ED/EDUC 3700 Education for a Sustainable Future A Teachable Lesson Plan: Honeybees and Colony Collapse Disorder Tara Eadie and Kerri Harrison P. H. Darkhor January 30, 2017

Our lesson will be taught as part of unit 4, our final unit, called *The World Around Me*. In this unit, students will further develop their understanding of populations, travel, and global issues. In particular, students will learn about Francophone countries and the environment. They will continue to develop their abilities to express their opinions, and communicate ideas, concerns, and hopes from a global perspective. The grammatical structures emphasized in this unit will be the future and conditional tenses, so students will learn how to discuss the potential state of the environment.

Subject	Grade 9 Core French (FSF1D)
Overall Expectations	 A1. Listening to Understand: determine meaning in a variety of authentic and adapted oral French texts, using a range of listening strategies. B1. Speaking to Communicate: communicate information and ideas orally in French, using a variety of speaking strategies, appropriate language structures, and language appropriate to the purpose and audience. D1. Purpose, Audience, and Form: write French texts for different purposes and audiences, using a variety of forms and knowledge of language structures and conventions of written French appropriate for this level.
Learning Goal	 The student will learn what factors contribute to the decline of the bee population. The student will learn changes he or she can make in his or her own life and community to prevent further decrease of the bee population. The student will learn the importance of being an active member of his or her community. The student will develop a positive attitude toward sustainability efforts.
Success Criteria	 The student can discuss the importance of bees and how they contribute to sustainable development. The student can identify the factors contributing to the decline in bee population. The student can spread awareness about bees within his or her community. The student can talk about environmental issues in french.

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Connection to Previous Learning	In a previous class, students learned about the environmental relationship between bees and humans, with a particular emphasis on the process of pollination and how it grows crops.
Assessment	 Students will be assessed on a cumulative project where they will display what they have learned about bees. The project will be in the form of a poster that promotes awareness of bees, their role in the ecosystem, and/or suggest ways that an individual can support the bees in their community. This project is to be done in small groups. The poster must be in french, and incorporate the new french terminology that they have acquired.
Accommodations	 Give students vocabulary sheets with important terms and/or phrases. Give students a transcript of the video. Give students the option to do their assignment in video form, rather than a poster.
Instruction: (75 minutes)	
Introduction (10 minutes)	Project an image that juxtaposes bees and wasps, and generate a conversation about Colony Collapse Disorder.
Lesson (5 minutes) (20 minutes)	Show students the video on the impact of pesticides and how they are harmful to the bee population. <u>http://www.francetvinfo.fr/monde/environnement/abeilles-des-militants-demandent-aux-deputes-d-interdire-certains-pesticides_1360817.html</u>
(15 minutes) (20 minutes)	In groups, have students share what they understood from the video. Have groups share their thoughts with the rest of the class. Discuss vocabulary terms and write them on the board.
	Teach students what other factors are contributing to the decline of bee colonies (climate change, habitat loss, parasites, etc.). Make a list on the board.
Closing (5 minutes)	In groups, get students to brainstorm ways that we can prevent the bee population from decreasing any further. Have groups share their thoughts with the rest of the class. Create a list on the board.
	Discuss the cumulative assignment. Point to the <i>Bees vs Wasps</i> image as an exemplar, and have students choose their groups.