

FEAST ON FACTS



FROM ACADEMY AWARD® NOMINEE SCOTT HAMILTON KENNEDY

FOOD|EVOLUTION

FOOD EVOLUTION IN THE CLASSROOM:

5 WAYS TO INCORPORATE
FILM
INTO YOUR
AGRICULTURE LESSONS

Today's **AGENDA**

- **Arrival, Welcome**
- **Introduction to Today's Focus**
- **Model a Sample Lesson**
- **Debrief the Lesson as a Group**
- **Closing, Q+A, Additional Info**

Let's Get Started!

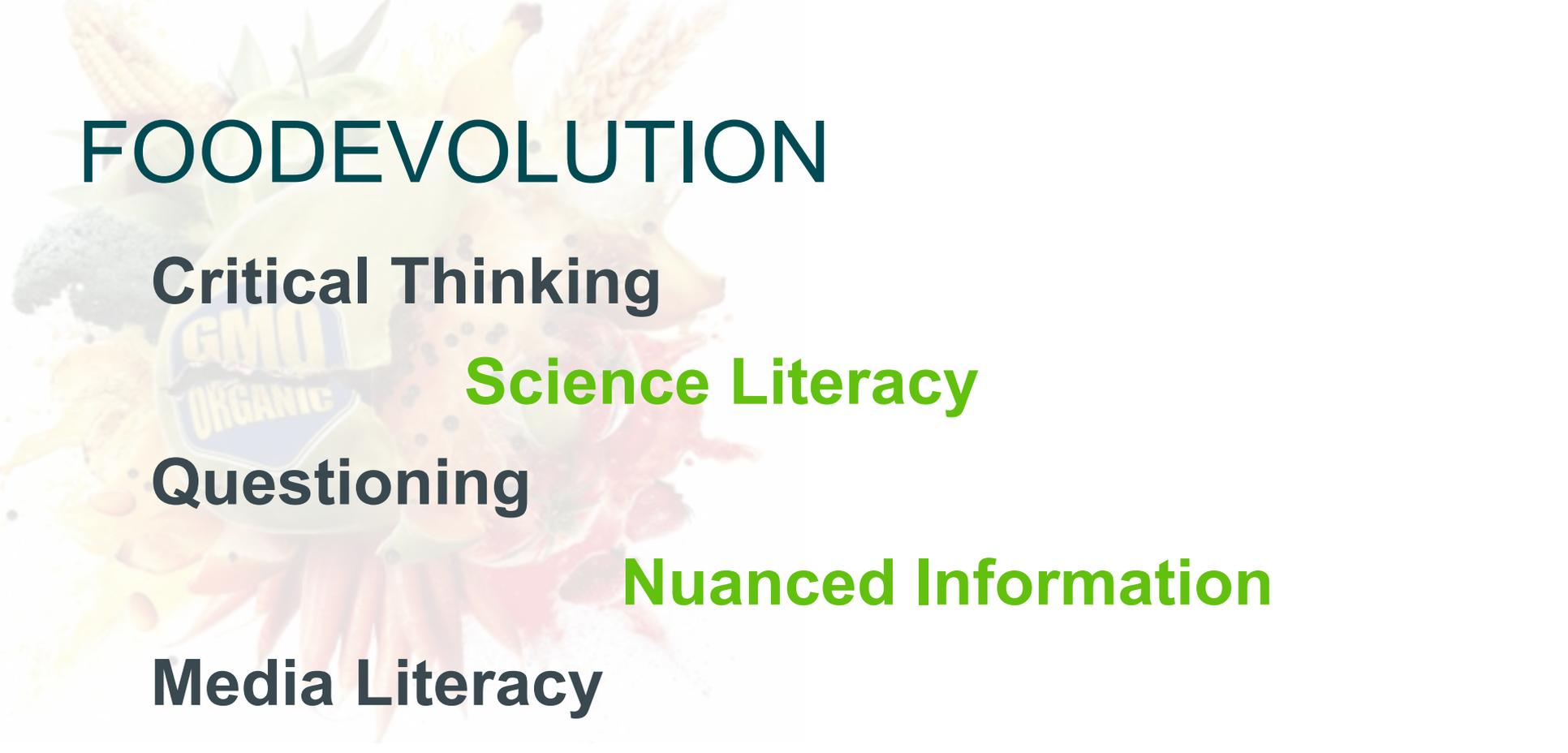


Today's **WORKSHOP**

How can **film** add a new dimension to your teaching about agriculture?

FOOD EVOLUTION **thefilm**

Using the often **angry and emotional controversy** over **genetically modified foods** as its entry point, FOOD EVOLUTION shows how easily fear and **misinformation can overwhelm** objective, **evidence-based analysis**. **FOOD EVOLUTION** takes the position that **science and scientists hold the key** to solving the food crisis. **But whose science?** In the GMO debate, **both sides claim** science is on their side. **Who is right?** How do we **figure** this out? **What does this mean** for the larger issues of **food security, sustainability, and environmental wellbeing?** FOOD EVOLUTION seeks to **answer these critically important questions**. Narrated by Dr. Neil deGrasse Tyson, FOOD EVOLUTION presents an inside look at **how misinformation travels** with fear and the **uphill battle** to prove that **what is accepted might not always be true**.



FOODEVOLUTION

Critical Thinking

Science Literacy

Questioning

Nuanced Information

Media Literacy

Varying Texts

Using the GMO debate as a lens

FOOD EVOLUTION **theguide**

The FOOD EVOLUTION **Educational Resource Guide** is meant to mobilize students, educators, and communities at large to **think differently** about how they **consume information**, how they interact with **evidence**, and how these processes feed into how we **solve** the **problems** that face us as a global community – such as **climate change, food sustainability**, and the management of **public discourse**. FOOD EVOLUTION and the accompanying Guide are a perfect fit for any curriculum that focuses on **media literacy, biology, agriculture, ethics, genetics, sustainability, climate change**, and **global hunger**. FOOD EVOLUTION and the **STEM-aligned** messages it conveys about the value of **science, technology, innovation**, and **analytical thinking** in daily life creates an opening for **engaging** and **thought-provoking** discussions. The film is now accompanied by a **standards-based** educational resource guide which includes discussion questions, **screening guidelines**, and procedural **lesson plans for classroom use**.

FOODEVOLUTIONtheguide

Lesson 1 – Using FOOD EVOLUTION to explore the concepts of correlation and causation and the scientific method

Lesson 2 – Using FOOD EVOLUTION to explore the relationship between science, fake news, alternative facts, and critical and analytical thinking

Lesson 3 – Using FOOD EVOLUTION to explore the way the GM debate can be used as a lens to examine other topics, such as climate change, world health, food sustainability, and processing nuanced and complex data

Lesson 4 – Using FOOD EVOLUTION to explore the difference between opinion and fact, and how various stakeholders can affect the real-life application of science around the world

Lesson 5 – Using FOOD EVOLUTION to explore how various societal, cultural, and political influences

Lesson 6 – Using FOOD EVOLUTION to explore the necessity of sound science for the future of humanity and the survival of our planet

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SAMPLE STANDARDS ALIGNMENTS

MS-LS1-5 FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSES

Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.

MS-LS2-1 ECOSYSTEMS, INTERACTIONS, ENERGY, AND DYNAMICS

Analyze and interpret data to provide evidence for the effects of resource availability on organisms and populations of organisms in an ecosystem.

MS-LS3-1 HEREDITY, INHERITANCE AND VARIATION OF TRAITS

Develop and use a model to describe why structural changes to genes (mutations) located on chromosomes may affect proteins and may result in harmful, beneficial, or neutral effects to the structure and function of the organism.

MS-LS4-5 BIOLOGICAL EVOLUTION: UNITY AND DIVERSITY

Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms.

MS-ESS3-5 EARTH AND HUMAN ACTIVITY

Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.

HS-LS2-2 ECOSYSTEMS, INTERACTIONS, ENERGY, AND DYNAMICS

Use mathematical representations to support and revise explanations based on evidence about factors affecting biodiversity and populations in ecosystems of different scales.

HS-LS2-7 ECOSYSTEMS, INTERACTIONS, ENERGY, AND DYNAMICS

Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.

HS-LS3-1 HEREDITY, INHERITANCE AND VARIATION OF TRAITS

Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.

HS-ESS3-1 EARTH AND HUMAN ACTIVITY

Construct an explanation based on evidence for how the availability of natural resources, occurrence of natural hazards, and changes in climate have influenced human activity.

HS-ESS3-2 EARTH AND HUMAN ACTIVITY

Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.

HS-ESS3-4 EARTH AND HUMAN ACTIVITY

Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

HS-ETS1-1 ENGINEERING DESIGN

Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.

HS-ETS1-2 ENGINEERING DESIGN

Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.



Today's Lesson

How are influences **besides science** affecting access to new technology that can solve the challenge of feeding the world?



Today's Lesson

Count off by 4's! Then consider the term you are assigned:

1's ... ECONOMICS

2's ... EMOTIONS

3's ... OPTICS

4's ... NUANCE



F P O



Lesson DEBRIEF

- What did you like / dislike about this lesson?
- How might this work with your students/ communities?
- What hands-on experiments/ activities might you incorporate?
- What challenges might you face using this lesson?
- What unique needs/ teaching objectives does this lesson address?
- How does this lesson add to the exploration of teaching ag in the classroom?

Who is Behind this Project?

The Institute of Food Technologists (IFT) funded the documentary FOOD EVOLUTION to inspire discussion and show the critical role science and innovation play in building a safe, nutritious, and sustainable food supply for everyone.

This film is intended to contribute to a rational conversation about science, facts, and food. The documentary was funded through IFT's financial reserves, derived from revenue generated primarily through membership dues, scientific publishing, events, and advertising, and without contribution from any other organization or company..

Unlike a trade association, IFT is a non-profit scientific association comprised of 17,000 scientists from 95 countries representing multiple disciplines, innumerable perspectives, and shared commitment to science. We are committed to a world where science and innovation are universally accepted as essential to a safe, nutritious, and sustainable food supply for everyone. We are proud to have funded this important film and hope that it will encourage informed discussions about sound science.

Who Made this Film?

SCOTT HAMILTON KENNEDY :: DIRECTOR - PRODUCER – WRITER

Academy Award® nominee Scott Hamilton Kennedy is a writer, director, producer, cameraman, and editor. He has worked with legends like Roger Corman, directed music videos like Jimmy Cliff's international hit "I Can See Clearly Now," and on commercials, motion-capture animation, scripted, and reality television. His documentary work includes Oscar-nominated THE GARDEN, about the struggle over the nation's largest community garden; Independent Spirit Award nominee OT: OUR TOWN, about the first play in 25 years at Dominguez High School in Compton; and the critically acclaimed FAME HIGH, which follows four students through a year at a competitive performing arts high school. Scott recently launched Time Capsule Movies, personalized documentaries that can be shared for generations at timecapsulemovies.com. Scott resides in Los Angeles with his wife Catherine Borek, their two daughters Tessa and Eden, and their dog Pepper. For more information, please visit blackvalleyfilms.com.

TRACE SHEEHAN :: WRITER – PRODUCER

Trace Sheehan is the founder and CEO of Boomdozer, Inc., and director of development at Left Field Pictures. Before launching Boomdozer, Sheehan co-founded the sales and production company, Preferred Content, responsible for critically acclaimed documentaries including JIRO DREAMS OF SUSHI and GRACE & MERCY. Sheehan graduated from Duke University with a degree in international business and has postgraduate degrees from the London School of Economics, the University of Cambridge, and the American Academy of Dramatic Arts. He is a member of the PGA and NPACT and is represented by the Kaplan Stahler Agency.

THANK YOU for joining us!



Don't forget to complete the survey to access your free copy of the film and guide!

http://bit.ly/FE_NAITC_2019