How to use the Android in the classroom 'e-course'

Instructor/Presenter: Karina D. Barley Length: 45 hours Dates: Rolling admission Number of Professional Development Credits: 3 University of the Pacific

Introduction

The 'How to use the Android in the classroom' e-Course at Digital Learning Tree introduces educators to using the Android device in education. This Android course is different to any other as it not only provides instruction on applications and how to use them; it demonstrates how using the Android and applications can reflect the Core Standards; and then links the Core Standards to classroom content by providing opportunities for practical lesson design and assessment.

This course has been written specifically for educators by an educator and provides practical and usable strategies and ideas that can be taken back to the classroom. 21st Century learning is now a reality and the Android tablet can be an educational tool that when utilized effectively can create exciting and innovative experiences for students that will motivate and inspire them to learn. Also, in the author's experience, using mobile technology in the classroom effectively can have a huge impact on student outcomes.

This course is jam packed with links to applications, core standards, resources, video, ideas for curriculum use and strategies for educators to create their lessons so that they can differentiate their learning for their students.

Course Objectives

This course explores how the Android tablet works and looks at the huge realm of applications; and links the technology to the new "Core Standards" and provides opportunities for teachers taking this course to:

- Learn how the Android works and also discover some hidden uses of the Android.
- Understand how applications can reflect the "Core Standards" and learning outcomes.
- · Learn how to incorporate mobile technology into your daily lesson plans
- Develop the use of Android applications as an assessment tool.
- Develop the concept of what an Android classroom can look like.
- Appreciate the benefits for students.

Learning Objectives

- An understanding of why tablets are **effective** in the classroom and why they are **beneficial** for students
- The student's perspective on tablets....why kids like them?
- An understanding of **Bloom's Digital Taxonomy** & a direct correlation to mobile technology and application practice in the classroom
- How to incorporate Bloom's Taxonomy's **learning objectives** into your lesson outline using the Android and Android applications
- Practical links, ideas and suggestions for how you can create your own Android 'classroom'
- To develop an understanding of the Core Standards and develop strategies for integrating these standards into all classroom planning including and especially using the Android as a teaching tool

- Links to the Core Standards and how The Standards should be considered when considering lesson content using Androids and applications
- Provides a brief overview on the long term goals of The Standards and the importance of their introduction into American education
- How using the Android in the classroom can meet these goals
- Provides a brief overview on the long term goals of The Standards and the importance of their introduction into American education
- How using the Androids in the classroom can meet these goals

Session Topics

- 1. Starting Out
- 2. Settings, Security & Childproofing
- 3. Apps, Photos and Screenshots
- 4. Using Mobile Technology for Flip Teaching
- 5. The Android in the Classroom
- 6. Androids and the Curriculum English Reading
- 7. Androids and the Curriculum English Writing & Speaking and Listening
- 8. Androids and the Curriculum Math
- 9. Applications for Literacy
- 10. Applications for Numeracy
- 11. Applications in Other Curriculum Areas
- 12. How to Search for applications

Methods of Instruction will include:

Individual lessons Multiple-choice quizzes Assignments Video, Android Resources & Applications, Web links. Optional essay for further study

Text and/or Other Materials

Video, screen captures, multiple-choice quizzes, web links and links to applications are provided by the instructor in this online course. There are NO required textbooks.

Assignments

This course has twelve assignments. The course includes twelve multiple-choice quizzes.

Percentage of Course Credit:

Quizzes 100%

Assignments – mandatory but ungraded

Due Dates of Major Assignments, Projects, and Examinations:

This online, self-running program can be started and completed at the student's own leisure within four months from the beginning of the course.

Grading and Evaluation Activities:

This online course uses Letter Grading and/or S/US according to the Quiz results.

The course administrator will review students' answers and provide feedback. Students will be evaluated on their quiz grades, assignment presentation, and the quality of all the assessment required for this course. There is an opportunity for the students to repeat the quiz twice should they fail.

List of Specific Assignments

- 1. Getting Started
- 2. Settings, Security & Childproofing
- 3. Applications, Photos & Screenshots
- 4. Flip Teaching
- 5. Tablets in the Classroom
- 6. Core Standards Curriculum in English Language Arts
- 7. English Writing and Speaking & Listening
- 8. Core Standards Curriculum Math
- 9. Applications for Literacy
- 10. Applications for Numeracy
- 11. Other Applications
- 12. How to Search for Applications

Lesson One - Getting Started

Why are we using mobile technology in schools in the first place?

Why use android tablets in the Classroom?

What to consider before you deploy mobile technology into your school and classrooms?

Ways to Use the Android Tablet

Android Core List for setting up your classroom

Lesson Two - Settings, Security & Childproofing

How to personalize your settings on your Android.

Security issues on the Android & security tips.

Childproofing your Android tablet.

Organizing your Android.

Methods of organizing applications on the Android tablet.

Can you use 'cloud' storage?

Developing a Mobile device policy

Lesson Three - More applications, Photos and Screenshots

Applications

Problems with Applications

Screenshots

Transferring Photos

Why use photos in classroom lessons?

Applications that can use photos

Lesson Four - Using Mobile Technology for Flip Teaching

What is a flipped classroom?

The Android and flip teaching

Using QR Codes for flip teaching

Screencasting using the Android & the Link to Flip Teaching

Augmented Reality Apps

Lesson Five – Androids in the Classroom/Blooms Digital Taxonomy

Why is MT so effective?

What does the MT classroom look like?

How does this affect student learning?

Bloom's Digital Taxonomy

Lesson Six - Tablets and the Curriculum - English - Reading

The Common Core State Standards and 'the standards' can be reflected utilizing the tablet within classroom activities.

From Primary to Secondary

College and Career Readiness Anchor Standards for Reading

Lesson Seven – Tablets and the Curriculum - English - Writing & Speaking & Listening

College and Career Readiness

Applications that can be utilized in each 'writing' area.

How to create English lessons that reflect the standards using the tablet.

College and Career Readiness Anchor Standards for Speaking and Listening

Lesson Eight – Tablet and the Curriculum - Maths

Overview of the 'practices' as stated in the Standards.

How to create math lessons that reflect 'the standards' using the Tablet.

Lesson Nine – Applications for Literacy

Applications for Reading

Applications for Writing

Applications for Speaking & Listening

Lesson Ten - Applications for Numeracy

Keypoints in Mathematics

Primary Maths

Secondary Maths

Lesson Eleven - Applications in Other Curriculum Areas

The Agile Space Applications in Other Areas Applications that can be used across the curriculum **Lesson Twelve - How to Search for Applications** Suggestions for Purchasing Applications Some things to consider when evaluating and or purchasing an app What applications do educators want? Checklist for applications and how effective they are in the classroom Evaluation for Android apps

LEARNING OUTCOMES

Outlined below are the learning outcomes, lesson by lesson that you can expect to achieve when you take this course:

LESSON ONE - Getting Started

To develop an understanding as to why you would use Mobile Technology in the classroom.

To develop an educational foundation from which to develop a Mobile Technology program within the school and classroom.

To develop ways to use the Android in the classroom.

To build a foundational core of apps to start an Android program for your classroom.

LESSON TWO - Settings, Security & Childproofing

To develop an awareness of the Settings icon on the Android and learn how to use Settings to childproof the Android in school arenas.

To learn how to make the Android more secure and child friendly.

To understand the importance of creating a Mobile Technology Policy for the School and Classroom.

To have the skills and knowledge to write a Mobile Technology Policy for your classroom.

Teachers will learn how to organize their Android applications into Folders and understand why it is important for classroom organization.

To understand how the 'Cloud' technology works and why the Cloud is important to classroom management of mobile devices.

LESSON THREE - Applications, Photos & Screenshots

To learn how to search for applications that are suitable for classroom needs.

How to fix problems that occur with applications.

How to take screenshots on the Android tablet and how teachers can use screenshots for record keeping, assessment etc.

How to transfer photos onto your mobile device and to your PC or other device.

Develop an understanding of why using photos in lessons can be valuable and ideas on how to use photos in lessons.

Gain awareness on the types of applications that utilize photos.

Ideas on how to use photos within lessons.

LESSON FOUR - Flip Teaching & the Android

To comprehend what flip teaching is and why the Android is an effective tool for this style of teaching. To gain an appreciation for why you would use flip teaching in a 21st Century classroom.

To have knowledge of the types of apps that can be used for flip teaching, using the Android device.

To have some foundational understanding of how to use these apps to develop a flip teaching lesson.

LESSON FIVE - Mobile Technology in the Classroom

QR Codes in the Classroom

An understanding of why mobile devices are effective in the classroom and why they are beneficial for students.

The student's perspective on tablets....why kids like them?

An understanding of Bloom's Digital Taxonomy & a direct correlation to the android and application practice in the classroom.

How to incorporate Bloom's Taxonomy's learning objectives into your lesson outline using the Android and Android applications.

Practical links, ideas and suggestions for how you can create your own mobile technology based 'classroom'.

LESSON SIX - Androids and the Curriculum - English - Reading

To develop an understanding of the Core Standards and develop strategies for integrating these standards into all classroom planning including and especially using the Android tablet as a teaching tool.

Links to the Core Standards and how The Standards should be considered when considering lesson content using Android tablet and applications.

Provides a brief overview on the long term goals of The Standards and the importance of their introduction into American education.

How using the Android tablet in the classroom can meet these goals.

College and Career Readiness Anchor Standards for Reading & the types of applications that can be utilized to develop these standards.

Understand what the 3 strands of the literacy core standards are and how they interrelate to become the English Core Standards.

For teachers to understand The Standards for Writing and what students should be able to do by the end of each grade and how using the Android tablet can assist in meeting College and Career Readiness Anchor Standards for Writing.

To be aware of the types of applications that can be utilized to develop these standards for Writing.

For teachers to understand The Standards for Speaking and Listening and what students should be able to do by the end of each grade and how using the Android tablet can assist in meeting College and Career Readiness Anchor Standards for Speaking and Listening.

To be aware of the types of applications that can be utilized to develop these standards for Speaking and Listening.

The opportunity to create writing lessons using mobile technology and applications ensuring the Standards are the basis for the lesson content.

To be able to develop lesson outlines with the Standards as the foundation for all curriculum planning.

LESSON EIGHT - Android and the Curriculum - Math

To have an awareness of the expectations of 'practices and proficiencies' in the Mathematics Standards and what types of Android applications can be used to demonstrate the qualities required in each section.

To be exposed to a range of Android Math applications from P-12.

To be able to take any of the 'practices' within the Core Standards for Mathematics and be able to create a Math lesson using any Math Android application.

To understand and develop your own understanding of how The Standards will affect and improve your teaching and whether the Android tablet and the many math applications will add to this understanding.

To be able to develop math lessons/curriculum using the Android and Android applications being mindful of the Standards.

LESSON NINE - Applications for Literacy

Develop an understanding of why reading, writing and speaking & listening applications are important in the literacy program.

To be aware of what kinds of classroom experiences can be provided using Android applications in all three areas.

To be exposed to a range of applications that can be used in the reading, writing and speaking & listening program for all ages.

To have experience in creating lesson content integrating Android applications.

To think about how using the Android and applications from the student's perspective.

LESSON TEN - Applications for Numeracy

Learn and identify key points in Mathematics according The Standards.

To become aware of the types of applications that exemplify The Standards as they encompass one or more of the key points.

To be exposed to how to use the Android applications with direct links to YouTube videos that provide reviews or explanations on how to use specific applications.

Be provided with opportunities to use the applications to create lesson or curriculum ideas.

To be able to observe what other schools have achieved using mobile technology in their classroom with direct links to websites, blogs and YouTube videos.

LESSON ELEVEN - Other Applications

To experience a range of applications in other curriculum areas such as history, geography, science, art and music.

To gain an understanding of the 'agile space' and how this relates to mobile technology and the curriculum.

To be exposed to how to use Android applications in other curriculum areas with direct links to YouTube videos that provide reviews or explanations on how to use these applications.

To gain knowledge about applications that can be used across many curriculum areas.

To explore applications that can be used by the teacher in the classroom as a testing and quiz tool.

Provides an opportunity to design lesson content in other curriculum areas utilizing the Android and Android applications.

To understand what it means to be digitally creative and reflect on how to evolve and improve one's individual teaching methods and experiences.

LESSON TWELVE - How to Search for applications

To learn how to search and choose applications for your specific classroom needs.

To understand the importance of evaluating applications for classroom use.

To gain a profile of the types of applications especially sought after by educators.

To practise completing an Evaluation Pro forma for assessing Android applications as to the benefit for use in lessons.