VIA AFRIKA DIGITAL EDUCATION ACADEMY

Digital learning in schools

SESSION 4

Content and apps for teaching

CLASS NOTES

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Department:
Basic Education
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In partnership with the Department of Basic Education.

Via Afrika

Our Teachers. Our Future.

Course content

Digital learning in schools

Session 1: Why eLearning?
Session 2: Getting technical
Session 3: Managing and using ICTs in schools
Session 4: Content and apps for teaching
Session 5: Online assessment tools
Session 6: Games and gamification in education

Digital learning in schools

Session 4: Content and apps for teaching

Class Notes

Via Afrika

Our Teachers. Our Future.

Important information

1. You can download and print the Class Notes for personal use, but you may not share them.
2. Once you have watched all the videos and completed all the quizzes, reflections, tasks and assessments successfully, you can download your certificate and print it.
3. If you wish to earn SACE Professional Development (PD) points for this session, you must complete all the online assessments in the session successfully. Our system will notify us of your success, and we will send the points allocation request to SACE.
4. Please remember that devices and apps are updated all the time, so the device specifications, app features and icons that you see here might differ slightly depending on the device you're using and any subsequent app updates.

Abbreviations and terms

Bloom's Revised Taxonomy: A pedagogical framework for eLearning. [See pedagogy, See eLearning]

eLearning: Learning that is supported by, enhanced by, or facilitated through Information Communication Technologies (ICTs), and that is supported by reconsiderations of content, and a relevant pedagogy. [see ICT]

ICT: Information and communication technologies.

PD Points: Professional Development Points [See SACE]

Pedagogy: The how and why of what we do in the classroom. The method and practice of teaching, especially as an academic subject or theoretical concept.

PedTech: Pedagogical Technology for what happens when we want to use technology in the classroom

RAT: Replace, Amplify, Transform. A pedagogical framework for eLearning. [See pedagogy, See eLearning]

SACE: South African Council for Educators. Awards Continuous Professional Development Points (CPDP) to teachers.

SAMR: Substitution, Augmentation, Modification, Redefinition. A pedagogical framework for eLearning. [See pedagogy, See eLearning]

TPACK: Technological, Pedagogical and Content Knowledge. A pedagogical framework for eLearning. [See pedagogy, See eLearning]

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Outcomes and content

Outcomes of the session

By the end of the session, the participant will be able to:

- understand that a digital device is a tool, and that content is required to make it useful
- appreciate different sources of content for digital devices
- appreciate the importance of eLearning theory (Bloom's Revised Taxonomy, TPACK, SAMR) in teaching with technology
- be able to differentiate among the different types of eBooks
- be able to make an informed decision as to which eBook type best suits the participants' individual context and needs
- appreciate the functions of eBook Reader Apps (Google Play Books and Snapplify)
- understand how to develop an eBook in PDF and ePUB formats
- have an appreciation of what needs to be considered when choosing an app for learners
- know about three Note-taking Apps (Google Keep, OneNote, Evernote)
- know about the Khan Academy and Khan Academy Kids Apps
- know about the Explain Everything App
- understand the ChatGPT App and its use in the classroom

Content of the session

This session will focus on:

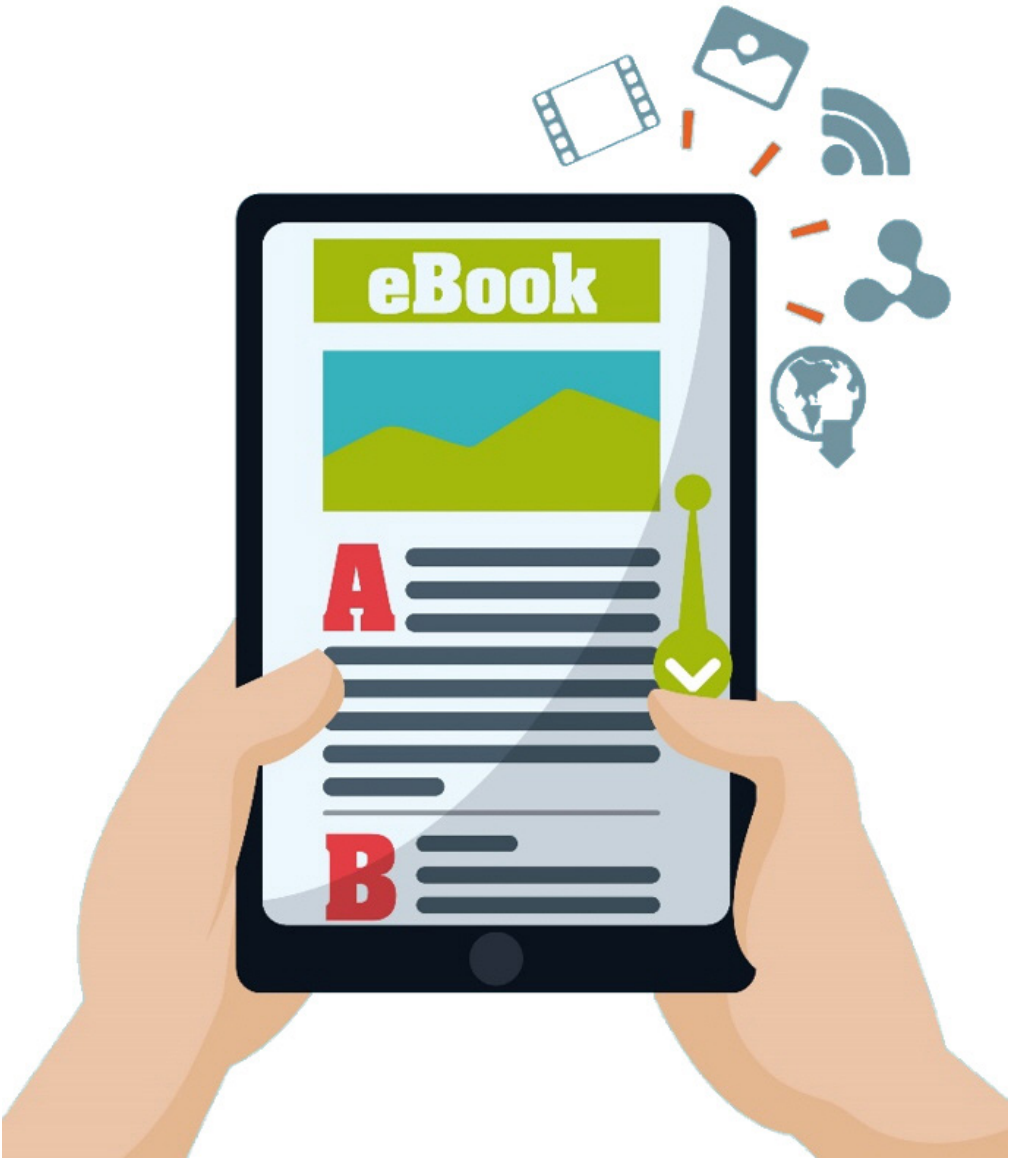
- sources of digital content
- the role of eLearning theory in teaching with technology
- eBooks – ePDFs, ePUB, reflowable text, fixed layout
- criteria for choosing apps
- incorporating apps in pedagogically sound ways during lessons
- apps: Google Keep, OneNote, Evernote, Khan Academy, Khan Academy Kids, Explain Everything, ChatGPT App

Overview

Welcome to **Content and apps for teaching**. This is the fourth session of Via Afrika's **Digital learning in schools Course**. The aim of this session is to give you the understanding necessary to help you choose content for your digital device.

We will cover three key issues in this session.

- Exploring content
- A closer look at eBooks
- Apps in education



Exploring content

When it comes to digital education, people often forget about content in their excitement to purchase devices. It is almost as if just having the device is enough.

Types of content

There is a variety of content that is available digitally.

- eBooks: PDF and ePUB formats
- Video content: YouTube and other self-made videos
- Documents: Word or Google Docs, Excel Workbooks and Google Sheets, PowerPoint Presentations and Google Slides
- Music
- Audiobooks
- Photos
- World Wide Web: Ordinary websites, websites designed for a particular purpose (for example, Wikipedia) or an internet repository of resources

Creating your own digital content

Creating your own digital content can be satisfying, but also frustrating.

Let's look at some reasons to create your own digital content.

- The content can meet the exact needs of learners.
- You can do it at little to no cost.
- You will have a sense of accomplishment.
- You will develop your skillset.

And now, let's consider some reasons not to do it.

- A high level of technical skill is required.
- You will need software to do it.
- Profound content knowledge is needed.
- It is time consuming.

Reflection
• Make notes in your PD Journal. • Would you consider developing your own digital materials? • Why do you say this?

Sources of content

We can differentiate among these sources of content.

- Ready-made content that is fit for purpose.
- Ready-made content that requires some work.
- Teacher-generated content.

Ready-made, fit-for-purpose content

Ready-made, fit-for-purpose content is likely to come from a publisher. Because people often think about publishers as being makers of books, this is also called commercial content.

Evaluating commercial content

Criteria	How it matches up
Language level	Carefully chosen to suit the market
Local context	Developed to suit the market
Quality	Most often good
Content-technology match	Designed to match the technology
Teacher effort	Little to none
Teacher expertise	Little to none
Cost	Mostly paid, some freemium and some free

Ready-made, work-needed content

Most often this comes from three sources on the internet.

- From the World Wide Web: This includes all kinds of blogs, websites and more.
- Open Educational Resources (OER): This includes content made available openly and freely online to be used for teaching, learning and research.
- Content Repositories: These are storage sites where content is managed and preserved – a bit like large online libraries. An example of an online repository in South Africa is the Department of Education's Thutong Website. An international example is WikiEducator. You will find links to both of these repositories in the Additional Resources section of these Class Notes.

Evaluating online content

Criteria	WWW	OER	Repositories
Language level	Check suitability	Check suitability	Check suitability
Local context	Check suitability	Check suitability	Check suitability
Quality	Varies a lot	Usually good	Usually good
Content-technology match	Likely to need work	Some work possible	Some work possible
Teacher effort	Some effort	Some effort	Some effort
Teacher expertise	Lots of expertise	Less expertise	Less expertise
Cost	Mostly free	Usually free	Usually free

Reflection

- Make notes in your PD Journal.
- What has been your experience of using content from the internet?
- Now that you have completed this lesson, are there things you would do differently when you are looking for content on the internet in future?

Bringing theory into the discussion

The digital device alone does nothing. We must make sure that using the device enhances the teaching and learning experience and engages learners in higher-order thinking.

There are three well-known pedagogical models or frameworks that will help us understand the integration of technology as part of teaching and learning and move us on from the scenario we just witnessed.

These three theories are Bloom's Revised Taxonomy, Technological, Pedagogical and Content Knowledge (TPACK), and Substitution, Augmentation, Modification and Redefinition (SAMR).

You will find more detailed information about TPACK and SAMR in Session 1 of this course – **Why eLearning?**

Bloom's Revised Taxonomy

Bloom's Revised Taxonomy is a framework for classifying and assessing learning outcomes, and it consists of six levels of learning: Remembering, Understanding, Applying, Analysing, Evaluating and Creating.

Learning can take place on several levels at the same time during a single task.

The levels are not an indication of progress from 'easy to hard'. For example, the teacher can assign a task in which learners have to create something that can be hard to do, or easy to do. The difficulty level can be adjusted according to learner profiles, but all the learners are still creating something.

Teachers could also use a single app such as Google Docs in a number of ways to assess learners on all levels of Bloom's Revised Taxonomy.

TPACK

- The framework is based on a deep understanding of the content to be taught, the pedagogy of how to teach it, and the use and role of technology within a specific context.
- These three areas of knowledge are interlinked and are of equal importance.

SAMR

The SAMR model links how teachers use technology to have an impact on the learning outcomes of their learners.

- **Substitution:** Technology acts as a direct substitution for a conventional teaching tool.
- **Augmentation:** Augmentation adds to or enhances a task using technology.
- **Modification:** The technology allows the teacher to redesign the task.
- **Redefinition:** A teacher could replace part of (or all) the assignments with new ones that are possible only with the use of technology.

Putting it all together

- **Bloom's Revised Taxonomy:** Here, teachers will create learning experiences during which several levels of activity can be integrated into a single task, and they will adjust the difficulty level according to the learner profile of their class.
- **TPACK:** A teacher will approach each learning experience with three combined and vital questions: What are the most relevant technological tools I can use here? Which content or skill does this assignment or lesson address? How can I best create an engaging teaching and learning experience with this in mind?
- **SAMR:** A teacher can ask: How can I make sure that this assignment or lesson redefines the teaching and learning in my classroom?

Task

Prepare a lesson plan to teach a topic of your choice. Use this structure.

- Outcome: List the curriculum outcome.
- Teaching medium: How will the instruction part of the lesson be done? What will the teacher input be? Will a video be used?
- Product: Explain what the learners will produce to prove they have understood the outcome.
- Technology: List the technology you will use.

Write down the Lesson Activity.

- What are the steps of the activity?

Now answer these questions.

- Analyse your lesson plan using Bloom's Revised Taxonomy. Do you need to change anything?
- Analyse your lesson plan using SAMR. At which level of SAMR is the activity?
- Does your lesson plan reach the 'sweet spot' of TPACK?

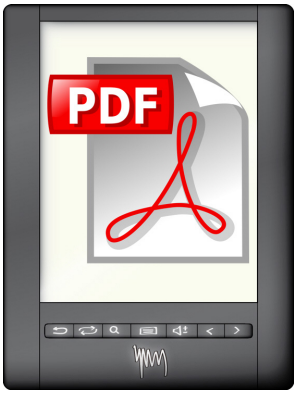
A closer look at eBooks

What are eBooks?

The **e** in eBook stands for **electronic**.

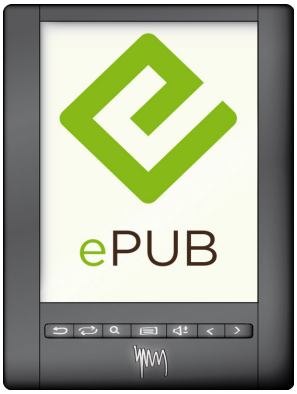
An eBook is an electronic book that can be read on a computer or on handheld devices (such as a tablet or smartphone) using an eReader App. It can also be read on an eReader device, like a Kindle or Kobo Reader.

eBooks come in various formats. We are going to learn about the two most common formats: PDF and ePUB.



PDFs

PDF stands for Portable Document Format. It is a useful way to read books and documents on a digital device either in the Adobe Reader App or another PDF Reader App.



ePUBs

ePUB stands for electronic publication, and it's the most commonly used format for eBooks. An ePUB can be read on probably all digital devices using a suitable eReading App. Usually, an ePUB file is very small.

eBook layout

Layout refers to the way the text, and any extra elements such as images, are arranged. There are two kinds of layout for eBooks – fixed layout and reflowable text.

Fixed layout

Fixed layout means that no matter which device you're reading your eBook on, the images and text stay in the same place on the page in the way the eBook creator originally designed them to be. The layout is fixed and will never change. It is like a photograph of the original way the layout was designed. The only way you can move it is up and down or from side to side.

PDFs are fixed layout. Some ePUBs can be fixed layout too.

Why use a fixed layout in an eBook?

Fixed layouts are generally used when the author wants the pictures to be in a particular place in relation to the text, and they want them to stay that way. A good example is a school textbook. The text position must be fixed next to, above, or underneath a picture that is relevant to the learning.

Fixed layout is also used when a print book is changed directly into an eBook, and the print book has columns of text or lots of tables. These may not adjust well to all screen sizes without losing text quality or moving out of alignment.

Reflowable text

ePUBs were designed with reflowable text in mind. With reflowable format, the device automatically resizes the text and layout settings, according to the needs of the user. The layout is not fixed. For example, if your device has a narrow screen or is in portrait mode, the text can flow over to the next line.

Reflowable layouts are normally used if most of the eBook is made up of text. Some illustrations will work acceptably in reflowable layouts, but their position in relation to the text should not be of critical importance.

A reflowable layout allows the text and pictures to adjust to the screen size of any device. Users can also adjust their settings for a reflowable format ePUB.

You can also change the size of the letters and the font. Once you've chosen your new setting, the layout changes automatically because it's a reflowable format.

One significant advantage of reflowable format is that vision-impaired readers can make the text easier to read by making it bigger.

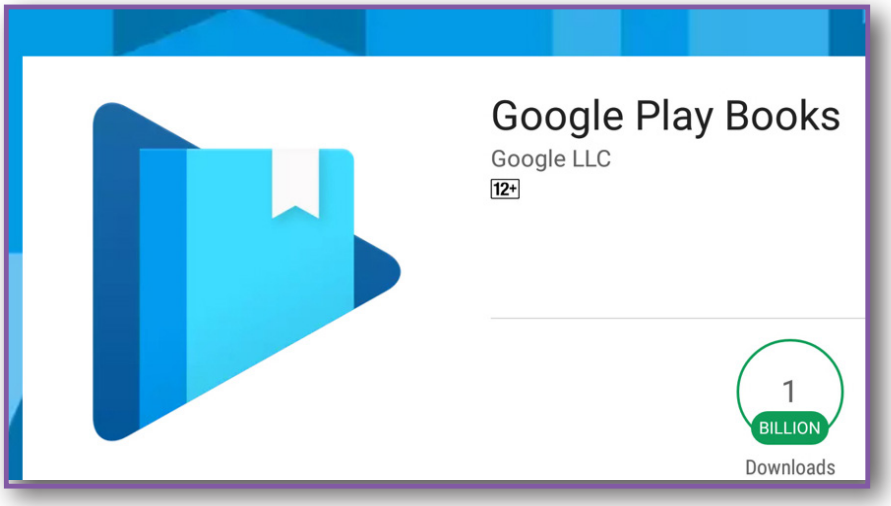
Reflection

- Make notes in your PD Journal.
- Many people argue that reading a book printed on paper is better than reading it as an eBook. What do you think are the advantages of reading a book in eBook format?
- What are the disadvantages of reading a book in eBook format?
- Which do you prefer – paper or digital?
- Why?

eReader Apps

An eBook cannot be read unless it is read in an app called an eReader App. There are several eReader Apps available on all the App Stores. This is just a small choice to show the features and functionalities of eReader Apps.

Google Play Books

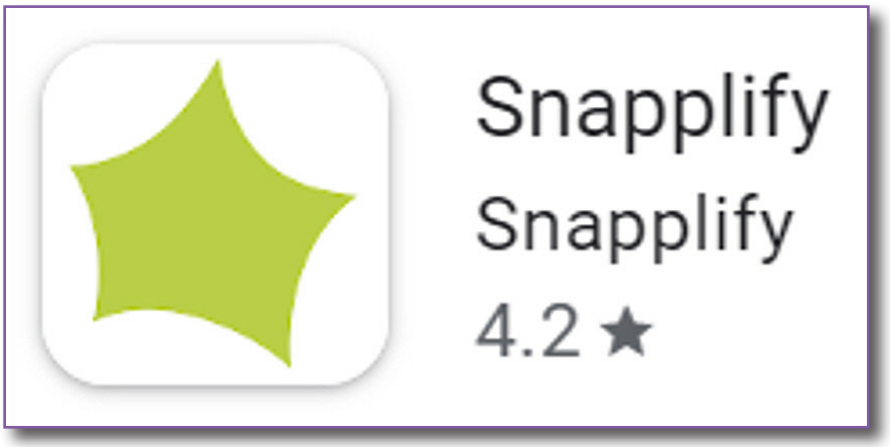


Google Play Books gives you access to a wide variety of free and paid content and is available for Android and iOS devices. You can also use the Google Play Books Web Reader App for Chrome on your computer.

Features

- Adjust font size to customize reading experience.
- Read online or offline.
- Continue to read where you left off on your smartphone, tablet, or computer.
- Add bookmarks to show your place in a book. Bookmarks are synced across different devices.
- Search within the book for a word or phrase.
- Use the built-in dictionary to define a word.
- Search Wikipedia directly from the eBook.
- Have the text read aloud.
- Add a note using the notepad and keyboard.
- Translate text.

Snapplify eReader App



The Snapplify eReader App gives you access to a wide variety of free and paid content and is available to use on MacOS, for Windows devices, iOS and Android. It is also possible to use the app in a web browser.

Features

- Adjust font size to customize your reading experience.
- Read online or offline.
- Add bookmarks to show your place in a book.
- Search within the book for a word or phrase.
- Add notes.
- Play media, such as videos.

Task

- Download the Google Play Books App to a mobile device, or download the extension on Chrome for your laptop.
- Open the app.
- Search for any free eBook that you think you can use in your classroom.
- Download it to your Google Play Books Library.
- Make short notes on why you chose this specific eBook and how you plan to use it in your classroom.
- Look critically at your notes, keeping the SAMR model in mind. Are you really redefining the learning experience or are you simply substituting a digital book for a paper book?
- Take a few minutes and review your notes. Challenge yourself and see if you can use this app at Redefinition Level.

Making eBooks

There are a great many eBooks available, and you can also create your own eBooks.

Making a PDF

You may wish to convert your notes into an eBook for your learners. This is better than sharing a Word or Google Document with them, because they will be unable to make any accidental changes to the notes. They will be able to read the notes in their eBook Reader, or in a PDF Reader.

How to create a PDF

1. Open the document you wish to convert to PDF.
2. Make sure you are happy with the formatting. Insert page numbers, check margins, etc.
3. Click File on the main toolbar.
4. Click Save As in the left-hand pane.
5. In the right-hand pane, check the file name.
6. Check where the file will be saved (above the file name).
7. Click the drop-down menu under the file name and select PDF (*.pdf).

8. Click Save.
9. Find the file in the folder where you saved it and double click to open it in a PDF Reader.
10. Check that you are happy with the formatting.
11. Share the PDF by email, or by a OneDrive or Google Drive link.

Making an ePUB

Rather than converting your notes into a PDF, you may wish to convert your notes into an ePUB format eBook for your learners. They will be able to read the notes in their eBook Reader. If you want to learn more about how to create your own ePUBs, visit Via Afrika's WritePublishRead web page. This free initiative educates and assists individuals to self-publish, in digital format, non-illustrated works they have written themselves. Through WritePublishRead, any person can learn how to write and how to publish their non-illustrated texts digitally, for everyone who has access to a phone or any other digital device to read. You will find a link to the WritePublishRead platform in the Additional Resources section of these Class Notes.

Task

- Make a PDF eBook from a set of your notes.
- Play around with formatting.
- Share it with your colleagues and ask for feedback.

Apps in education

An introduction to apps in education

There are more than five million apps available for download in the various App Stores, for example the Google Play Store and the Apple App Store. When it comes to educational apps, the choice can be overwhelming.

Why do you want to use an app?

It is important to know why you want to use an app. SAMR is useful as a model to guide you.

- Do you want to simply substitute paper for technology?
- Do you want to augment your existing lesson?
- Will the app enable you to transform the lesson by modifying or redefining it?

App Stores

Operating System	App Store
Android and ChromeOS	Google Play Store
Windows	Microsoft Store
iOS, iPadOS, MacOS	Apple App Store

Reflection

- Make notes in your PD Journal.
- Do you currently use apps in your classroom?
- If so, why did you choose to use an app rather than just teaching the class yourself? If not, what is it that stopped you? Could you overcome that obstacle?

Criteria for choosing apps

These criteria are important when you are choosing an app for use in your classroom.

- **Availability:** Make sure the app is available on your chosen App Store and in your country.
- **Cost:** While many good apps are free, some come at a cost. Be aware that Freemium Apps start off as free, but then require either a subscription or the payment of a purchase price to unlock features.
- **Offline mode:** It is particularly useful if the app still works when there is no internet available.
- **Relevance:** An app should be relevant to the curriculum, to your context, to the learner's age and language and skills level.
- **Assessment:** A good app will provide the opportunity to get summative or formative feedback. The most beneficial apps will correct the learners' mistakes and show them where they went wrong. This will help learners to develop their knowledge and skills. An example of an app with this feature is Via Afrika's Test-Urself App. This app not only marks the assessments, but also provides memoranda. You will find a link to this app in the Additional Resources section of these Class Notes.
- **Independent learning:** If a learner is to develop the skill of learning independently, the app must be within their skills level.
- **Gamification:** The addition of game-like elements (for example points and levels, could be useful, but is not a dealbreaker).

Use these questions to guide you.

- Are the instructions easy to understand?
- Is the language (or type of icons used) suitable for your learners?
- Can learners move through the app easily, knowing what is required, without getting stuck?

Task

- What apps have you used before in your classroom?
- Analyse them according to the criteria we have discussed here.
- How do they rate?

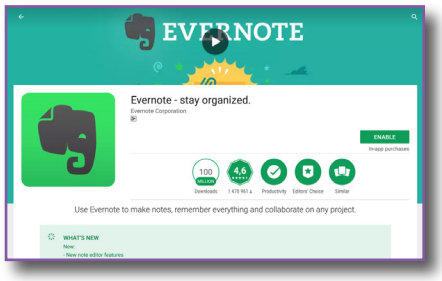
A selection of useful apps

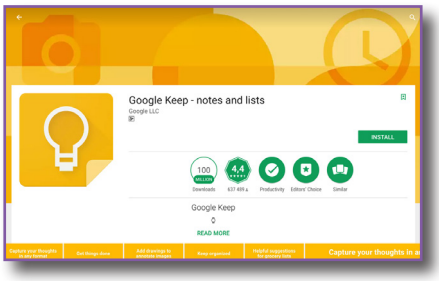
There are many apps for you to experiment with. In the section below, we look at a few example apps, but you can explore and choose to work with any other apps too! The aim is to give you a feel for what is available and provide reasons to use various apps as a way to build the skill of selecting apps into your repertoire of skills.

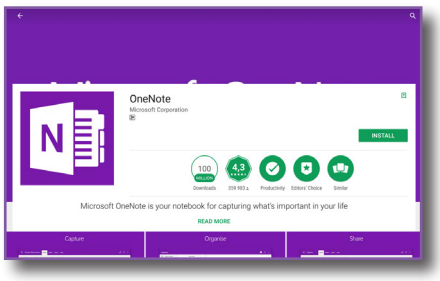
Note-taking Apps

Note-taking Apps are useful for both you and your learners. For you, they are a quick way to jot down an idea you get for a lesson, add a reminder about something, or even use during informal assessment. Note-taking Apps are available on your smartphone or tablet device. You do not need to carry your laptop around with you to use them.

A comparison of features of three Note-taking Apps







Feature	Evernote	Google Keep	Microsoft OneNote
Notes in handwriting or text	Yes	Yes	Yes
Capture photos	Yes	Yes	Yes
Voice notes and dictation	Yes	Yes	Yes
Lists	Yes	Yes	Yes
Searchable notes	Yes	Yes	Yes
Document sharing and collaboration	Yes	Yes	Yes
Offline use	Only paid	Yes	Yes
Cost	Free and subscription	Free	Free

An evaluation of two free Note-taking Apps

Criterion	Google Keep	Microsoft OneNote
Availability	Available on Android and iOS devices around the world.	
Cost	Free	
Offline mode	Yes	
Relevance	Yes, because the teacher determines the content, curriculum, context and learner level.	
Assessment	Can be created by the teacher.	
Independent learning	For learners in Grades 4 and above.	
Gamification	No	

An evaluation of the Khan Academy App

Criterion	Khan Academy
Availability	Available on Android and iOS devices around the world.
Cost	Free
Offline mode	Yes
Relevance	Content must be very carefully selected by the teacher.
Assessment	Built-in
Independent learning	For all learners.
Gamification	Yes

An evaluation of Khan Academy Kids

Criterion	Khan Academy Kids
Availability	Available on Android and iOS devices around the world.
Cost	Free
Offline mode	Mostly online, some offline material.
Relevance	Content must be very carefully selected by the teacher.
Assessment	Built-in
Independent learning	Ages two to seven years old.
Gamification	Yes

An evaluation of the Explain Everything App

Criterion	Explain Everything Whiteboard
Availability	It is available on Android and iOS devices around the world.
Cost	Freemium. There is a short trial followed by a choice of monthly or annual plans.
Offline mode	Yes
Relevance	Yes, because the teacher determines the content, curriculum, context and learner level.
Assessment	Can be created by the teacher.
Independent learning	For learners in Grades 8 and above.
Gamification	No

An evaluation of ChatGPT

Criterion	ChatGPT
Availability	Available everywhere in a browser.
Cost	Freemium. There is a short trial followed by a choice of monthly or annual plans.
Offline mode	Yes
Relevance	Teacher determines the content, curriculum, context and must check accuracy and learner level.
Assessment	Can be created by the teacher.
Independent learning	Currently age-restricted.
Gamification	No

You will find useful information on Microsoft's web page for using OneNote in education. There is a link to this page in the Additional Resources section of these Class Notes. If you would like to implement Khan Academy Kids at your school, you will find more information about how to go about doing that in the Additional Resources as well.

Task
• Go to the App Store that matches your device and find an app that you think you'll be able to use in one of your classes. • Play with it and evaluate it against the criteria we have established here. • Write a note to your Head of Department explaining why you think this app should be downloaded on all your learners' devices. You can mention what you plan to do with the app, how it meets the various criteria for a good educational app, and anything else you think would support your choice.

Apps to open a new world

Google Maps

Google Maps has a variety of functions. You can use it to save places for future reference, see traffic flow in real-time. check public transport routes, and look at maps as satellite images or contour maps. It allows you to search for specific locations and addresses. The app then displays information about these locations, including links to websites, the option to call the location, travel time to the location from your current location, and a route planner.

An evaluation of Google Maps

Criterion	Google Maps
Availability	Standard on Android devices. Can be used on a web browser on computers and downloaded as an app for iOS.
Cost	Free
Offline mode	Only for apps.
Relevance	The teacher determines the content and curriculum. The teacher must also check accuracy and learner level.
Assessment	Can be created by the teacher.
Independent learning	Yes
Gamification	No

Google Maps in the classroom

There are a number of ways in which you can use Google Maps in the classroom. The types of activities you can use are:

- Getting from point A to point B: this can be used in Mathematics to determine distance, in Languages to give directions, in Geography to identify terrain elements and in Tourism to plan routes.
- Going abroad: this can be used in Mathematics to determine distance, in Geography to look at different geographical areas, and in Tourism to explore and experience different countries' tourism offerings.
- Seeing South Africa: this can be used in History to show and discuss relevant landmarks, and in Social Sciences to add a visual and geographical context to what is being taught.

Google Earth

Where Google Maps functions as a road map for directions and distances, Google Earth is used like an atlas to explore different parts of the world. Google Earth allows you to explore the entire planet, and to see the world's cities and natural landmarks as if you were right there.

Google Earth provides information on notable sights close to the area you're exploring, and shows the world in satellite imagery.

Furthermore, Google Earth offers users the option to use Street View or 3D viewing. Google has also released Street View as a separate app, if you prefer to use it that way. Street View allows you to virtually walk any street on earth. The example below shows the street view of the Pyramids of Giza, in Egypt.

An evaluation of Google Earth

Criterion	Google Earth
Availability	Available everywhere in a web browser, and as apps for Android, iOS and computers.
Cost	Free
Offline mode	Very limited
Relevance	The teacher determines the content and curriculum. The teacher must also check accuracy and learner level.
Assessment	Can be created by the teacher.
Independent learning	Yes
Gamification	No

Google Earth in the classroom

There are a number of ways in which you can use Google Earth in the classroom. The table below shows different subjects, and the potential ways in which you can use Google Earth to teach them.

Subject	Use Google Earth to:
Languages	• Visit important locations mentioned in books, for example the cities in Shakespeare's works. • Take literary trips on www.googletrips.com. • Show teachers and other learners the places visited during a holiday – as an oral activity.
History	• Visit historic sites around the world. • View historical maps and compare them to modern maps.
Tourism	• Highlight tourism destinations to potential clients. • Visit monuments around the world, and take virtual tours.
Life Sciences	• Take virtual tours of ecosystems of the world.
Geography	• Compare different landscape features around the world. • Overlay and compare topographic maps.
Arts and Culture	• View galleries and art displayed in museums. • Show living situations of different cultures around the world. • Access Google Street View to explore the interior of art galleries and museums.

To successfully use Maps and Earth in our classrooms, we need to think critically about the role of technology in our classrooms. The best way to do this, is to check your lesson plans in terms of TPACK, Bloom's Revised Taxonomy and SAMR. This requires some thought and planning. Here is an example of a Lesson Plan where Google Maps and Google Earth has been incorporated.

Sample lesson plan

VIA AFRIKA DIGITAL EDUCATION ACADEMY

LESSON PLAN

Lesson details

Topic: A tour of our province (Tourism)

Date: 1–5 September 2024

Grade: 11

Time allocation: 90 minutes

Via Afrika

Our Teachers. Our Future.

Overview

In this lesson we will create a small tour that can be held in Cape Town. This will enable tourists from around the world to see and enjoy popular tourist and cultural attractions across the province.

Learners must identify at least 4 important attractions that they think tourists would enjoy seeing. This could include cultural, historic or natural sights. Learners must provide information on all these attractions and indicate where and how tourists will get them. This must all be presented in an electronic brochure that could conceivably be distributed to prospective tourists.

Learners will learn about:

- Tourism attractions in Cape Town
- Maps, directions and means of travel
- Pictures of tourist attractions

Resources and preparation:

- Instructional page
- Tablets
- Internet connection
- Google Maps and Google Earth

Specific aims:

1. Equip learners with the skills necessary to plan a detailed itinerary for a tour group.
2. Guide learners to communicate their results in a meaningful way to the consumer.
3. Guide learners to identify potential shortfalls or challenges that they might encounter on their tour.

Teacher activities

Preparation

- Do research on popular tourist destinations in Cape Town in case learners require assistance in identifying them.
- Create a sample tour of Cape Town using Google Slides to show learners an example of what is expected.

Class activity

- Go through the teacher's Google Slides presentation. Discuss what the learners would like to do if they could visit Cape Town.
- Teacher discusses main attractions and kinds of tourist activities. Learners have to create a trip around a specific kind of tourist interest, such as water sports, shopping, nature, history, or a combination. Have a class discussion around kinds of activities.
- Learners use Google Earth to identify key tourist areas in Cape Town.
- Learners use Google Maps to plan the route for their itinerary.
- Learners use Google Slides to create their electronic brochure. The brochure has to contain information on the route, best times of year for trip to take place, kinds of transport to be used.

Consolidation

- Learners present their brochures to the class using Google Slides.
- The teacher assesses each presentation based on the information given during the general discussion, as well as around the content taught throughout the year and Grade 10.

Learner activities:

- Learners research different tourist spots in Cape Town using Google Earth, Google Maps and Google.
- Learners plan routes using Google Maps.
- Learners plan itinerary items and create visual portfolios using Google Earth.
- Learners create presentations using Google Slides.
- Learners present to the class.

Assessment:

- Teacher assesses presentations based on whether they meet the outcomes and information standards required from a travel brochure or presentation.

Homework suggestions:
• Homework after the first class is to create the presentation in Google Slides.
Common misconceptions/problem areas
• Finding interesting places. • Learners might not have the experience they need to understand items such as travel, hotels and different cultural ways.

On the following pages, you will find a blank lesson plan template. Please use the template to complete the last task for this session.

VIA AFRIKA DIGITAL EDUCATION ACADEMY

LESSON PLAN TEMPLATE

Lesson details

Topic:

Date:

Grade:

Time allocation:

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Overview
Learners will learn about:

Resources
Specific aims
Teacher activities

Learner activities
Assessment
Homework suggestions

Task

- Use the lesson plan template above and create a lesson plan for a subject that you teach at school.
- Ensure that learners use Google Maps in the lesson.
- Ensure that the learners use Google Earth in the lesson.
- Make sure that your lesson aligns with TPACK, Bloom's Revised Taxonomy and SAMR.

About the Final Assessment

At the end of this training session, you will be asked to complete the Final Assessment.

If you complete the Final Assessment successfully, you will qualify for your virtual badge and certificate. You can see a sample here.

Final Assessment

Indicate the ONE correct response for each question.	
1	Reflowable layout allows the reader to change the font size and style according to their needs.
a	True
b	False
2	It is very important to follow the sequence set out by Bloom's Revised Taxonomy – first train learners only in memory exercises before you can allow them to use analysis in an assessment or task.
a	True
b	False
3	According to the TPACK framework, technology is more important than pedagogy and content in creating an effective eLearning environment.
a	True
b	False
4	The use of PDFs on tablets redefines teaching and learning in our schools according to SAMR.
a	True
b	False
5	At which level of the SAMR model are learners using technology when they are: • creating their own presentations using the Explain Everything App on their tablets? • presenting their presentations on an interactive whiteboard?
a	Redefinition
b	Substitution
c	Augmentation
6	When a learner saves their place on a page of an eBook to read later, they are _____ the page.
a	annotating
b	collaborating
c	bookmarking

Final Assessment (continued)	
Indicate the ONE correct response for each question.	
7	An app that marks and provides feedback replaces a teacher.
a	True
b	False
8	Which of these is not a reasonable criterion on which to evaluate an app?
a	Cost.
b	Relevance to learner context.
c	Whether or not it uses classical background music.
9	Which is incorrect? Reflowable text _____.
a	is used when the book has columns and tables
b	is useful when the position of the images isn't very important
c	is not possible in a PDF
10	Which one of the following statements is true?
a	The position of the text is fixed, but images move in a fixed layout eBook.
b	An eBook is an electronic publication for use on iPad only.
c	A reflowable format automatically resizes the text and layout settings.
11	Which scenario is not well-aligned with the development and application of 21st Century skills?
a	A teacher provides all knowledge and skills to learners on the assumption that they would not be able to collaborate effectively without these.
b	A teacher provides learners with the opportunity to collaborate with learners of other cultures on projects significant to their context using an app.
c	The learners locate and evaluate information from various online and offline resources.
12	Which statement is correct?
a	According to Bloom's Revised Taxonomy, a teacher should start at the bottom of the pyramid and work their way up.
b	The acronym SAMR stands for Substitution, Acknowledgment, Modification, and Redefinition.

Final Assessment (continued)	
Indicate the ONE correct response for each question.	
c	TPACK reminds teachers that they should plan their work with content, pedagogy and technology in mind.
13	When we replace a printed novel with reading the novel as an eBook on a tablet, and we make use of the built-in tools, we are using the app at the following level.
a	Augmentation
b	Redefinition
c	Modification
14	Khan Academy Kids is suitable for ages _____.
a	15 and older
b	2 to 7
c	10 to 14
15	Google Maps can only be used to teach Geography.
a	True
b	False

Additional Resources

Samples, tips and templates

Khan Academy Kids

If you are a school or district administrator who would like to implement Khan Academy Kids at your school or district, please reach out to them at khankidspartners@khanacademy.org.

If you are a school who would like to implement Khan Academy Kids at your school, please reach out to them at khankidspartners@khanacademy.org.

Microsoft OneNote in education

https://www.microsoft.com/en-us/education/products/onenote

Thutong Content Repository

https://www.thutong.doe.gov.za

Via Afrika WritePublishRead

https://viaafrika.com/writepublishread

Via Afrika's Test-Urself App

Click on this link to get the app in the Google Play Store: https://acesse.one/CCHXc

Wikieducator Content Repositories

https://encr.pw/LQgvz

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Acknowledgements

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