystery. (Figure 1)

Story Boarding on Walls: This is to allow students to write on boards on the walls; it may be cork board or pin up index cards. Cork Board or Pin up indexes may contain titles and sub titles to help students to know what category data should be written. Finally it is to see students comparing and easily connecting the written thoughts on all the walls and makes his vision broader.

Incubation: A student can use unconscious thinking to grow new fresh unpressurized ideas whenever time is available.

Random Input: It is to take any entity as let us say a Noun and then find its all the related aspect; it is for sure any one related aspect catalyze next creative leap.

Questioning: Instruct students to create a list of 100 questions of each respect without any instruction to ask them or answer them.

Slip Writing: This tool can be exercised when a large number of audiences are available; they may be given slip pads with assigned topics of titles to give them the feel of participation and collection of data.

Laddering: It is toggling between two abstractions and thus reviewing the hierarchal modal with 'why so?'. Exaggeration is one of the techniques which works with 'stretching' and 'minimizing'. This is called **Heuristics**; they are techniques for creative thinking and generating ideas. Commonly used heuristics include brainstorming, making sketches, forming analogies, and free writing. Other heuristics often used in education include, The Journalist's Questions (Who, What, When, Where, Why, How), SCAMPER etc. (Table 1)

Brain-Sketching: Brain-Sketching is Brain Mapping; there are certain tools on internet which are free and of sole propriety like Tony Buzan's iMindMap, Buzan being a leading developer of work in this area and a man who claimed to have invented mind maps. The visual thesaurus (www.visualthesaurus.com), an interactive dictionary and thesaurus that creates word maps between meanings and related words is also available. Reverse Brain Sketching is looks at a problem with anti-tradition approach to see new aspects of it.

Mystery Spot: In this technique an instructor sets up a mystery myth about anything and then eaves a large scope for the students to explore the unexplored ends of this story; through this process students learns new things with a great excitement.

It is very important to decide the level of challenge for students which should not overwhelm them but gives them a good opportunity to access the maximum skills. Generally, learning is inhibited by threat and enhanced by challenge.

Mihaly Csikszentmihalyi's pioneering work on the concept of 'flow' persuaded him to define occurring effortless

creative state when high levels of ability and high levels of challenge meet. For Csikszentmihalyi, achieving a state of "flow" requires that a learner should have clear goals and expectations, a degree of skill and chance to focus on practicing the skill, and direct and immediate feedback. (Figure 2)

Except the teaching techniques, there are multiple devices which are prepared to making the learning process more specific. There is latest example of 'Clickers'- a device which records the response of students at a particular condition; Professor Emeritus Corly Brooke, who successfully implemented clickers in her large-enrollment Human Development and Family Studies class at IOWA state university.(Figure 3)

Along with the adaptation of such devices, we need to take of learning difficulties like:

- **Dyslexia:** difficulty in reading and spelling

- **Dyscalculia:** difficulty with number and 'amount'

- **Attention Deficit:** difficulty paying attention by choice

- **Autistic Spectrum:** difficulty knowing what others are thinking/feeling

William Hazlitt defined two important terms profusely in one of his piece of prose that talent and the instinct of being genius are two totally different issues. Talent weans on and off with practice, and the innate inclination, which is the sting of genius, makes a person problem solver in any categorized field. To grow talent, there is need of deep discussion on problems unless it is not forte of an Indian student to calculate the price of odd quantities like 770 g or 999 g because the present system gives strong feelings as we try to find solutions without problems though it look very odd to mention. Ultimately you have your bucket full of solution-steps and the problem comprehension is missed usually. **Thus the applied knowledge is missed and we hesitate in solving new problems of the same family.** We are burdened of these tools by which set or fix problems can be solved but as the education system of Indian never allows you to spend more time with problems and leaves us unskilled and imperfect.

CONCLUSIONS

While caring the natural problems with the student in leaning we need a major improvement on the part of facilitation employing all sort of techniques like Assumption Busting, Brain-Storming, Reverse Brain- Storming, Concept Mapping, Story Boarding on Walls, Incubation, Random Input, Questioning ,Slip Writing, Laddering, Brain-Sketching and Mystery Spot .

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    (John Haron's method of learning or the interwoven ways of learning are experiential, presentational, propositional and practical. Propositional is to exemplify which is a common western pattern and presentational way of learning is generally overlooked.)

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APPENDICES

KEYWORDS: Problem Comprehension, Real-Time Teaching, Understanding Real Meaning of Facilitation, Knowledge That & Knowledge How (Epistemology), The Interwoven Ways of Learning: Experiential, Presentational, Propositional & Practical (Expediency Requirement), Learning Principals of Bill Pelz, A Professor of Psychology At Herkimer Country Community College, Negative (or Reverse) Brainstorming, Laddering, Exaggeration, Brain-Sketching
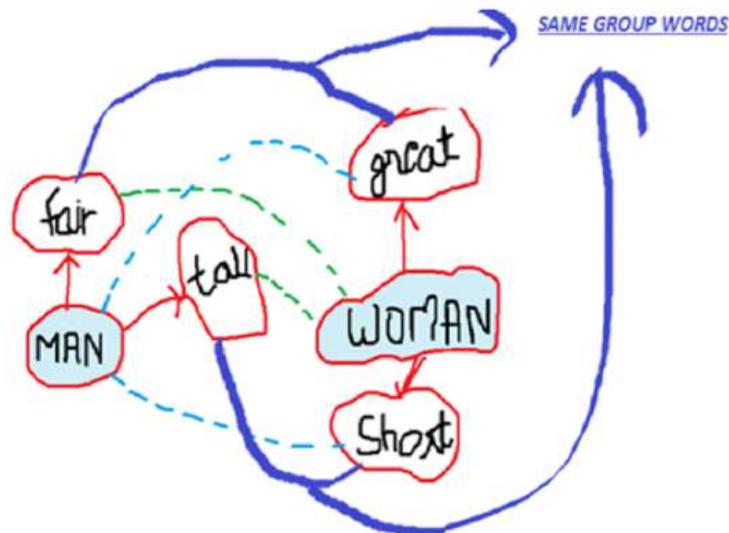

Figure 1

Table 1

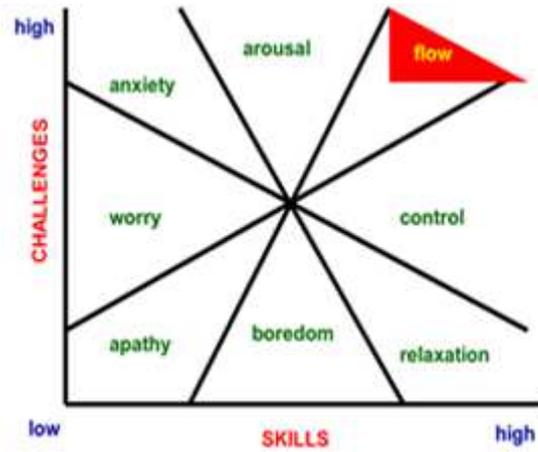| Forms of Exaggeration	Type	Examples
Exaggerate upwards	Magnify	I am a perfect student in my school.
Exaggerate downwards	Minify	I am a useless student in my school.
Exaggerate scope	Invade context	All the students are useless in my school.
Exaggerate significance	Aggrandize	All the students are useless/ useful in the world.
Exaggerate selectively	Caricature	All the students of English language are useless/ useful in the world.

Figure 2

Figure 3