Research Article

THE INEVITABILITY IN FOSTERING INGENUITY AMONG THE 21ST CENTURY LEARNERS

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ABSTRACT

The 21st century learners are natural inquirers. They learn through experiences and by working together with others, observing things and probing. They learn in spontaneous and incredible ways. The students need to be provided sufficient encouragement and freedom to learn on their own and at their own speed. Classrooms should principally inspire an environment of exploration, experimentation and dialogue. Teachers need to recognise the porous limitations that categorise various topics, accept the discrepancies in learners' capabilities and aptitudes, and deliver opportunity for each student to develop his or her strengths. This paper aims at identifying the characteristics of ingenuity in the 21st century learners, to recognise the factors that affect the ingenuity requirement, and to suggest measures to develop ingenuity among the 21st century learners. Also, the paper traces the correlation between ingenuity and Bhagavad Gita, which clearly portrays the practical meaning of ingenuity from the cultural perspectives in India.

INTRODUCTION

Now-a-days, it is seen that children are short of self-assurance and therefore demonstrate behavioural problems. Their levels of maturity are observed to be deteriorating critically in a society, which necessitates them to make matured judgments and preferences. This obstructs their normal capacities and accomplishments. As a result, powerful emotions of frustration and violence become deep-seated within them. Hence, the children ought not be compelled to do things, which they do not want to do. As the world becomes more and more complex, it becomes decisive for people to tackle and resolve the problems faced. In this situation, the role played by ingenuity deserves consideration. It influences our thinking, working, playing, creating and maintaining relationships, interacting with each other, finding solutions to problems, renovating things and circumstances, and justifying thought. It is also reflects the effects of human thinking and actions.

STATEMENT OF THE PROBLEM

The problem is entitled 'The Inevitability in Fostering Ingenuity among the 21st Century Learners'

OBJECTIVES OF THE STUDY

1. To identify the attributes of ingenuity in the 21st century learners.
2. To recognise the factors which affect the ingenuity requirement.
3. To trace the correlation between ingenuity and Bhagavad Gita.
4. To suggest measures to develop ingenuity among the 21st century learners.

METHODOLOGY ADOPTED

By means of intense grounded theory approach and construct making, the investigator identified the relevance of instilling ingenuity among the 21st century learners, and the factors that affect ingenuity requirement. Correspondingly, the investigator suggested measures to develop ingenuity among the 21st century learners. Also, in order to shape the contemporary learners into productive citizens of the 21st century, who possess the cultural traditions and value patterns of India, the investigator detected the indispensible traces of ingenuity in Bhagavad Gita. This highlighted the inevitability in fostering ingenuity among the 21st century learners.

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DISCUSSION OF FINDINGS

In place of the previous notion of the classroom compelling students to think and learn in one position all day, the teachers have to restructure the classrooms with the purpose of making the learning space more flexible. The resources in the classroom need to be developed and prearranged for the user-friendliness and suitability of all learners. The teachers need to guarantee that they are not just assisting one category of learner, but a comprehensive classes of learners with distinct multiple intelligences. This necessitates the creation of an adaptable learning environment that can convene the requirements of all learners. Such a reshaping of the classrooms to harmonise the necessities of every discrete learner will motivate learners to perform well in a pressure-free fashion.

Ingenuity denotes the characteristic of the learners for being clever, resourceful, inventive, skilful, original and imaginative. Ingenuity in education governs the modes of thinking, playing, working, intermingling and problem solving of the learners. It facilitates the learners to make upsensible selections between the positive and negative facets of concepts. It triggers the complete system to engage in an advanced and innovative method through open-ended communications, beneficial dialogues and thought fulinvestigations. The attributes of ingenuity are represented in Figure 1.

Figure 1 Attributes of Ingenuity

Ingenuity supports individuals in the preparation of using their viewpoints for efficient problem solving. It has instigated numerous scientific developments through applied science and is also apparent in the development of new social establishments and associations. Ingenuity includes the supreme complex human thinking processes, merging the opinions and actions of individuals both autonomously and supportively, to make the best of the accessible outlooks and manage problems.

Learners who have ingenuity consider and investigate novel perceptions, and think about their thought procedures from various view points. They examine and evaluate concerns authentically in order to generate significant learning experiences. They grow to be aware of the learning processes, and evaluate others' activities in comparable circumstances. This helps them to judiciously assess the experiences and recognise their effect from time to time, thus formulating predictions on their after effects and forthcoming developments. Along with producing excellent ideas, the learners obtain a sophisticated mind-set and vision that help them to constitute implications and benchmarks in all situations. They get ignited to employ technology to their enthusiastic ideas.

Ingenuity permits learners to scrutinise the products and processes of human creativity in multiple ways, and to study their effect on mind and humanity as a whole. It delivers possibilities for learners to understand and encourage in themselves the human capability to create, modify, realise and improve the significance of life. It highlights the methods by which man can activate an anticipated and constructive change, and evaluate the consequences. It emphasises both the importance of investigating the developments achieved by people across space, time and traditions, and the significance of taking time to consider these developments. In this manner, ingenuity rises above the act of creation alone, guiding the learners to inspect, replicate and experience the inventive process.

The Theory of Ingenuity sets forth the Ingenuity Paradigm. Human beings are practical problem-solvers. They use ingenuity in all the means through which they expect to solve their problems and accomplish their goals. Ingenuity may be methodological as well as societal. When there is a discrepancy between supply and necessity, ingenuity gap appears. Once we disconnect the two sides of the gap, we can inspect the characteristics that make our difficulties more problematic and also examine the influences determining whether we can continue.

Correspondingly, six factors were recognised, which guide our ingenuity requisite. These were changing values, extended time horizon, decreasing resources, rising complexity, increasing speed, and more surprises. This is diagrammatically represented in Figure 2.
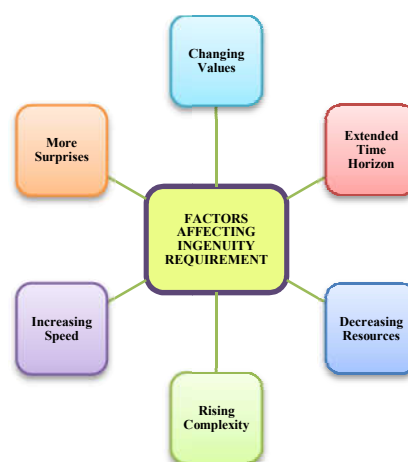

Figure 2 Factors affecting Ingenuity Requirement

The ingenuity theory also proposes some methods to tackle this ingenuity paradigm as follows:

1. Emphasis on increasing resilience
2. Identify difficulty of problems and solutions
3. Use distributed experimentation to search for solutions

The Bhagavad Gita illustrates karmayoga in chapter 3; which is a straight forward evidence of the applied implication of ingenuity from the traditional view points in India. The karmayoga depicts the need for people to involve in some kind of activity (karma) without egocentric intentions in this physical world. According to verse 17 in karmayoga:
yas tvātma-ratir eva syād ātma-tṛiptaśh cha mānavaḥ
ātmanyeva cha santuṣhṭas tasya kāryaṁ na vidyate

The implicit meaning behind this verse is that only the one who discovers pleasure in the self, who is illumined in the self, who cheers in and is pleased with the self, is completely satisfied; and for him, there is no duty. This verse highlights the need for internal spirit within individuals while engaged in an action, which provides them enjoyment and satisfaction. He/she gets overjoyed in the inner spirit, which he/she has learned to identify within himself/herself. The one who makes a sincere effort to obtain this essence will certainly emerge with flying colours in life.

For a student, his karma or duty is to learn. Once he understands his inner self, he executes his duty of learning with pleasure and happiness, rather than an obligatory task. Then it becomes the duty of the instructor to provide a favourable and stress-free environment in the classroom so that the learners can acknowledge and express their distinctive capabilities freely. This prepares the learners with the independence of self-expression, uniqueness, and prospects to associate with his inner self and also with his peers.

Most of the situations comprise a problem to be solved. This may be emotional, task-based or people-based. Being able to recognise techniques around a problem is thus a significant part of problem solving. This is not simply about solutions, but it is also about being able to precisely define and categorise problems.

Ingenuity can be developed in learners through numerous steps, as depicted in Figure 3.
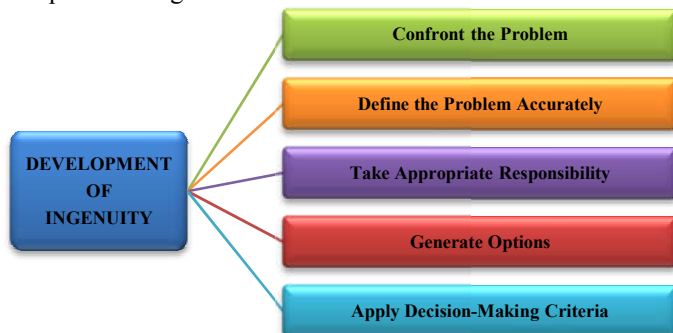

Figure 3 Steps for the Development of Ingenuity

The learners need to understand the prevailing situation thoroughly. If there is a problem to be solved, the first step is to confront the problem. If the issue is avoided, you will never involve in the problem solving activities required to move out there. The next step is to define the problem precisely. For this, the learner needs to gather information, determine what he/she knows about the concern, and do the needful to evaluate the situation accurately. Then, the learner needs to take proper responsibility. A significant function of problem solving is formulating suitable acknowledgments about who or what is responsible, a methodology that excessively internalises (by admitting one's own mistakes) or excessively externalises (by blaming others for the faults) will produce obstructions to problem solving as the learner may either take extreme responsibility and think defeated, or suppose that all others are answerable for the problem that occurred. The next step is to create options. This could be affected by making use of one's experiences, considering others 'view points, attempting the issue from a range of diverse tracks and produce options. Then, the learner needs to apply decision-making criteria. This involves recognising significant criteria to assess the options and determine whether the solution works or not. And if it doesn't work, the learner needs to be prepared to attempt an alternative approach till one does work. Occasionally the observable solution may be the best, and too much ingenuity can cause overcomplicating or over-engineering a solution. So it is always advisable to concentrate on the apt approach that will be most efficient at solving the problem.

Thus, ingenuity is the requirement of the day, which carves the 21st century learners to be expert employees, excellent inventors, farsighted modernisers and creative reorganisers of the society.

CONCLUSION

As stated by Marc Prensky (2001), the present-day learners, whom he calls as digital natives, have multitasking skills to facilitate their ability of dealing with distinctive tasks at the same time and bouncing between two ideas rapidly. Subsequently, we need to transform the former, generally established concept of 'one thing at a time' to gratify the needs of today's learners. This highlights the need to nurture them with information at a speedierrate. Ground-breaking developments and measures which are envisioned for making learners techno savvy, advancing creative thinking, smoothing both synchronous and asynchronous e-learning styles; ought to be incorporated to the contemporary curriculum. Such a re-framing of the classroom procedures helps to inculcate ingenuity in learners. Although it is a complex task regarding financial support, technical facilities and infrastructural services, we are obliged to incorporate these alterations so as to shape a generation of learners, who retain ingenuity in all regards. This underlines the instantaneous need and importance of the development of a modern classroom designing and a theoretical or hypothetical paradigm, which leads to the designing of a new educational taxonomy for the 21st century learners, which aims at moulding learners who possess ingenuity with reference to cleverness, resourcefulness, inventiveness, skilfulness, originality and imagination.

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