aws educate
Webinar Series on Remote Learning

TITLE
Develop an Asynchronous Remote-First Infrastructure for Your Class

BRIEF SYNOPSIS
Learn to use proven remote-first strategies and easily integrate them into your existing class. One of the downsides of the traditional lecture-based approach is the teacher is the main source of learning. In a flipped classroom, the students lead weekly discussions that they share in a graded, electronic forum like canvas, piazza or slack. The discussion then become a central focus of the learning as they share effective technical communication through methods such as Github, Gists, Jupyter Notebooks and YouTube videos of screencasts.

SPEAKER
Noah Gift

SPEAKER BIO:
Noah Gift is the founder of Pragmatic AI Labs. Noah Gift lectures at MSDS, at Northwestern, Duke MIDS Graduate Data Science Program, and the Graduate Data Science program at UC Berkeley and the UC Davis Graduate School of Management MSBA program, and UNC Charlotte Data Science Initiative. He is teaching and designing graduate machine learning, A.I., Data Science courses, and consulting on Machine Learning and Cloud Architecture for students and faculty. These responsibilities include leading a multi-cloud certification initiative for students.

DURATION
38 min 33 sec

TIMESTAMPS
0:00 – Speaker Introduction
4:00 – Section 1
6:19 – Techniques
9:26 – Section 1: Takeaways
10:22 – Section 2

11:50 – Share Screencast Videos
13:25 – Section 2: Takeaways
13:40 – Section 3
15:08 – Section 3: Takeaways

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Q&A with Noah Gift:

AWS Educate

Q: Are there any charges associated with AWS Educate?

A: AWS Educate is free for students and educators.

Q: How can students get more credits when promotional credits get utilized?

A: You can request access through AWS Educate, utilizing the AWS Educate Classrooms feature.

Q: How we can introduce new customer problems on the AWS educate platform?

A: AWS Educate can provide access to the AWS Console through AWS Educate Classrooms to do custom labs.

Teaching Resources

Q: What tools would you recommend for recording audio and video? A modern smart phone is actually a high end video system and often can do 4k video

Q: Any practical solutions for team-based learning, problem-solving, project-based learning, and portfolio assessment?

A: Here is some ideas: https://noahgift.github.io/cloud-data-analysis-at-scale/

Q: Do you know what tools most adult education teachers are using?

A: The tools depend completely on your own situation. There are multiple types of tools (LMS, quiz, video recording, video conference, etc.) as well as brands in each type.

Q: Do you recommend live coding?

A: Yes. I do live coding and mix it with pre-recorded how-to videos.

Q: How about an absolute beginner's class for Data Analysis?

A: Here is a good resource: https://github.com/paiml/minimal-python

Q: How do I set up a remote learning environment - hardware, software, etc.?

A: AWS Educate and Cloud9 are perfect, there is a guide here on how to get started https://noahgift.github.io/cloud-data-analysis-at-scale/topics/cloud-onboarding

Q: How do you hold presenters accountable if they don't present the "best" type of information or material? Is there a rubric that you use?

A: Yes, there is a rubric about how to respond and it is baked into the grading.

Q: I am a CS teacher at a very competitive high school. Can you list technologies/concepts they should start getting comfortable with?

A: I would follow this Duke class I teach: https://noahgift.github.io/cloud-data-analysis-at-scale/

Q: How can I adapt team-based learning, problem solving, and project-based learning for online?

A: Creation of digital artifacts: YouTube, etc

Q: I've never taught online. Where can I learn coding?

A: Guide for coding for absolute beginners: https://github.com/paiml/minimal-python

Q: What digital tools do you like for students to demo/have discussions?

A: There are lots of options for tools, not only brands but types - LMS, quiz tools, video production, webinars, etc.

Q: What exactly is an LMS?

A: A Learning Management System like Moodle or Blackboard or Canvas

Q: What is a "slack" channel?

A: Slack is a communication tool that is available for free. Think of a threaded online conversation. You invite in a group to discuss a certain topic.

Q: Where can i find more info about AWS Cloud 9

A: Learn more here: https://aws.amazon.com/cloud9/

Q: Can you explain the use of notebooks?

A: Here is a good starter notebook: https://github.com/paiml/minimal-python/blob/master/Chapter7_data_science.ipynb

Q: You mentioned asynchronous format; how often do teams meet in synchronous settings?

A: Once a week at a regular time

Q: What are some online tools that you can suggest for notebooks, scrapbooks and portfolios?

A: It depends on the type of portfolio. It could be as simple as Box, Dropbox, Google Drive or Jupyter Notebook for Computer Science classes.

Q: What kind of training does a student need to have in order to develop the "create a demo" culture?

A: No specific training. In an online environment, they can use simple tools like screencasts, video recording (even from phone), etc.

Q: For what class size is your teaching approach effective?

A: This is appropriate for all class sizes, 20-200 students. You just have to adjust some of your techniques for different sizes. For larger classes, create smaller groups of students.

Q: How do we keep our students engaged during the session?

A: Polls, interactive coding and collaborative notebooks.

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Resources:

AWS Cloud9 - AWS Cloud9 is a cloud-based integrated development environment (IDE) that lets you write, run, and debug your code with just a browser.

AWS Educate - Through AWS Educate, students and educators have access to content and programs developed to skill up for cloud careers in growing fields.

AWS Educate Office Hours for Educators and Students – Webinars, office hours, and training sessions for educators and students

Box – Box provides a single place to manage, secure and share content.

Blackboard – Blackboard learning management system provides solutions, resources, and tools to help you deliver quality training.

Canvas – Canvas learning management platform provides digital learning environments and integrated learning products for teachers and students.

Dropbox – Dropbox is a file hosting service and workspace that brings files and cloud content together.

Github – Github provides hosting for software development version control using Git.

Jupyter Notebook - Jupyter Notebook is an open-source web application that allows you to create and share documents that contain live code, equations, visualizations, and narrative text.

Moodle – Moodle is a free and open-source learning management system designed to help educators create effective online education.

Slack – Slack is a collaboration platform that replaces email and helps teams work together efficiently.