

TECHNOLOGY, LEARNING, AND LIFE

# Fundamental Principles of Online Learning and Teaching

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# Overview

What's in this presentation?

- Technology and its Impact on Education
- e-Learner Characteristics
- 7 Affordances of e-Learning (Cope & Kalantzis, 2017), Connectivism
- Ethical Considerations for e-Learning
- Role of the Instructor
- Engagement Strategies
- Interactive Technology
- Remote Learning is the New Normal
- What's Next in Digital Learning

# COVID-19: Impact on Higher Education



1st half of 2020: largest half year for global Edtech investment in over 10 years – at \$4.5 billion – 3x greater than the average 6-months of investment in the prior decade.

**82%**

Faculty members who cited that less than half of their academic institutions' courses were offered remotely prior to Covid-19

**66%**

Students who claimed they did not feel mentally prepared for the move online

**60%**

Students who cited not feeling academically prepared for online learning

**48%**

Students who claim the pandemic has worsened their ability to remain focused and engaged

**60%**

Faculty members who reported a decline in student engagement

**>50%**

Students who cited limited engagement with fellow students as a significant challenge to remote learning.

**33%**

Faculty who reported minimal social interaction and community-building opportunities as a key obstacle



A man and a woman are shown from the chest up, looking intently at a laptop screen. The man is on the left, wearing a grey t-shirt, and the woman is on the right, wearing a light-colored top. The background is dark and out of focus. The overall mood is focused and collaborative.

# Technology and its Impact on Education

Recent global events have accelerated the role of technology in education. Remote learning and virtual classrooms are rapidly becoming the norm.





# Before Online Learning

- Students needed to go to physical classrooms, schools, and libraries for education.
- Students have limited options to enrich their learning experience.
- Students are limited with educational institutions in their area.

# After Online Learning

- Students are no longer limited by location when it comes to learning.
- Students have their pick of learning opportunities online.
- Students can enroll in schools all over the world.



# Who is Learning Online

## Pre-COVID

- One third of all learners in the US took at least one online unit and around 15% are enrolled exclusively online.
- In Australia, approximately 14% of learners study exclusively online, with the percentage of postgraduate learners studying online exceeding the percentage of undergraduate students.

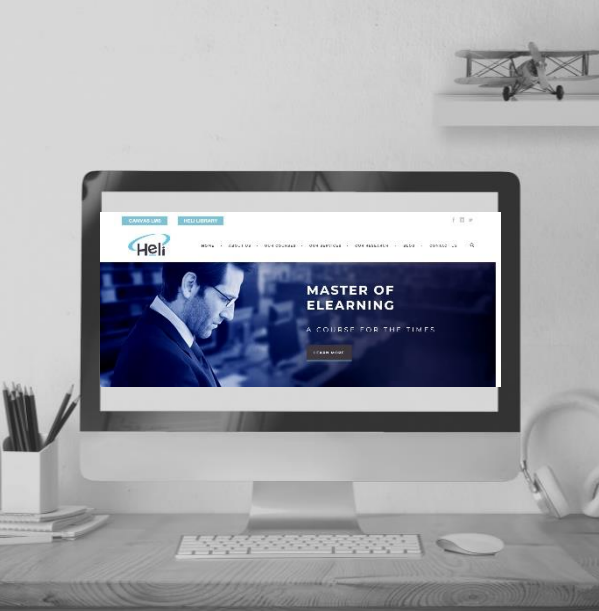
## During-COVID

- Everyone

## Post-COVID

- ?
- However, we can assume it will be a higher proportion than Pre-COVID.





# 7 e-affordances of learning

(Cope & Kalantzis, 2017)

1 ..... 2 ..... 3 ..... 4

**Ubiquitous learning**

Anywhere, anytime

Today's learners access education their way

**Active knowledge making**

Designing meanings

Allow learners to produce knowledge rather than passively consume

**Multimodal meaning**

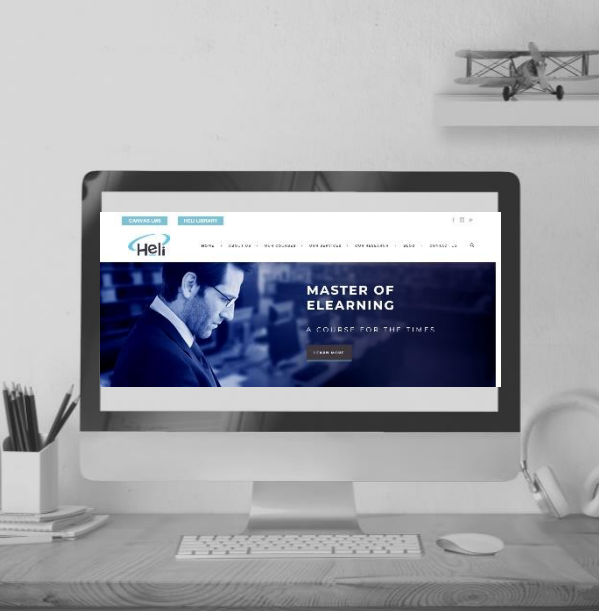
Text, image, sound, data

Develop resources in multiple formats

**Recursive feedback**

Formative assessment

Providing immediate feedback rather than the traditional two-week turnaround



# 7 e-affordances of learning

(Cope & Kalantzis, 2017)

5 ..... 6 ..... 7

**Collaborative  
intelligence**

Knowledge you  
can reach and use

Provide multiple  
opportunities for  
learners to  
collaborate

**Metacognition**

Thinking about  
thinking

Develop activities  
encouraging self  
reflection

**Differentiated  
learning**

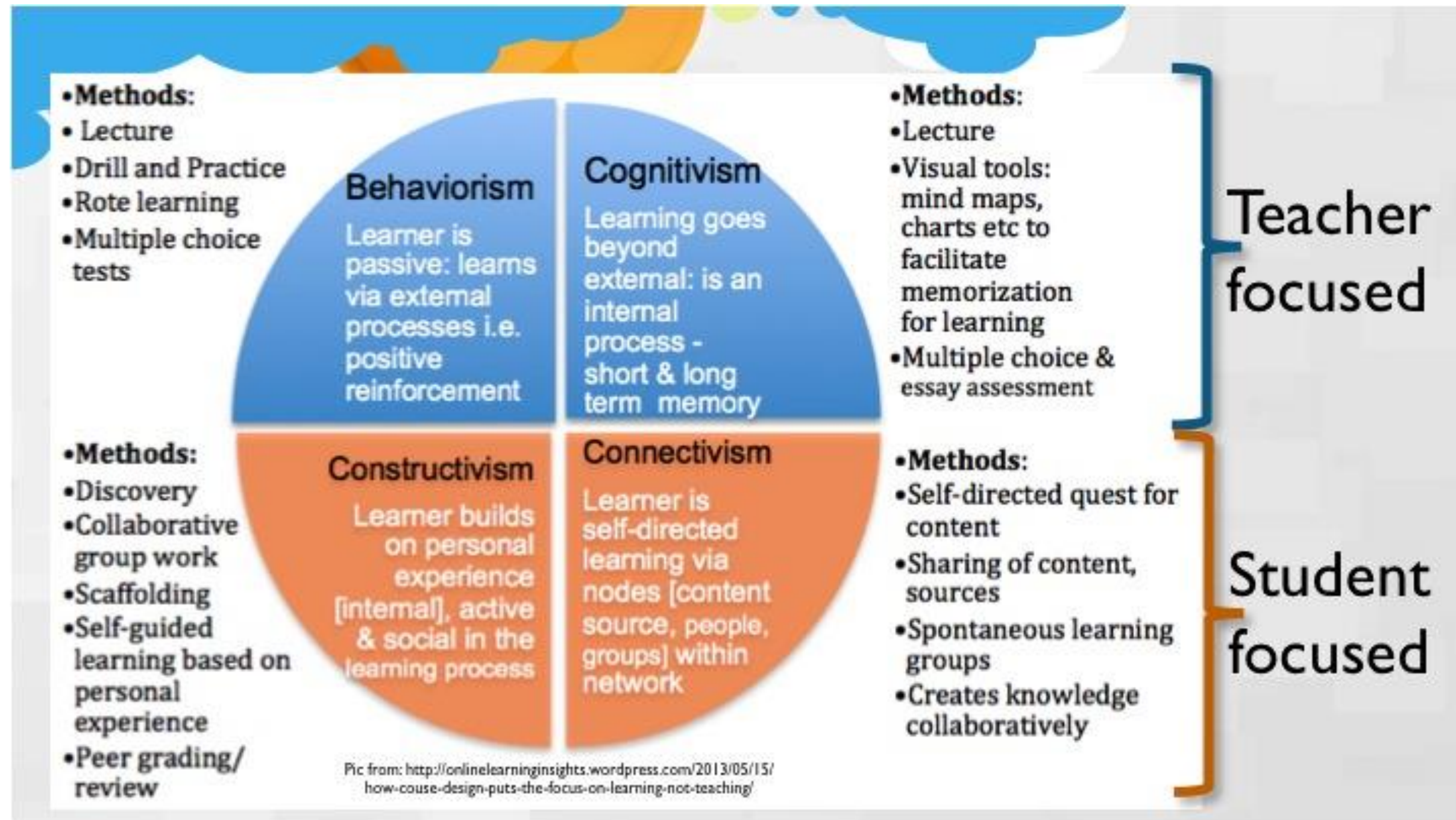
Each according to  
their interest and  
need

Personalise the  
learning experience  
for different learners



# Connectivism

(Siemens, 2005, 2012)



# Ethical considerations for e-learning



## **Access**

Geographical, Cultural & Learner Diversity, Students with Disabilities

## **Student privacy**

Online Proctoring, WebCams, Sharing Data, GDPR

## **Cyber civility**

Group Work, Social Media, Cyber Bullying

## **Communication**

Email, Social Media, Synchronous Learning, Professional Boundaries

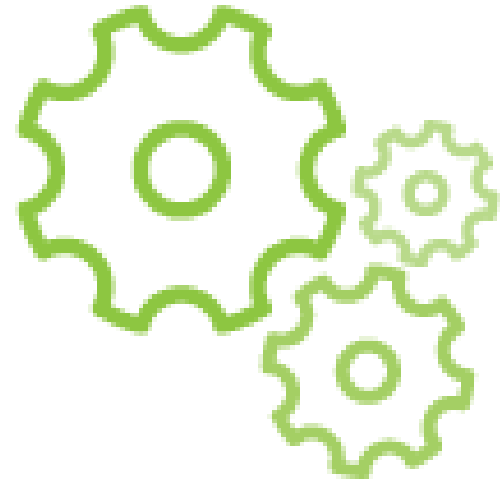
## **Academic integrity**

Contract Cheating, Plagiarism, Online Exam Cheating

# Role of the Online Educator



E-learning Designer



Technology Specialist



Content Coach



Social Director

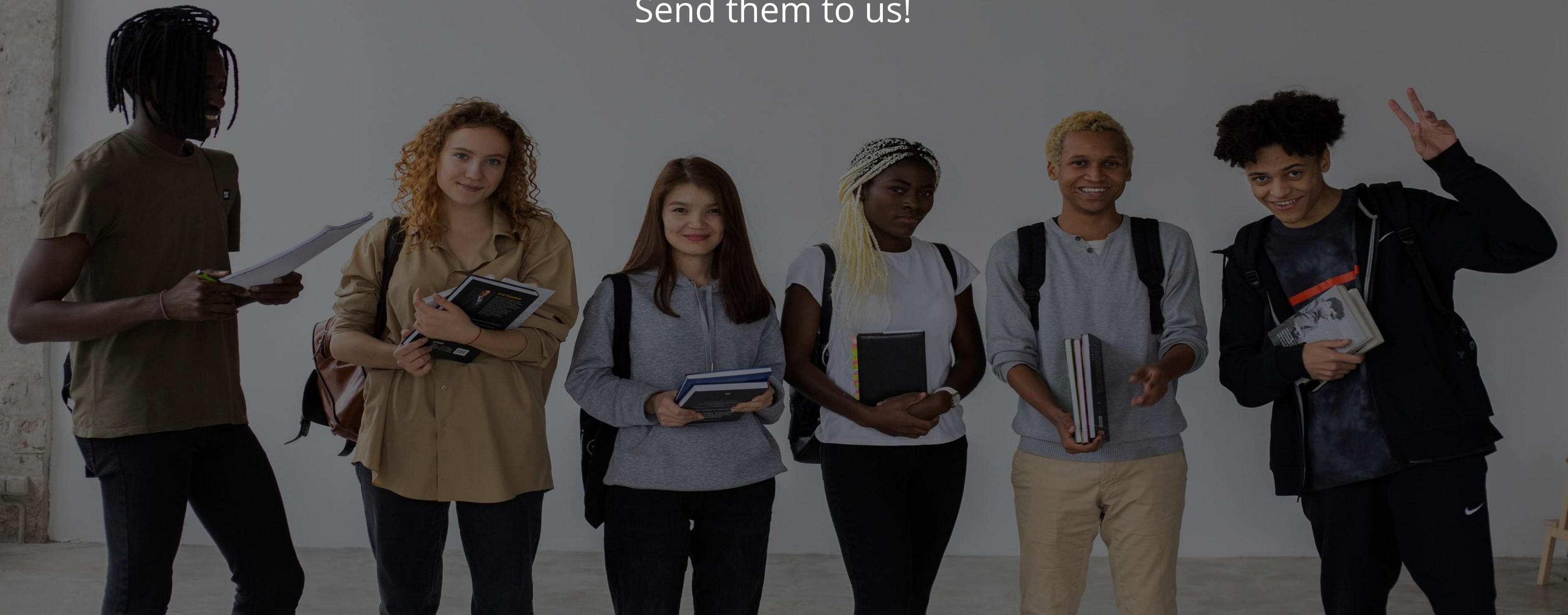


Managing Correspondant



# Do you have any questions?

Send them to us!



# Engagement strategies

- Schlechty's framework
- Kahu's framework
- Chi's framework
- Provoke conversations and challenge students
- Encourage social media usage
- Make meaningful connections with students
- Offer personalised and approachable assistance
- Create innovative and fun activities
- Be clear about how and when to get in touch





# Engagement strategies

- Use automation to monitor progress and communicate with students
- Encourage goal-setting, competition, and failure
- Celebrate greatness and accomplishments
- Focus on active learning
- Set clear expectations
- Break content into “chunks”
- Apply the Community of Inquiry (CoI) model in online discussions
- Provide regular feedback





# Interactive Technology

Interactive technology is the future of education.

Collaboration and real-time classroom work is still possible even when done remotely. Interactive technology makes this a reality.





A close-up, low-angle shot of a man with a beard and mustache, wearing a dark shirt, looking intently at a laptop screen. His hands are positioned on the keyboard, with his fingers resting on the keys. The lighting is dramatic, with strong highlights on his face and hands against a dark background. The overall mood is focused and professional.

# How Interactive Technology Improves Education

# For Teachers

Interactive technology opens up unlimited possibilities for instruction.



## **Creative teaching models**

Allows educators to think outside the box to get their message across.

## **Time-saving opportunities**

Tools can be used to streamline parts of educational activities such as classroom games.

## **Digital substitute for physical elements**

Interactive technology can augment some aspects of the physical classroom utilizing virtual labs and simulators, and virtual fieldtrips.



# For Students

Interactive technology opens up possibilities for learning.



## **Game-based learning**

Technologies can gamify learning, allowing students to be more engaged with the experience.

## **Custom-built for digital natives**

It introduces interacting with technology early in their learning experience, making students more comfortable with technology in general.

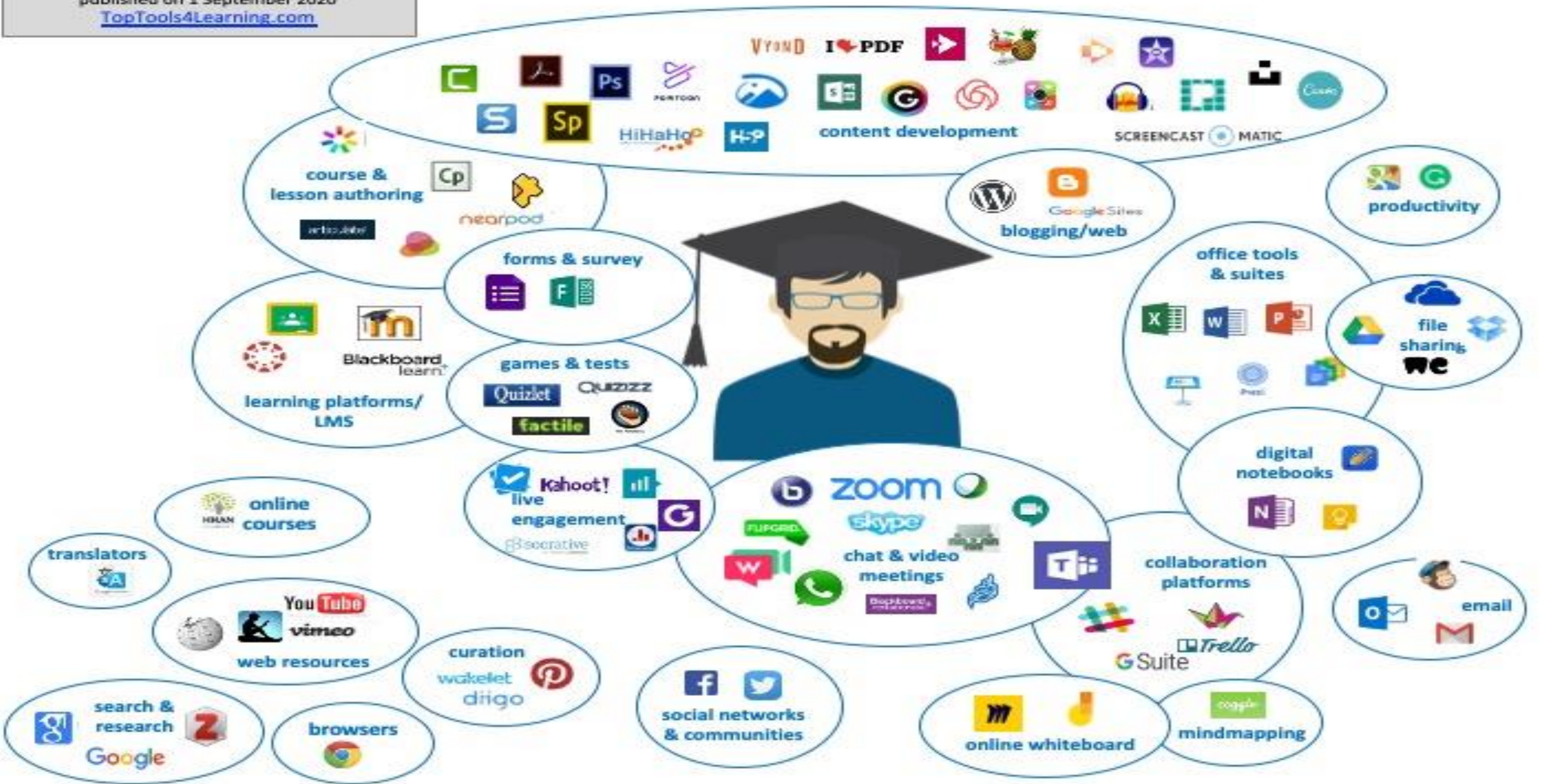
## **Inclusion and collaboration**

Students can interact with other students and their educators in a more substantial way.



The TOP 100 TOOLS FOR EDUCATION 2020 was compiled by Jane Hart of the Centre for Learning & Performance Technologies from the results of the 14<sup>th</sup> annual tools survey published on 1 September 2020  
[TopTools4Learning.com](http://TopTools4Learning.com)

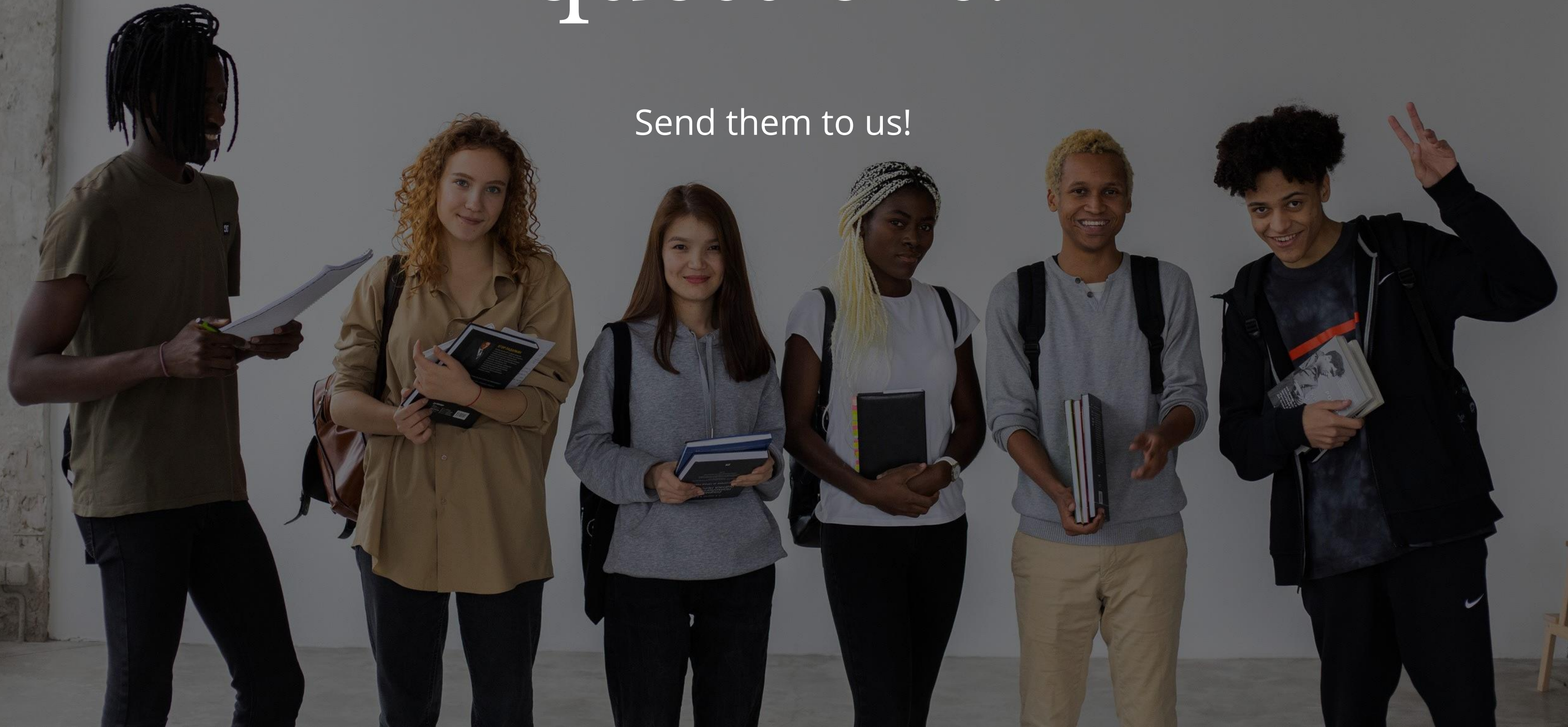
# Top 100 Tools for Education 2020





# Do you have any questions?

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# Remote Learning is the New Normal

Even as global issues shift and change, remote education will be a permanent option. In the future will all face-to-face courses be “blended”.

Through technology, the physical barriers of the classroom are gone. New generations of parents and students will opt for remote learning.





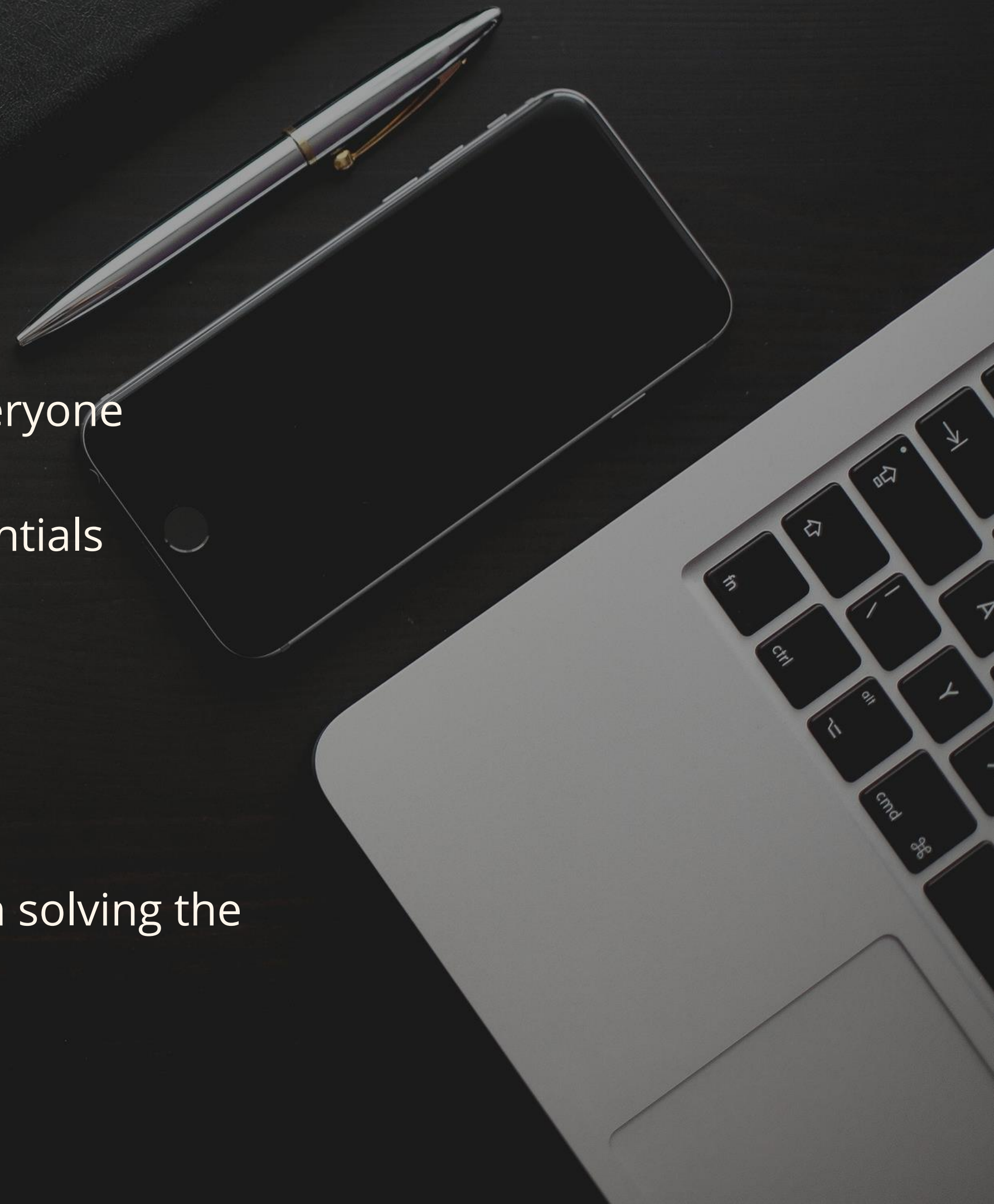
A nighttime photograph of the Golden Gate Bridge in San Francisco, California. The bridge's two massive towers are illuminated with a warm, golden light, and the suspension cables are visible. The city skyline in the background is a dense collection of lights from buildings and streets, with some taller skyscrapers standing out. The sky is a deep, dark blue, suggesting twilight or early night. The overall mood is serene and urban.

Technology will continue  
to break the barriers and  
boundaries of education.



# What's Next in Digital Learning

- Online classrooms mean digital learning for everyone
- A global market for practical courses and credentials
- Improvement in the quality of blended learning
- Rising demand for skills-based programs
- Greater investment on interactive technology in solving the digital divide
- MOOC's and Micro-credentials





You can't teach people everything they need to know. The best you can do is position them where they can find what they need to know when they need to know it.



Seymour Papert

# Do you have any questions?

Please contact me anytime if you would like to discuss further.

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I hope you learned something new.

