

## DEVELOPING SKILLS FOR 21<sup>ST</sup> CENTURY

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### ABSTRACT:

21<sup>st</sup> Century Skills as associated with Letter 'C' – Communication, Creativity, Critical Thinking, Collaboration... Yet there are other set of skills the students need to be successful in their career. 21<sup>st</sup> Century is not only being taught in class rooms but also a set of pedagogies. It is not only important that the faculty need to prepare their students to communicate well in English but also to communicate across culture, borders and perceptively. As the world evolves towards greater interconnectedness, the students are to be entrusted with a greater sense of responsibility of building a global society. Basic Linguistic Skills are essential, at the same time, an individual's ability to think out of the box, find creative solutions to the problems, collaborating with others, reaching consensus across national and cultural borders are also important. The present article aims at studying the important skills required for 21<sup>st</sup> Century, challenges in skill development and techniques for skill development.

**KEYWORDS:** STEM, lifelong learning, KWL Chart, project based learning.

### INTRODUCTION:

It is the need of the hour to arm the students with non-cognitive i.e., 21<sup>st</sup> century skills to prepare them with more STEM – Science, Technology, Engineering and Mathematics based job market. Thus the educational institutions need to be ready to response to this call to action and research on how exemplary the institutions accomplish the goal. To achieve success in evolving global economy- Creativity, Ingenuity and Innovation are the keys to success. Every Educational Institutions' responsibility is to prepare the youngsters for work and life in the 21<sup>st</sup> century. The emerging industries will generate different jobs which do not even exist now. So it is important that the future workforce need to be adaptable and flexible. The students need to learn imagining the unimaginable to nurture their creative talents. In this process they need to develop the following competencies:

- \*To preserve new ideas – Capturing
- \*To give one self tough problem to solve – Challenging
- \*To boost creativity by learning the innovative things – Broadening

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\*To associate with diverse and interesting people and things – Surrounding.

### **OBJECTIVES OF THE STUDY:**

- i. To study the skills required for the students of higher education
- ii. To understand the challenges in skill development
- iii. To learn about strategies for skill development

### **RESEARCH METHODOLOGY:**

The Study is based on secondary data which is obtained from Articles related to Skill Development.

### **SKILLS REQUIRED FOR THE STUDENTS OF HIGHER EDUCATION:**

**Knowledge Construction:** It happens when the students create a new knowledge by themselves rather than consuming or reproducing information. It happens when they participate and build a deep understanding of the concepts and content. The learning environments which are designed for knowledge construction need to promote self-directed and self-regulated learners as well as building grit.

When the students are unfamiliar with this kind of approach, they need to be scaffolding to assume a joint responsibility of learning. In this type of approach, the teacher acts as a facilitator. It is a student-centric learning environment which encourages them for a paradigm shift of expecting one convergent answer and towards deeper making meaning when they are learning.

**Real world problem solving :** It is also called Project based learning. It happens when the students are working to solve problems which has no current solution and wherein the students can implement their approaches. In this type of approach, they are encouraged to identify the problem, propose a feasible solution and share their ideas. It also leads to Design Thinking, where they are encouraged to be creative and learn from failures.

The faculty need to facilitate the real world problem solving skills of their students through modelling inquiry by supplementing with databases of real life data and further evaluating evidences from current events. They need to be encouraged with a positive attitude towards STEM careers. The knowledge which is constructed with real world problem solving will create



a foundation through which the students can engage in collaboration, self-regulation and communication.

**Self-regulation:** It is a key for 21<sup>st</sup> century skill to be independent learners. The students with a self-regulated plan can be problem solvers and can monitor their own progress which can reflect on their works with a given feedback. The self-regulation process motivates the students to control his or her own impulses to solve problems efficiently.

**Collaboration :** It occurs when the students takes on roles and further interact with other groups during the work of producing a product. Such collaborative interactions includes accepting leadership roles, decision making, communicating, building trust, managing conflicts and reflecting. The students who collaborate can solve higher level problems and capable of creating a better solutions to fix the problem.

**Skilled Communication:** It is defined as a type of communication which is used to explain or present information. The skilled communicators will present their ideas and can demonstrate on how can they use the relevant evidence. It is the ability to connect to a product for the needs of specific audience. The students need to consider the media through which they present their ideas for an appropriate audience.

**Use of ICT for Learning :** Using ICT for learning helps them to design, create, represent, evaluate or improve a product and it is not merely demonstrating the knowledge. While using ICT, they need to choose when and how to use it to recognize a credible e-resources.

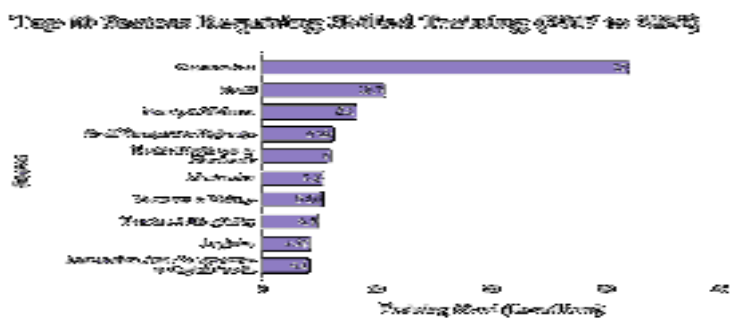


Figure 1 Source :Ministry of Skill Development and Entrepreneurship Annual Report 2016-17

### SKILL INDIA FOR SKILL DEVELOPMENT :

National Skill Development Mission of India or Skill India is a campaign launched by Sri Narendra Modi. It is managed by NSDC – National Skill Development Corporation of India under the

Ministry of Skill Development and Entrepreneurship. The Programme was launched during 2015 with an aspiration to train over forty crore people in India in different skills by the year 2022. It was launched with various other initiatives viz., PMKVY – Pradhan MantriKaushalVikasYogana, National Skill Development Mission, Skill Loan Scheme, National Policy for Skill Development and Entrepreneurship and Rural India Skill.

The Country witnessed a great economic growth in the recent years which is driven by the New age industries. Due to the raise in the purchasing power of the people, a new level of service quality is demanded. As per NSDC - National Skill Development Corporation, the following are the classification of the skills and types of training required.

Level	Type of Skills	Description
1	Semi Skilled	Short Term Courses, on the job training and focused interventions
2	Skilled	They are specific to an occupation and acquired through vocational or technical training
3	Highly Skilled	They involves Highly commercial or technical level operations which is acquired through Formal Education – Diploma, UG or PG
4	Highly Skilled with Specialization	They refer to skills with high specialization ie, Design and Research which is acquired through a doctoral degree with many years of work experience in a specific field.

#### **CHALLENGES IN THE SKILL DEVELOPMENT:**

The country is facing the following challenges in the skill development by keeping in view the policy framework and current infrastructure:

- The present infrastructural facilities available in the country are inadequate by considering the heavy demand for skilled workforce.
- Unavailability of highly skilled trainers is an important issue. The faculty members need to be motivated and skilled to take the higher responsibilities



- The people's outlook towards skill development is still traditional and the students' enrolment in vocational training is another challenging task.
- There is a need for sufficient support from various stakeholders, as there is a limited buy-in from the corporate sector, the progress of various initiatives is very slow
- There is a skill gap and skill mismatch between what the industry needed and what the educational training institutions are imparting.
- Lack of Industry-Academia Interaction is one of the challenging aspect.
- The curricula is not including Skill development as a module



Figure 2 : Figure showing growing skill gap ( Source : NSDC)

## DEVELOPING SKILLS FOR 21<sup>ST</sup> CENTURY :

The Employment market across the globe including India, is undergoing a tectonic shift. Inclusion, Growth and Transformation is the future of work in India. The Educational Institutions need to focus on transformative technologies. The skill development needs to include automation, time optimization, productivity maximization, digital platforms creation and formalizing informal operations as the key **aspects**. **The following are the steps involved in developing skills for 21<sup>st</sup> Century:**

1. Lead the Learning by the students : When the students feel empowered to learn, a best learning environment will be created. Effective faculty members need to be moderators by inspiring and guiding students to discover themselves. The Students need to be a self-learner which guarantees life long learning.
2. Creating an Inquiry based class room environment : Students need to be encouraged about questioning and exploring the answers for the same. Both faculty and students need to 'wonder out loud' when they encounter a new information. As per KWL Chart – they

should know ‘What do you Know?’, ‘What do you want to know’ and ‘What have you learned’ – these motivate the students towards a real self-motivated learning.

3. Encouraging Collaboration : Sharing classroom is an essential for an active and healthy classroom. Man is a social animal and students are the social beings and they should be provided with an opportunity to allow to form small groups and pairs for encouraging them to develop their listening and speaking skills.
4. Developing Critical Thinking Skills : Learning is above remembering and memorizing. Critical thinking skills lead the students beyond a simple comprehension of information. These skills are helpful for problem solving in new situations, making inferences and generalizations, combining information in new patterns, making judgements based on various evidences and criterion.
5. Encouraging Creativity : Creative activities need to be designed by the faculty members to encourage creativity by expressing what they have learnt in innovative ways.

## CONCLUSION :

The strategies discussed above need to be implemented to develop 21<sup>st</sup> century skills. First and foremost, the faculty members need to be trained in imparting these skills among students. They are to be properly motivated and appreciated. The students need to be given enough time to adjust with the new way of learning environment. Many emerging industries and fastest growing jobs rely on employees’ creative capacity i.e. the ability to question the herd, to think unconventionally, imagine new scenarios and to produce astonishing work.

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