

Learning Design for: Animal Planet with Kodu

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CONTEXT

Topic: Adventure Game

Total learning time: 760 minutes

Number of students: 25

Description: Students will write the stories and translate them into Kodu adventure game. They will create a zoo with animals. They will define their habitats and characteristics.

AIMS

Create a video game with a story and many achievable tasks. Break down a story into its elements and analyze the role each plays in furthering the storyline and development of the characters. Learn about the animals, their characteristics in English. Learn how to define objects in English. Speaking and Listening. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively. Adapt speech to a variety of contexts and communicative tasks, demonstrating command of formal English when indicated or appropriate. Writing Write narratives to develop real or imagined experiences or events using effective technique, well-chosen details and well-structured event sequences. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach

OUTCOMES

Define an algorithm as a sequence of instructions that are processed by a computer. Evaluate ways that different algorithms may be used to solve the same problem. Describe and analyze a sequence of instructions being followed. Use the basic steps in algorithmic problem-solving to design algorithms (e.g., problem statement and exploration, examination of sample instances, design, implementing a solution, testing, and evaluation). Evaluate what kinds of problems can be solved using modeling and simulation. Exchange knowledge with their peers through ICT. Knowledge building & critical thinking Collaboration. Communication. Student self-assessment. Digital citizenship. Defining objects/animals in a target language.

TEACHING-LEARNING ACTIVITIES

Read Watch Listen

80 minutes 25 students Tutor is available



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Students are asked about their experiences with Kodu. They are introduced creative computing with Kodu and the range of projects they will be able to create by showing the Kodu overview video and some sample projects that students will find engaging and inspiring. They are explained that over the next several sessions they will be creating their own interactive computational media with Kodu. “What will they create about animals?” They are asked to imagine what type of project they want to create with Kodu. “What will be the genre of the game?”

Notes:

Instructional approach: Project based learning (PBL) Personalized learning Independent study
Pair work

Explore:

Investigate *80 minutes* *25 student* *Tutor is available*

The students are needed to be familiar with Kodu. They will download Kodu. Explore the Kodu and given guidelines. They will learn to express a complex activity using a sequence of simple instructions. They are introduced literary key terms. They will play sample projects. They are introduced to the created Facebook group where they can brainstorm ideas and share personal reflections. Project wiki is created. Students are grouped with team up tool with 3-4. They are also encouraged to add the activities to their blogs anytime during the process of designing projects to capture ideas, inspiration, notes, sketches, questions, frustrations, triumphs, etc. Student rubrics are discussed. Teacher takes field notes as working the room during programming sessions.

Notes:

<http://worlds.kodugamelab.com/browse>

Reflect:

Discuss *80 minutes* *25 students* *Tutor is available*

They are asked: “How would you describe Kodu to a friend?!” “Write or sketch ideas for three different Kodu projects you are interested in creating.” Studio pedagogy allows a space for students to discuss their work and receive feedback this process is integrated throughout the game creation process rather than sequencing the activity at the end of a draft, as in the traditional writing process, or at the end of product creation.

Map:

Produce *80 minutes* *5 students* *Tutor is available*



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Students write short narrative stories. They map implementing elements of plot structure using mind mapping tool popplet. They reflect and share their popplet on Facebook and wikis. They think back on their creative explorations by responding to the reflection prompts in the Facebook or in a group discussion.

Make:

Produce 160 minutes 5 students Tutor is available

Students illustrate their stories as video games using Kodu, character actions and paying attention to details of setting.

Collaborate 160 minutes 5 students Tutor is available

Students exchange video games for critiquing. They are asked to add a comment on the project page of the teams in the collection that they find particularly interesting or inspiring. They are engaged in a discussion as a group about how to give appropriate and purposeful feedback.

Show:

Discuss 80 minutes 25 students Tutor is available

Students present their video games and literary analyses of their own games. Kodu unit with an exhibition of student work. Students can introduce their games to an audience of peers, parents and other adults. For added interest, it can be considered coming up with the components of a successful game with the students. This can be used as the criteria for evaluating the games. Reflect: Discuss as a class the challenges students faced in translating the written stories into the video games and what made some video games better than others.

Notes:

Assessment and Evaluation: Formative and summative assessments of in-class and comp-laboratory

[View this lesson plan online.](#)

This lesson plan was created as part of the online course [‘How to Teach Computing: An Introduction to Concepts, Tools and Resources for Secondary Teachers’](#), funding for which was provided by the Grand Coalition for Digital Jobs.



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