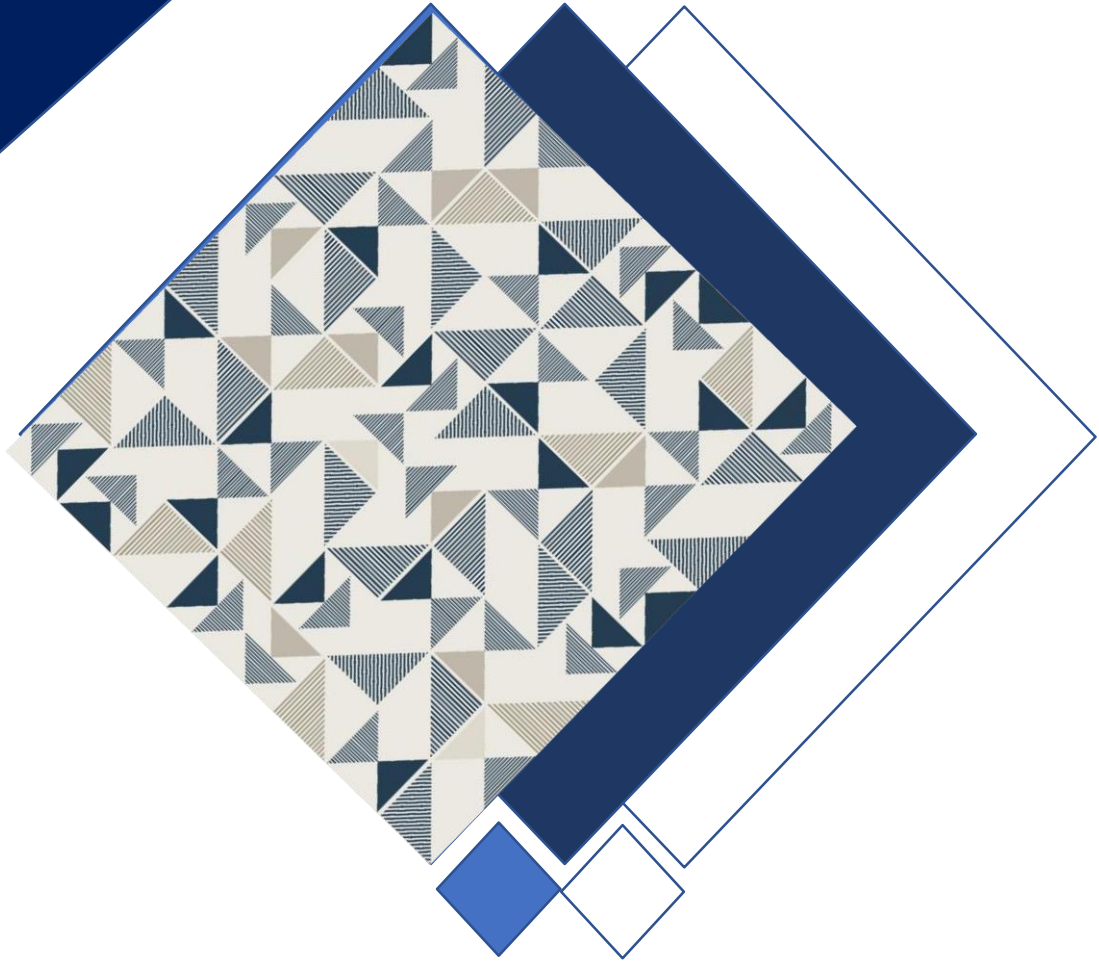




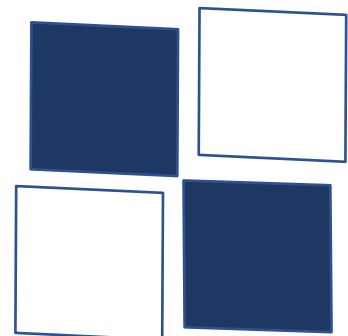
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# **Education @ ETMA**

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**Educational Technology and  
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# Education @ ETMA

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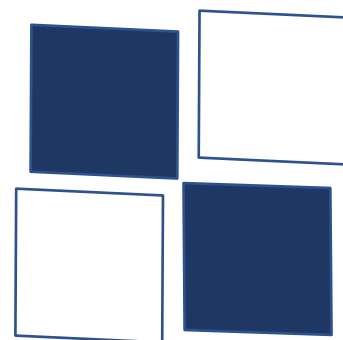
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## Educational Technology and Management Academy

T-6/1701 Valley View Estate, Gurgaon Faridabad Road, Gurgaon, Haryana 122001, India

E-Mail: [etma.india@gmail.com](mailto:etma.india@gmail.com) | Website: <https://etma-india.in> | Contact: +91836825793

<https://educationatetma.etma-india.in/index.php/journal/index>





# Education @ ETMA

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## **Editor**

**Dr Mrityunjoy Kaibarta**, Education Specialist, ETMA, Gurugram  
mrityunjoykaibarta[at]etma-india[dot]in

## **Editorial Advisory Committee**

**Prof Marmar Mukhopadhyay**, Chairman, ETMA, Gurugram  
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pushpanadham.k-eduadm[at]msubaroda[dot]ac[dot]in

**Prof Renu Nanda**, Dean of Faculty of Education, University of Jammu, Jammu  
renunanda[at]jammuuniversity[dot]ac[dot]in

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snadeem[at]jmi[dot]ac[dot]in

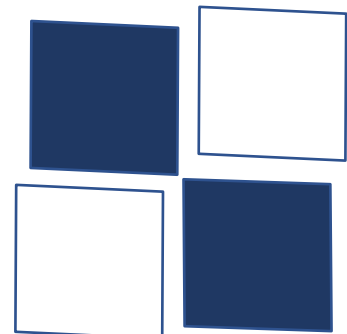
**Dr Ramesh C Sharma**, Director, HRDC, Dr B R Ambedkar University Delhi  
rcsharma[at]aud[dot]ac[dot]in

## **Educational Technology and Management Academy**

T-6/1701 Valley View Estate, Gurgaon Faridabad Road, Gurgaon, Haryana 122001, India

E-Mail: [etma.india@gmail.com](mailto:etma.india@gmail.com) | Website: <https://etma-india.in> | Contact: +91836825793

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## Case Study

### Learning Growth Mindset through Technology-Integrated Learning

*Anupriya Chellani\**, *Arti Bhujbal\**, *Nikita Vinayaka#* & *Surabhi Agarwal#*

\* Coordinator, The HDFC School, Pune. e-Mail: [coordinator.pune@thehdfcschool.com](mailto:coordinator.pune@thehdfcschool.com) & [coordinator1.pune@thehdfcschool.com](mailto:coordinator1.pune@thehdfcschool.com)

# Educator, The HDFC School, Pune. e-Mail: [nikita.vinayaka@gmail.com](mailto:nikita.vinayaka@gmail.com) & [urabhi.ag07@gmail.com](mailto:urabhi.ag07@gmail.com)

"I am not what happened to me; I am what I  
chose to become"- Carl Jung

In the 21<sup>st</sup> century, teachers and students are influenced by cognitive factors and external factors like beliefs and values. These factors decide our mindset and impact our work and life accordingly. Every individual has their filters, which create our world map, which is unique. To understand different mindsets, we use technology-integrated learning.

Technology integration uses technology tools in general content areas in education to allow teachers and students to apply computer and technology skills to learning and problem-solving. Technology integration is defined as using technology to enhance and support the educational environment.

In a larger sense, technology integration can also refer to the use of an integration platform to integrate disparate SaaS (Software As A Service) applications, databases, and programs used by an educational institution. So that their data can be shared in real-time across all systems on campus, thus supporting students' education by improving data quality and access for faculty and staff.

#### Online Survey

We conducted an online survey to understand the mindset prevailing in different individuals in our surroundings. It makes collecting data easier than ever and better for everyone. Online surveys have various advantages than normal surveys:

- Online surveys are cost-effective. Plenty of websites and platforms are available that make creating the survey fast and affordable.
- We can access online surveys in real-time. Respondents' answers are stored

automatically, so we get results quickly. This turns to analyse our results into effortless and immediate action.

- Online surveys' low cost and overall convenience bring in a high response. Respondents get to answer questions on their schedule at a pace they choose.
- Since respondents are not disclosing their answers directly to another person, it is easier to open up.
- Online surveys are flexible to design. Surveys can be programmed even if they're very complex. Intricate skip patterns and logic can be employed seamlessly.
- Online surveys are very convenient. Respondents answer questions on their schedule and can even have flexibility with completion time.
- The margin of error is greatly reduced with online surveys because participants enter their responses directly into a web survey.
- Online surveys have a greater reach than other types of market research techniques.

Online survey research is one of the most impactful ways to conduct web-based research that yields effective results. Here are a few points that we took into consideration while designing an online survey for our research:

- We have given a multiple-choice, ranking, and Yes/ No questions in our survey rather than open-ended questions.
- We have made our survey such that it can be completed in 15 minutes.
- We have assigned one person responsible for keeping track of the survey and sending reminders.

We conducted our survey through Ms Forms. We created a poll. Based on the poll generated result through technology, we learned that only 25% of individuals believe that their

intelligence is not fixed, and through effective learning practices, they can improve. They took failures as an opportunity for their growth.

As educators, we took it a challenge to teach the students a "Growth Mindset". In education, the goal is to supply students with skills and knowledge and foster the ability to problem-solve and take on challenges so that students are prepared to tackle issues they face outside of school. Decades of research have demonstrated that a student's mindset is a critical factor that impacts how comfortable and motivated they are when posed with a new or difficult problem.

Mindset is how one believes, thinks, and feels about an event, phenomenon, person, or institution. Our beliefs seriously influence our attitude and thinking. We call it the World View. It is the mindset that shapes our reactions and responses to situations.

With this mindset, we started our research.

### Research using technology

We started our search online and divided our topic into four subtopics:

- What is the importance of mindset in your life?
- Difference between fixed and growth mindset.
- Is it possible to develop Growth Mindsets for life?
- How to Develop a Growth Mindset?

Online research is a research method that involves collecting information from the internet. With the advent of the internet, the traditional pen-and-paper research techniques have taken a backseat and made room for online research. We have chosen online research for our topic as it has many advantages than the traditional research:

- Internet is an elaborate platform for researchers to invest their time retrieving crucial information that would otherwise consume a lot of their time.
- It has eased the process of publishing and collecting information and thus, saves a lot of time and money.

- Researchers and statisticians keep searching for updated information on various important topics; students search the internet for academic purposes, which is the greatest edge the internet offers.

We researched and gathered relevant information about our topics individually through online search engines like Microsoft Edge and Google chrome. Now we get a basic understanding of our topic- Growth Mindset.

### SMART Learning

Video learning is better than book learning. Video learning creates a sense of presence that supports the cognitive and social presence. All these components are critical for successful learning.

Learning is not possible from merely reading or learning through books. Nowadays, videos have been recognised as a powerful tool for learning. Video tutorials make the learning process fun, effective, responsive and fruitful.

Learning through videos is considered SMART learning. So instead of reading books, we all watched several videos on our topic as it has many advantages:

- Videos, just like animation, tell the story about how a particular process occurs. There is no reading; it is all watching. Abstract concepts that are difficult to understand in any other way are learned by watching people perform or demonstrate the process.
- Videos are a good way to do self-study. The videos, audios and webinars help us to learn. The best part is that this self-study technique has a powerful impact on the brain, which might be better than reading the same lesson from a book.
- As videos give the power to represent the real world visually, this form of contextualisation is incredibly useful in converting abstract theories into visuals.
- There can be no better way of illustration than using videos to define what you wish to define.

So, all of us watch videos on YouTube at our convenience. We also watched many TED talks on our topic.

Later we do the video conferencing through MS Teams and discuss certain questions related to the videos.

- What is mindset?
- What are different types of mindsets?
- What is the difference between a growth mindset and a fixed mindset?

After our discussion, we came to the concept of how the brain can be rewired as we learn and think differently. One of our group members is a science teacher. She explains to us the process of Neuroplasticity by using augmented reality technology.

Augmented reality (AR) is an interactive experience of a real-world environment where the objects in the real world are enhanced by computer-generated perceptual information, sometimes across multiple sensory modalities, including visual, auditory, haptic, somatosensory and olfactory.

We all understand the science behind the brain as it learns with this technology.

### **Collaboration through Technology**

Collaborative learning is enabled through these technological communication systems. Learning collaborative approaches go beyond the physical walls and aids in catering to different learner preferences and strengthening areas. To collaborate our works, we use many ways:

- **Synchronous communication:** Synchronous means that the communications happen in real-time, with all parties engaged simultaneously. We had synchronous communication through various applications like google meet, zoom and MS Teams.
- **Asynchronous communication:** It doesn't require all parties to participate simultaneously to be effective. We communicate with each other through E-mails. E-mail is a method of exchanging messages instantly from one system to

another with the help of the internet. So, technology enables us to communicate asynchronously and work at our convenience and comfort.

We also use one unique tool called Think Binder.

### **Think Binder**

Think Binder is a great way of organising a study group online. Text and video chat capabilities allow us to interact as if we are in a traditional study group but without being at the same physical location. There is cloud storage space and bookmarking facilities for resources that are relevant to the group, and an interactive whiteboard section where we put our ideas down in a visually appealing way.

After gathering all the relevant information, we drafted our document on ONE drive. OneDrive is a Microsoft cloud storage service that lets you store your files in one place, share them with others, and get to them from any device connected to the internet.

We worked with software Canva for giving diagrammatic illustrations in our document. The most important part of a Growth Mindset is positive feedback for all the efforts taken and encouragement done for the productive struggle. We exchanged the semifinal draft through e-mail with our colleagues and coordinator to get critics' feedback. To motivate each other, we praise each other through online praise apps. Finally, we reached our final draft through technology-enabled collaborative learning.

Through this module:

- We gain ideas for using existing resources and technology to support students' time, effort, practice, and use strategy.
- We learnt that collaborative learning could easily be achieved through technology.
- We understand mindset theory, including both growth and fixed mindsets.
- We learn how to influence student mindsets in both classroom and co-curricular settings.



- We gain ideas for the operationalising time, effort, practice and strategy use across disciplines and co-curricular settings.
- We learnt that simple strategies like praising the efforts, brainstorming for solutions instead of giving up, the power of "Yet" will help students and teachers to shift their mindset from a fixed state to a growth state.

### Conclusion

Engaging students with educational technologies allows them to talk about where they are, where they have been, and where they are going in their tasks. They can celebrate each other success through peer feedback. The data provided from educational technology can also be sent home with a student to inform a parent of how their kid is showing progress. Their parents can also support them through a simple word of motivation.

The idea is very simple: we can either consider our abilities fixed or can change and grow. By thinking of the mind like any other muscle that we can change, students learn new skills, gain strategies for overcoming challenges, and are motivated by their knowledge-building. However, developing a growth mindset requires a continuous learning process. Students are given ongoing opportunities to engage with challenges at optimal difficulty levels and receive support using new approaches. Integrating educational tools in our classroom is considered as one of the ways to support the development of a growth mindset in our students. Educational technology tools allow students to monitor their progress, receive actionable feedback, and take low-stakes opportunities to practice different problem-solving strategies. By considering the above points when selecting an educational technology

tool, educators can strive to support the development of growth mindsets in their students, both online and offline.

### References

- Bergwall, T. (2 January 2015). 7 Reasons Students Learn Better With Video. LinkedIn.  
<https://www.linkedin.com/pulse/7-reasons-students-learn-better-video-travis-bergwall/>
- BrightHub Education. (1 June 2010). Collaborative Learning: Integrating Technology in Education. BrightHub Education.  
<https://www.brighthubeducation.com/teaching-methods-tips/73038-collaborative-learning-a-case-in-support-of-technology-integration/>
- Kruse, F. (n.d.). 8 Ways to Embrace Technology-Based Learning Approaches. Skills you need.  
<https://www.skillsyouneed.com/rhubarb/technology-based-learning-approaches.html>
- Poth, Rachele Dane. (22 January 2017). 10 EdTech Tools for Encouraging Classroom Collaboration. Getting Smart.  
<https://www.gettingsmart.com/2017/01/22/10-edtech-tools-classroom-collaboration/>
- QuestionPro. (n.d.) Online research: Definition, Methods, Types and Execution. Retrieved from  
<https://www.questionpro.com/blog/execute-online-research/#:~:text=Online%20research%20is%20a%20research.of%20information%20from%20the%20internet.&text=Online%20surveys%2C%20polls%2C%20questionnaires%2C,information%20essential%20for%20market%20research.>
- Schnellmann, Aisha. (18 July 2018) "Technology enhances collaborative learning".  
<https://bold.expert/technology-enhances-collaborative-learning/>
- Wikipedia. (2009, September). Technology integration.  
[https://en.wikipedia.org/wiki/Technology\\_integration](https://en.wikipedia.org/wiki/Technology_integration)