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Online Teaching in Science Faculty: Technique And Tools

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ABSTRACT: 2020 has been a transformative year. Everything has changed, including the way kids and university students go to school. During the pandemic, most of the world instated social distancing rules, 20-second hand-washing practices and preventive mask-wearing in public. To say this affected the way educators and students interact is an understatement. In March, millions of children transitioned from face to face classrooms to some kind of virtual education set up at home. During the first months of the pandemic, teachers had to scramble and find the best ways to set up a virtual classroom that would keep their students engaged. During these months, educators at every level tested tools and programs until they found their favorites.

KEYWORDS: online teaching, virtual, home, preventive, education at home, techniques, tools

I. INTRODUCTION

Visme is an online design tool that anyone can use to create presentations, infographics, concept maps, schedules, reports and more. It's packed with tons of features, like free photos and graphics, customization options and an easy drag-and-drop editor that both non-designers and designers love to use. Many tools are directed either at the educator or the student. In the case of Visme, our integrated design tools benefit both. Teachers are always creating content for their students to learn with. From slide presentations to fillable worksheets and more. With a Visme education license, teachers and students can use the tool together for a creative and interactive educative experience. Below are some of the solutions Visme offers for educators at any level.

- Interactive content as presentations and infographics
- Visual posters and infographics
- Webinar materials
- Interactive schedules
- Syllabus and lesson plans
- Printable lists and worksheets
- Embed third-party content like quizzes and forms
- Share news about a class on social media or email
- Personalized report cards
- Personalized certificates

To help you get started, here are some handpicked Visme templates for teachers. Click on the button below each template to customize it for your own use.

Class Schedule Template-Create a class schedule in the form of a presentation and share it with your students to help them stay on track with their weekly lessons. This class schedule template is designed with engaging colors and visuals to make it easier for students to remember the information. online teaching tools - weekly class schedule presentation template

Lesson Plan Template-Use a template to create a fully visual lesson plan to share with your students. Simply input all your information and download it as a PDF or image. It's easy to then import into your LMS or send it to students via email.

Report Card Template-At the end of each semester, show students their grades by adding a little fun. Use this report card template to input each student's final results and inspire them to continue performing well for the rest of the year.

Certificate of Completion Template-If your course isn't part of a school curriculum, you can still instill a sense of accomplishment in your students with a certificate of completion or achievement certificate. Use this template to add your course information and personalize it with the student's name.

Visme also helps students get their work done for their online classes. Teachers can assign all sorts of assignments to be created with the tool. Below are some ways students can use Visme:

- Book report presentations or infographics
- Research projects for any topic as presentations or infographics
- Graphic organizers for research and mind-mapping
- Venn diagrams for comparisons

Here are some useful Visme templates for students at the school or university level. Click on the button below each template to customize it for your own use.

Idea Web / Mind Map Template

Students thrive with graphic organizers and visual mind mapping tools. Visme makes it easy and fun to create idea webs, flowcharts and mind maps. This idea web template is perfect for finding similarities between two different topics.

Presentation Template

Research projects and book reports have been assigned as presentations since we can all remember. Help your students create better presentations with our Visme templates for students.

II. DISCUSSION

Timeline Infographic Template-Many assignments involve understanding how things happened over time. This type of visual can be applied to projects for history, literature, and social studies. By creating a timeline infographic, students understand the process of the topic and enjoy creating it along the way.

Online teaching tools - google classroom-Google Classroom is the low-key most versatile online teaching tool available.

This Learning Management System (LMS) is part of G Suite, which means teachers can use Google apps to create lessons, quizzes and documents all inside Google Classroom.

To use the Google Classroom app, you'll need a G Suite for Education account. Many schools and teachers transitioned to this LMS when schools were closed due to the pandemic. For anyone using Google products regularly, Google Classroom is easy to tackle. Inside the app, educators offer the content for the lessons, quizzes, assessments, and tests. They can also communicate with the students and parents via message boards or email. The best thing about Google Classroom is that you can create all the content for your classes with the software of your choice. For example, you can simply use Google apps to prepare lesson materials or import any visual created with Visme. In 2020, Google Classroom is easier to integrate with Google Meet, the new version of Google Hangouts. This has made

it even easier to conduct an online class. You might know Zoom from business meetings but did you know that it also works great for online teaching. There are two ways of using Zoom; Meetings and Webinars. The most suited for interactive online teaching is Zoom Meetings, while Zoom Webinars is better for lectures. Teachers can choose with which to work at any given time. Zoom Meetings have practical features that make online teaching easier, such as breakout rooms. These help teachers separate the students into groups, much like you would do in a normal classroom setting.

Each group can communicate with each other and the teacher can be notified to come in and help if needed. Since Zoom became so popular for distance learning, many other online teaching tools have incorporated seamless integrations. online teaching tools - aww app a web whiteboard app logo. AWW App is the perfect solution for teachers that are used to having a board to write on during class. This is a digital whiteboard where teachers can annotate much like on a regular board. The integration between AWW and Zoom makes it easier than ever to teach a class online. You can also import PDF and PowerPoint files into AWW. This app is great for teachers that enjoy explaining things by showing how it's done. The boards can be pre-created before a lesson or written on during the lecture. The settings permit students to collaborate or "come up to the board."

Online teaching tools - ted talks

Ted Talks are a great resource for online teaching. We wouldn't exactly call it a tool, but more of a repository.

Ted's website offers videos of 18-minute speeches by influential speakers on a variety of topics. There are even some Ted talks by kids, which can be greatly inspiring for students. Best of all, every talk is free to include in lessons. The videos can be embedded or shared with a link. They're easy to incorporate with any LMS. Dialpad has a VoIP for education solution that provides an easy to use application for schools where teachers & students can meet, text, chat, and interact online. Students can engage with teachers within virtual classrooms using screen sharing, whiteboarding, and chat features. Teachers can also set office hours, share class recordings, and connect with the faculty all within the same platform. Dialpad is accessible on a variety of devices, including tablets, smartphones, computers, and laptops. Using Dialpad helps to reduce IT overhead for schools, and removes the requirement for hardware. Teachers can meet students remotely, and create online classes instantly from anywhere in the world. They can also send out bulk SMS messages to check in with students on assignments, send updates, and announcements. Schools can set up advanced call routing rules for students to reach the correct department or desk, so teachers never have to worry about missing important phone calls. There are so many features available on Dialpad, that we couldn't even fit all of them here. For teachers interested in an all-in-one application, Dialpad offers a free 14 day trial.

III. RESULTS

One of the most challenging things to keep up with is your students' literacy progress. This is true both online and in face-to-face classrooms. LightSail is a program that has already been showing positive results in classrooms. Now, with the spread of online learning, their team has adapted to educative solutions provided. The LightSail app provides students with a variety of reading material to improve their literacy. The app tracks how much each student reads and how they are improving. Teachers can create lesson plans around what their students enjoy reading, be it a book, or a website. Everything the student reads can be turned into a learning opportunity. A big part of school education is communicating with both students and parents. This is no different when the learning is being done online.

The Remind App is an advanced messaging system that works in three different ways:

- Reminders for upcoming lessons or due dates of projects and tests
- Email messaging with students and parents
- Direct messaging with parents of students

Online teaching tools - remind screenshot. The main feature of Remind is that all notifications are sent to mobile devices, making it easier for teachers to interact with students and parents. The app can be integrated with Google

Classroom and Google Drive for easy access to class materials. Also, it's easy to send links to Zoom meetings and webinars. Teachers can set up office hours for timely messaging and control over their private lives.

Online teaching tools - pear deck logo

Pear Deck is the perfect add-on for teachers who regularly use Google Slides and Microsoft PowerPoint. It improves interactivity and the quality of visuals on the teacher's slides. The add-on is available in the editor and also includes a teacher platform to help keep track of student participation during class. When you open the PearDeck add-on in your Google Slides or Microsoft PowerPoint software, it's available in a sidebar. All the features are accessible from right inside the editor and can improve your presentations to a great degree.

Online teaching tools - actively learn logo

The Actively Learn website is a specialized platform to teach ELA, Science and Social Studies. It's easily integrated with most LMS like Google Classroom and Canvas. What stands out about Actively Learn is the way the readings are set up for both students and teachers. It's the perfect platform for blended learning, and just as easy to use as an online learning teaching tool. Each article, video or book excerpt has a set of questions, vocabulary features and further reading for the student. The features for teachers include suggested lesson plans and further assignments.

Padlet is a multifunctional platform to collect information, visuals, videos, documents and much more. Users can create "padlets" or digital corkboards to create collections of data and information pretty much any way they want. online teaching tools - padlet screenshot. Teachers can use padlets to build group lessons, work on group projects, collate research for a lecture, and much more. Padlet is one of the favorites in the online teaching world and it's no surprise why. [Here is an article with a long list of ideas](#) for teachers using Padlet.

IV. CONCLUSIONS

Thinglink is a platform dedicated to the creation of interactive visuals. You can add interactive elements like audio, text popups and map location labels to any of the following:

- Images
- Videos
- 360-degree media

This is one of the most immersive online teaching software. You can even create VR-ready environments for students to explore at their leisure. Edpuzzle is an app that takes any video and turns into an educational lesson. Teachers simply add their chosen video, set it up for students with questions about the content and assign it to them via their regular LMS. Edpuzzle integrates with Google Classroom and many other LMS platforms as well. A notable feature of Edpuzzle is that teachers can easily track student progress. The settings can be toggled for the video and to make added questions unskippable. Edpuzzle is the perfect accompaniment [for the flipped classroom method](#), both in face-to-face and virtual classrooms. online teaching tools - quizziz logo. Quizizz is a free quiz maker for students of any age. If you don't want to create your own quiz, there are lots of available quizzes in the gallery that are free to use. Integrate your quiz seamlessly with Google Classroom or share it with a link. You can also share it as a game and send the link to the Remind app and other online teaching tools.

Considering that Quizizz has been used in regular classrooms for a while, the transition of the tool to online teaching was seamless.

Talking Points is a communication platform for teachers and families. It's similar to the Remind app but the most important feature is that the messages are translated to the family's language. The app supports more than 100+ languages. Each family picks their home language (if they don't speak English) and all messages will arrive in the chosen language.

The app works on all mobile devices and is free for teachers. Teaching online in a virtual classroom is easier than it seems—the difficult part is getting used to it. Once you have the tools you need to be efficient and engaging, every lesson is easier than the one before it.

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