



macmillan
education
India

For Private
Circulation only

TeacherTalk

YOUR SPACE YOUR PLATFORM

Quarterly Newsletter, Volume 1, Issue 1, January-March 2018

What is 21st Century Education going to look like.....01
Characteristics of a 21st Century Classroom.....03
New Skills for a New World.....05
Key Elements of 21st Century Classroom Design.....07

What is 21st Century Education going to look like. Are our Students prepared?

We often hear parents and teachers commenting that children are way too smart these days. Well, they ought to be if they have to make sense of, and manage within our rapidly evolving world. The demands of the 21st century are very different from the previous one which centered around acquisition of knowledge and working within a structure. The ecosystem today is fluid and constantly being reshaped. As soon as you develop skills for a particular role, the demands of the role change. Jobs no longer pay for reproduction of knowledge but for application of the same.



Are our Students Prepared?

In this age, where Dr. Google knows everything, what should our students be taught? Many students have faced situations where they are not sufficiently equipped for a job, in their field of study. If taken a managerial position most of them are not been able to write clearly, manage a project, give a presentation, conduct a meeting, or create a budget.

This puts a great responsibility on our educators and the education policy makers to respond to this challenge by changing what students learn, how they learn and apply their learning. It also brings to the fore the need for continuous learning as adults and this self-learning.

Therefore, a pressing need is for our education system is to focus on making children competent to face the challenges being thrown up by our increasingly complex environment. K-12 education needs to identify and develop knowledge, skills and attributes required for life and work in the 21st century.

Focus areas of development

1. Global Awareness

Global awareness enables students to learn from and work collaboratively with individuals from diverse cultures, religions, ideologies, and lifestyles in an environment of openness and mutual respect.

2. Financial Literacy

Financial literacy refers to the skillset individuals need to make informed economic decisions. The curriculum should enable students to understand ways to manage money, banking, understanding taxes and insurance, and understanding the implications of consumer fraud and identity theft.

3. Health Literacy

Health literacy refers to possessing understanding of good health and its long term benefits. This includes a working knowledge of ways to access health information and services and of preventative health measures.

4. Environmental Literacy

Environment literacy provides students an understanding of the underlying scientific principles,

values systems, and the cultural, aesthetic, ethical and emotional responses that the environment invokes.

5. Visual Literacy

With the advent of smart phones, digital cameras, graphics packages, streaming video etc., the need for having use of visual imagery for communication has increased. It is evident that students need to have good visualization skills to be able to decipher, interpret, detect patterns, and communicate effectively.

6. IT Literacy

There isn't a sphere which IT has not permeated – it would be suicidal for anyone to not have the requisite IT skills to search for, collate, analyse, understand and present data. This would involve basic knowledge of spreadsheets, word processing, and coding as basic technical skills.

We need to develop a generation of critical thinkers, collaborators, communicators, environmentalists, & ethical IT users with emphasis on life-long learning.



Characteristics of a 21st Century Classroom

Teachers need to embrace new teaching strategies that are radically different from those employed in the 20th Century classrooms. The curriculum must be more relevant to what students will experience in the 21st Century workplace. The 21st Century classroom is student centered, not teacher centered. Teachers function as facilitators of learning and not lecturers. The students are learning by doing, and the teacher is, helping students as they work on projects. Students learn to use the inquiry method, and to collaborate with others--a microcosm of the real world they will experience once they leave the classroom.

Students no longer study each subject in isolation. Instead, they work on interdisciplinary projects that use information and skills from a variety of subjects and address many essential academic standards. For example, books assigned in reading or English, may be set in a country that is also being explored in social studies. The final reading of an English book report may require that specific social studies standards be met as well. Textbooks are no longer the major source of information.

Students use multiple sources, including technology, to find and gather the information they need. They might keep journals, interview experts, explore the Internet, or use computer software programs to apply what they have learned or to find information. Instead of being reserved only for special projects,

technology is seamlessly integrated into daily instruction. In this new classroom, flexible student groupings, based on individual needs, are the norm.

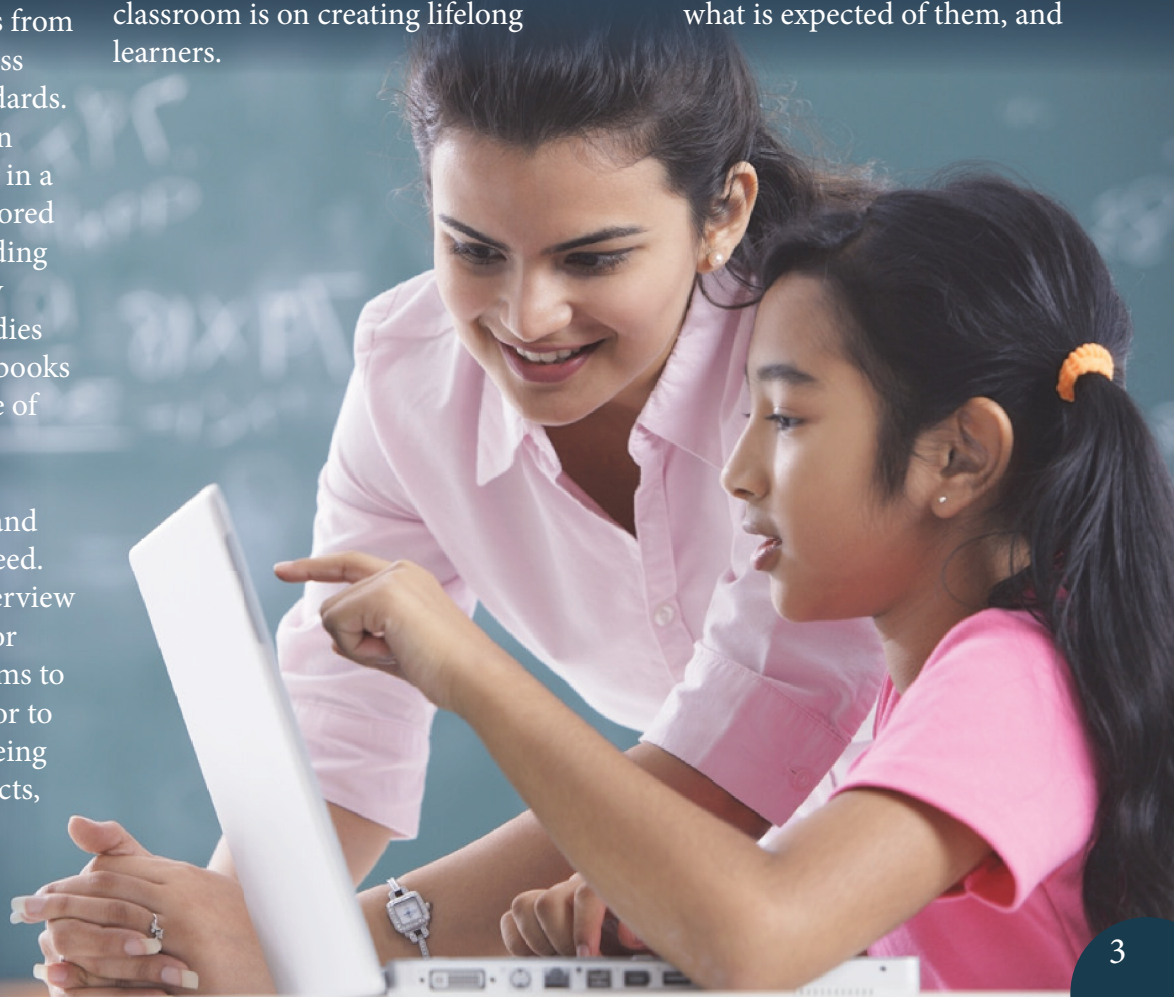
Characteristics of a 21st Century Classroom teacher

Teachers can still use whole group instruction, but it should not be the primary instructional method used. Teachers assess student instructional needs and learning styles and then draw on a variety of instructional methods to meet the needs of all the students in the classroom. The focus is no longer on learning by memorizing and recalling information but on learning how to learn. Students learn how to ask the right questions, how to conduct an appropriate investigation, how to find answers, and how to use information. The emphasis in this classroom is on creating lifelong learners.

With this goal in mind, students move beyond the student role to learn through real world experiences. Just as student learning has changed so has assessment of that learning. Tests that measure a student's ability to memorize and to recall facts are no longer the sole means of assessing student learning. Instead, teachers use student projects, presentations, and other performance-based assessments to determine students' achievement and their individual needs.

Characteristics of a 21st Century Classroom

- safe, supportive, and positive learning environment for all students. Classroom procedures and policies are defined by the teachers. Students know what is expected of them, and



the teacher knows how to effectively handle disruptions so there is no adverse impact on students' instructional time.

- foster cooperation among students within the classroom. The teacher models and promotes fairness and democratic values that are essential in the real world.
- encourage students' curiosity and intrinsic motivation to learn. The teacher provides enough time for students to complete tasks, and students are actively involved in their own learning within a climate that respects their unique developmental needs and fosters mutual respect.
- The teacher emphasizes cooperative group effort rather than individual competitive effort through collaborative projects and a team spirit.
- use language to foster self-expression, identity development, and learning in her students.
- foster cultural awareness and sensitivity in her students and instill in her students a respect for others and their differences. (Commitment to the Role of Teacher as a Facilitator of Learning, 2007)

Changes in Teacher Behavior

Just as the classroom is changing, so must the teacher adapt their roles and responsibilities. Teachers are no longer teaching in isolation. They now co-teach, team teach, and collaborate with other department members. Teachers are not the only ones



responsible for student learning. Other stakeholders including administrators, board members, parents, and students all share responsibility with the teacher for educating the student. To do this, teachers keep abreast of what is happening in the field. As lifelong learners, they are active participants in their own learning. They seek out professional development that helps them to improve both student learning and their own performance.

The new role of the teacher in the 21st Century classroom requires changes in teachers' knowledge and classroom behaviors. The teacher must know how to act as a classroom facilitator. They use appropriate resources and opportunities to create a learning environment that allows each child to construct his or her own knowledge. The teacher is in tune with her students and knows how to pace lessons and provide support.

Conclusion: If students are to be productive members of the 21st Century workplace, they must move beyond the skills of the 20th Century and master those of the 21st Century. Teachers are entrusted with mastering these skills as well and with modeling these skills in the classroom. The characteristics of the 21st Century classroom will be very different from those of in the classrooms of the past because the focus is on producing students who are highly productive, effective communicators, inventive thinkers, and masters of technology

It is certain that the 21st century skills cannot be acquired solely by teaching or self-motivated learning. Hence, it is the job of everyone involved closely with the student—parent, teacher and other influencers, in imparting and making him competent enough in the working and learning environment.

New Skills for a New World

In traditional economies, most workers held jobs in industry, the key skills were knowing a trade, following directions, getting along with others, working hard, and being professional—efficient, prompt, honest, and fair. Schools have done an excellent job of teaching these skills, and students still need them.

To hold jobs in the present information-age, students also need to think deeply about issues, solve problems creatively, work in teams, communicate clearly in many media, learn ever-changing technologies, and deal with a flood of information. The rapid changes in our world require students to be flexible, to take the initiative and lead when necessary, and to produce something new and useful.

As we move further into the new millennium, it becomes clear that 21st Century classroom needs are very different from 20th Century classroom needs. In the 21st Century classroom, teachers are facilitators of student learning and creators of productive classroom environments in which students can develop the skills they will need in the workplace.

The **focus of the 21st Century classroom** is, developing the **higher order thinking skills, effective communication skills**, and **knowledge of technology** that students will need in the 21st Century workplace. The interdisciplinary nature of the 21st Century classroom sets it apart from the 20th Century classroom.

21st century skills can be broadly classified into **Learning skills, Literacy skills and Life skills**.

Learning Skills

Communication and collaboration

Communication is the ability of a person to effectively interact using oral, written and non-verbal languages. Collaborations is a skill that helps an individual to interact responsibly with diverse people. School curricula have traditionally focused more on Reading and Writing, recent changes are emphasizing the importance of Listening and Speaking as skills.

To develop communication skills, a child should be encouraged to

- articulate thoughts and ideas in a variety of contexts and forms – blogs, email, letter, reports and more
- read for comprehension and listen actively to decipher the meaning, including knowledge, values, attitudes and intentions.
- use communication for variety of purpose for example to inform, instruct, motivate and persuade
- Utilize multiple media and technologies

To develop collaborative approach a child should be able to

- exercise flexibility and willingness to be helpful in making necessary compromises to accomplish a common goal
- share responsibility and value the contribution of each member of a team

Critical thinking and problem solving

Educationists define critical thinking as the ability to analyze, interpret, evaluate, summarize, and synthesize information. In the 21st century it is technology which allows us to manipulate, create, analyze, manage, store and communicate information.

Critical thinking and problem-solving skills include the ability of an individual to

- a. Reason effectively
- b. Ask pointed questions and solve problems
- c. Analyze and evaluate alternative points of view
- d. Reflect critically on decisions and process



Creativity and innovation

Rapid change in workplace calls for a culture of creativity, innovation and ideation. Creativity is no longer restricted to artistic people it has become a part of everyday work practices. Creativity can be nurtured by teachers at the time of learning by creating an environment which encourages questioning, openness to new ideas and learning from mistakes and failures. Creativity and innovation skills can be developed, like other skills, with practice and over time.

Life Skills

Leadership

Leadership is the ability of an individual to inspire others to achieve a common goal. It involves developing the ability to motivate others, possess keen empathy and a task orientation. Leadership in the classroom and school paves the way for developing this essential skill for the workplace. School committees and councils can be used as important founding blocks.

Accountability

Skills like setting and meeting goals, prioritizing needs, managing time, and cooperating with colleagues—all come under the category of accountability. Giving responsibility to students to conduct school functions, organize field trips are some ways of developing responsibility and accountability in students.

Social and Cross-cultural skills

In 21st century, the ability to present oneself professionally, and respect and embrace social and cultural differences is essential. Using this understanding to develop new ideas and solutions to the problems is the

key to success. Studying in groups in the classroom and working on projects with different cultural and social perspectives help students develop a consciousness of self and their world.

Literacy Skills

Media Literacy

Media by its sheer pervasion greatly influences young minds. It is important to help students get a realistic view of issues and products by interpreting media messages correctly. This skill set also includes the ability to understand media bias and the ways in which media influences beliefs and behaviors.

Information Literacy

Educationists say that, “the ability to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information” is what information literacy is.

Information Literacy skills enable a child to:

- determine the extent of information needed
- access the needed information

effectively and efficiently

- evaluate information and its sources critically
- incorporate selected information into one's knowledge base
- use information effectively to accomplish a specific purpose

Technological Literacy

E-learning is the accessing of information, instruction or interaction through the internet using tools like web-based resources, e-mail, discussion boards, blogs, chats or videos.

Teachers should continually strive to integrate technology into the teaching-learning process and encourage technological literacy in learners. Doing safe searches, finding out and reliable sources of information and visualization of information are all important in today's world.





Key Elements of 21st Century Classroom Design

Technological developments in content delivery have not yet led to pedagogical changes. One reason for this is the lack of change in classroom design. Most classrooms still have children sitting in a factory layout – rows and columns in tight space which discourages interaction.

Classrooms today may have a smart whiteboard but the basic set up is still the same—students sit in neatly aligned desks for most of the day, while a teacher lectures at the front of the room. Fortunately, many professionals are trying to recreate classroom design for the 21st century in a manner that breaks out of the traditional mould. These classrooms aim to create an environment that will foster students' personal growth in communication, collaboration, creativity, and leadership skills. Wondering what this could look like? Here's a peek at what the 21st century classroom will entail.

A Flexible Layout

In synchronization with the push for shared and self-learning, the driving concept behind 21st century classroom design is flexibility. An agile space would give teachers the chance to conduct tasks which require brainstorming, movement and collaboration. This would also support the teacher in teaching to

suit different learning styles. Typically, these classrooms include some version of a common activity area, theatre style/ cluster seating options, and a movement zone that can be adapted for more unique learning activities. This layout allows for a variety grouping formats and lesson types that consider students' widely varying learning styles. 21st century classrooms are driven by student's interests, and their open, flexible spaces allow students to come together to share, collaborate, and create.

Furniture for Utility

To support flexibility in teaching – learning, schools are getting rid of standard desks and replacing them with different seating options. Common examples of these seating options include mats, chairs, stools and floor tables. On an average, children spend about eight hours of their day sitting, so classroom furniture should accommodate for their natural need to move. Giving students options that allow them to jump, bounce, and rotate provides for enhanced circulation and concentration throughout the day—and all the learning benefits that come with it. These classrooms also increase functionality for students by lowering whiteboards and making materials easily accessible.

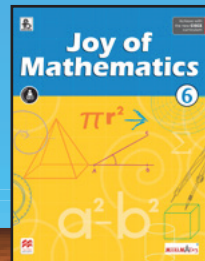
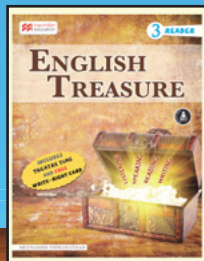
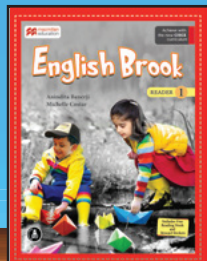
Technology Integration

Technology integration is a key aspect of modern classroom design and is used as a tool to stimulate curiosity and inspire students' desire to learn whether it is through laptops or tablets. These devices put information at students' fingertips and motivate them to research and make discoveries. In addition, technology integration supports inclusive classrooms as it allows students to move at their own pace, whether they are looking for opportunities for enrichment or need help to catch up. Learning at the right level and pace helps keep students engaged, which reduces inappropriate classroom behaviour dramatically.

Light-Filled Environment

Believe it or not, lighting is an important part of 21st century classroom design. Bright fluorescent lighting is being replaced with more natural light through windows. Not only does this make students more comfortable and reduce headaches, but studies have shown that student learning rates have improved between 7 and 26 percent in classrooms that are exposed to adequate natural lighting. Flexible lighting options are also beneficial as students use technology more frequently, since dimmed lights make screens easier to see.

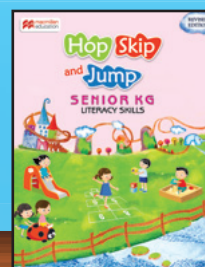
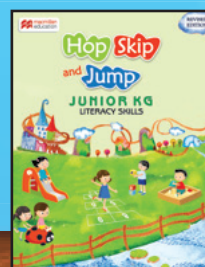
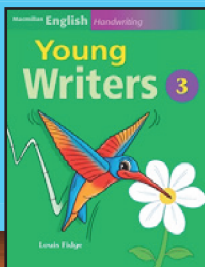
Upcoming Titles



ENGLISH BROOK
Classes 1 to 8

ENGLISH TREASURE
Classes 1 to 8

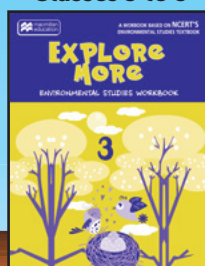
JOY OF MATHEMATICS
Classes 1 to 8



LITTLE WRITERS AND YOUNG WRITERS

HOP SKIP AND JUMP

Classes 3 to 5



Classes 1 to 8



Classes 6 to 8



Classes 5 to 8



NCERT MAPPED WORKBOOKS

Macmillan Publishers India Pvt. Ltd.
For more information
email: marketing@macmillan.co.in
Contact: +91 9560416111

North India
D-90, Sector-2,
Noida, Uttar Pradesh-201301
Landline: (0120) 4000100

East India
Unit No. 302, L & T Chambers
3rd floor, 16 Camac Street,
Kolkata-700017
Landline: (033) 22834481/82/83/84

West India
404, Antariksh, Thakur House,
Makwana Road, Off. Marol Maroshi
Road, Marol, Andheri (East)
Mumbai-400059
Landline: (022) 42152803

South India
21, Patullos Road
Chennai-600002, Tamil Nadu
Landline: (044) 30915100