Teacher's Guide: Getting Started

How will we sustainably feed nearly 10 billion people by the year 2050?

Journey 2050 takes students on a **virtual simulation that explores world food sustainability**. The program allows students to make decisions on a virtual farm and witness their **impact on society, the environment and the economy at a local and global scale**. Teachers guide their students through inquiry-based lesson plans that showcase farm families around the world.

The best part – the entire program is FREE! Educators do not need an agricultural background to facilitate the learning outcomes. The detailed lesson plans, animated video clips and supporting resources are provided systematically. The program was **developed with teachers and sustainability experts to complement curriculum**. The strongest ties are with science and social studies standards aimed at **grades 7-12**.

The program can be completed in **seven hours**. It uses agricultural sustainability as the foundation to introduce topics of plant health and nutrients, water conservation, markets and economies, land use, geography, careers, technology and innovative solutions. Those wanting to spend more time engaging with the issues of sustainability will find the content-rich lesson plans a resource for greater exploration.

The goal of Journey 2050 is to engage students in positive discussions about the importance of sustainable agriculture, best management practices and innovations.

Feeding the world is the responsibility of all. We need to think about the ways we act now so that future generations and our natural environment may prosper.

Food is life. Sustainable food is our future.

Program At-a-Glance:

The lesson plans focus on student exploration, using three dimensional learning or a backwards design teaching method. The lessons follow the 5E Instructional Model: Engage, Explore, Explain, Elaborate, and Evaluate.[1] Each lesson begins with an interest approach to introduce and *engage* students in the topic. Students will then *explore* and *explain* by watching a video clip and participating in a class activity/discussion. Students then *elaborate* by playing a level of the Journey 2050 *Sustainability Farming Game*. Last, students assess what they learned and teachers *evaluate* their understanding. Each lesson concludes with a wrap-up discussion to serve as a summary assessment of the concepts.

- Lesson 1: Introduction to Sustainable Agriculture (90 min)
- Lesson 2: Plant Health (45 min)
- Lesson 3: Water (45 min)
- Lesson 4: Economy (45 min)
- Lesson 5: Land Use (45 min)
- Lesson 6: Careers for 2050 and Beyond! (45 min)
- Lesson 7: Technology and Innovations (60 min)
- Action: Project Based Learning and Summary (60-90 min)

Preparation for the first day of class:

1. **Register for the program** on the Journey 2050 website (http://journey2050.rnp.io/teachers/sign_up)
2. Due to the simulation game-play focus of the program, each student needs access to their own computer or tablet. Before you begin the program with the students, please **download the game onto each device**. For more information and instructions visit: http://journey2050.rnp.io/teachers/online/activities_and_resources.
    - If playing on a computer, the game can be opened directly through a web browser such as Chrome, Safari or Firefox. Internet Explorer is no longer compatible. Alternatively, the game can be downloaded onto the computer as software so no internet connection is required when the students begin to play. Teachers may want to consult with their school IT support to ensure there is no difficulty downloading the game.
    - If playing on a tablet, download the game for free from the App Store, Windows Store or Google Play.

3. **View the curriculum connections** under Teacher Experience/Online Experience/Begin Program/Curriculum Connections
4. **Download the Step-by-Step lesson plans**, **PowerPoints, videos and games**. http://journey2050.rnp.io/teachers/online/activities_and_resources#step-by-step-guide
5. Once you register, you will be given a teacher code. If students have an **internet connection** and **enter your teacher code** before playing each level, the **game will generate a student report**. The teacher code is found after your name once you sign in. The code has two purposes – it skips the videos (so that you can show them at the front of your class instead of on each device) and it generates reports based on each game. Level 1-4 is split into 4 topics for the lesson plans but it is actually one game so students have to complete all 4 levels at once to generate a report. Level 5 and 6 are independent games so a report is generated after each one if the code is entered beforehand.

Questions: If you have questions or would like to speak with an agricultural expert please contact us. We have a network of organizations excited to visit with you and your students about agriculture!
Email: programs@naitco.org

[1] http://enhancinged.wgbh.org/research/eeeee.html