SILO: EDGE OF THE REAL WORLD

Inspired by True Events



Film Discussion Guide and Activities

"Silo: Edge of the Real World" Discussion/Reference Guide

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Purpose

The purpose of this Discussion Guide is to provide discussion points and further activities to use after a school or community presentation of the short documentary SILO: Edge of the Real World. The guide contains background information on the short digital documentary, key quotes from the short and possible discussion points and also contains social media links as well as links to grain safety websites that can be used for follow up discussion with school students or community members.

Background Information

Information for the educator on the topic of grain bin entrapment. This info was taken directly from the website for this film. (https://silothefilm.com/)

"Silo: Edge of the Real World is a meditation on life in a small midwest farm town. When a grain entrapment shocks their small community, Adam Fox, a young farmer and Clay Althoff, a senior in high school, both consider the risks and rewards of a corn farmer's life."

"WHY?

Why enter a bin in the first place? The primary reason for entering a bin is to loosen crusted, frozen or spoiled grain. In other words, grain that is out of condition and resisting easy transfer from the bin to a truck through the traditional mechanisms.

HOW?

How do people get trapped or swallowed after entering a bin? There are two scenarios at play here:

1) Out of condition grain can form bridges, leaving pockets of air below. Bridged grain may appear safe to walk on, but collapses with the weight of a person. This collapse can cause a suction-like effect to occur, pulling a person down into the grain like quick sand.

2) If while walking the grain, the unloading equipment is running, (meaning the bottom-feeding auger is on), a similar grain collapse can occur, covering the person in an avalanche of grain.

WHAT?

What happens after a person is covered in grain? Sometimes the impact of the grain falling on the entrapped person can be enough to cause fatalities. More often, though, after the person has become entrapped suffocation is the primary cause of death."

Some helpful links for more background knowledge on the topic:

Interview with Silo film producer Sam Goldberg - <u>http://aggrad.com/future-of-agriculture-055-grain-entrapment-how-idea-becomes-feature-film-sam-goldberg-silo-the-film/</u>

Flowing Grain Entrapment - http://nasdonline.org/43/d001611/flowing-grain-entrapment.html

National Grain Safety Coalition: <u>http://grainsafety.org/</u>

Key Quotes from "Silo: Edge of the Real World"

This is the list of key quotes accompanied by potential discussion points. The notes and questions provided beneath each quote can be tailored to fit time and student needs. The idea is simply to spark a real, honest discussion relating to grain bin safety and the risks associated with agricultural operations, with the intention of raising awareness and preventing future grain entrapment injury or fatalities.

1) "It may be more of a recovery than a rescue." (00:50)

- Ask the students what this might mean.

- When someone gets trapped in the grain, it takes only 3 - 4 seconds to become helpless (trapped) in the grain flow. Within 20 seconds of moving grain, a person can become buried alive. In rural areas it often takes longer for the firefighters to get to the scene, and the response time is increased even further if the trapped person was alone and found later or if they could not call out for help before becoming engulfed.

2) "Now it's all mechanized, it's kind of fewer people, bigger machines." (1:56)

- Refer back to previous point. Often farmers or farmhands will go out to check the grain bins alone, as there are simply fewer people on the farm now. If they feel the need to get into the bin for whatever reason, no one is there to call for help if they become trapped.

- Bigger machines: one common cause of grain entrapments is the movement of the auger at the bottom of the bin. If this is not turned off before entering the bin, or if someone turns it on without knowing there is a person inside the bin, the grain can begin to move.

- The felt pressure on farmers to produce more and more in this high paced, demanding and mechanized society can cause them to take risks in order to ensure the grain is up to standard. Someone may climb into the bin to check on conditions like temperature, moisture, clogged augers, molded grain, etc. sacrificing safety for productivity.

3) "My first job was in 7th grade, it felt like real life hit me already and I matured a lot faster than others." (2:08)

- This dialogue then goes on to talk about growing up with jobs on the farm

- When did you (directed at students) get your first job? Were there any risks or safety hazards associated with it?

4) "We were driving tractors and trucks when we were 7 or 8." (3:20)

- Continuing on from the previous point

- What are the risks associated with allowing young children to partake in agricultural operations?

- Did your family allow you to operate equipment from a young age? If so, did they give you any instruction on safety while using the equipment? (Including students not from a farming background in the discussion – Did your parents allow you to use: oven/stove, lawnmower, grills or other fire hazards, etc?)

- Children on the farm often grow up watching their family members operate equipment. In a "monkey see, monkey do" fashion, the child will grow up performing tasks the same way they saw it done by family members, regardless of whether or not the adult was modeling appropriate safety precautions.

- Adults should be aware of the eyes that observe them when doing a risky or dangerous task.

5) "You put in all the sweat and tears, put them in the ground, they grow - in a sense they're like your own kid." (3:34)

- What do you think was meant by this statement?

- The farm is both a workplace and a home for many agriculturists. Generations of hard work have made these family farms what they are today. There are a lot of long days spent planting, spraying, checking, and finally harvesting these crops.

- A unique aspect of the agriculture industry is the pride and ownership felt by those who raise the food we eat. So much work is contributed that an emotional connection to the process forms. This concept can often foreshadow why a person might risk their life by climbing into a grain bin; for them, this is their livelihood.

This could also tie back to the heightened pressure farmers feel in today's society to take risks in order to ensure all their labor is not wasted, as well as meeting the demands of the public.
There is a heavy metaphor here about how the livelihood these families depend upon is causing the death of these farmers, even after all of the hard work they have contributed to get the grain harvested. This quote seems to foreshadow the end of the short film where the 911 calls are being played, after an entrapment.

- Can you think of something so important to you that you would be willing to risk your personal health and safety for it?

6) "We don't want to lose people. You know in life there's rules. We don't always like them, but they're in everyone's best interest. Because 'it's not going to happen to me'." (5:10)

- This is a quote from an ag teacher discussing grain bin safety with his class. Ag teachers are often highly respected figures of authority and comradery in a teenager's life. Sometimes a student might be more willing to listen to the advice of their teacher than their own parents. This shows the importance of having these discussions in your classroom.

- Refer back to the discussion of taking risks. Why do farmers or people working on farms take risks? (the "I know what I'm doing, it won't happen to me" mentality)

- How do we minimize risks?

- What are some rules associated with safe farm practices?

- What are some rules to follow when working with grain bins to make sure you don't become trapped?

7) "It's so loud, you can't yell really. And he wouldn't have been able to yell. It's just like being underwater. Every time he took a breath corn went in. That was pretty much it." (6:00)

- What is it actually like to be stuck in a grain bin?

- Students can relate to the feeling of drowning while swimming. Relate the grain bin entrapment to drowning.

8) "Anytime something like that happens it's a shock to the community. It's kind of a wake-up call, it's a reminder that what we're doing is not entirely safe." (6:15)

- How are communities affected by these events?

- Do you think an accident has to occur before a farmer will consider their own decisions and safety measures?

- What can agricultural communities do to support farmers and ensure no one is ever trapped in a grain bin?

- How can the first responders in an agricultural community prepare themselves for an entrapment?

9) "We need approximately 12 semis for unloading grain." (6:43)

- This quote comes from the 911 call (you might have to listen carefully to catch it)

Here is the opportunity to open students' eyes to just how much grain can be in a grain bin.
Students can visualize how much "stuff" might fit in 12 semi-trucks. Imagine becoming trapped in that kind of weight? Imagine how deep it would be and how quickly a human might find themselves lost in it all?

10) "Hopefully buy a house and some land one of these days. Start building a family. I mean, I'm right on the edge of the real world." (7:33)

What does "the edge of the real world" mean to you? What is coming next in your life?
Most high school students can relate to this feeling. Do they want to throw away their future by climbing into a grain bin/participating in any unsafe activity without taking precautions?
Take note that this is where the title of the film comes from

11) "It's something I'm good at, I don't want to throw it away." (8:14)

- Often, many children will return home to continue the tradition of their family's farm

- What can you do as the next generation to ensure safety on your operation?

- What should farmers be doing to keep up with the demand while also maintaining safety for themselves and others?

- Good opportunity for this younger generation of agriculturists to provide their own insight and initiative on how they can make the industry safer.

12) "You could be gone in an instant. And it's not just me, it's my wife, (son- Adler), it's their whole support system too. So if I go, their whole way of life is gone." (9:02)

- Every decision we make has a reaction or consequence

- Who will be affected if you make an unsafe decision?

13) "It's always in the back of your head – is it worth it, getting in this bin right now?" (9:21)

- Why do we get in a grain bin? IS it worth it?

- Are there other solutions? What is the safest way to go about correcting issues with a grain bin?

14) "Since 1964, 1,156 farm workers have died in silo accidents. Over 200 of them were teenage boys." (*End Credits*)

- How could these accidents have been prevented?

- Does anyone know someone that has been involved in a farming accident?

- Does anyone know someone who has been involved in the grain industry or has been in a grain related accident?

- What can you (directed at the students) do to prevent someone you know from getting injured in a farm-related/grain-related accident?

Alternative Approach: Themes

This short film is a very powerful look into the life of an agricultural community facing the issues associated with a grain bin entrapment scenario. While it is not a fictional film, "Silo: Edge of the Real World" carries many theatrical and thematic elements. Similar to how an English class might dissect a book for recurring themes, this film discussion could be organized accordingly. Some suggestions for organizing the discussion by themes:

Farm/Home/Community Interaction

- "My first job was in 7th grade, it felt like real life hit me already and I matured a lot faster than others." (2:08)

- "We were driving tractors and trucks when we were 7 or 8." (3:20)

- "You put in all the sweat and tears, put them in the ground, they grow - in a sense they're like your own kid." (3:34)

Taking Risks

- "Now it's all mechanized, it's kind of fewer people, bigger machines."(1:56)

- "We don't want to lose people. You know in life there's rules. We don't always like them, but they're in everyone's best interest. Because 'it's not going to happen to me'." (5:10)

- "It's always in the back of your head – is it worth it, getting in this bin right now?" (9:21)

Grain Bin Safety

- "We need approximately 12 semis for unloading grain." (6:43)

- "Since 1964, 1,156 farm workers have died in silo accidents. Over 200 of them were teenage boys." (End Credits)

Emergency Response

- "It may be more of a recovery than a rescue." (00:50)

- "It's so loud, you can't yell really. And he wouldn't have been able to yell. It's just like being underwater. Every time he took a breath corn went in. That was pretty much it." (6:00)

Fragility of Life

- "Anytime something like that happens it's a shock to the community. It's kind of a wake-up call, it's a reminder that what we're doing is not entirely safe." (6:15)

- "Hopefully buy a house and some land one of these days. Start building a family. I mean, I'm right on the edge of the real world." (7:33)

- "It's something I'm good at, I don't want to throw it away." (8:14)

- "You could be gone in an instant. And it's not just me, it's my wife, (son-Adler), it's their whole support system too. So if I go, their whole way of life is gone." (9:02)

* Idea: Copy and paste each of these into their own PowerPoint slide to organize discussion and aid visual learners who would benefit from seeing the quotes on screen, as well as students who benefit from organizers and a more structured approach to the discussion.

Grain Entrapment Prevention

A grain entrapment is a serious, scary situation. This is some information to give students to help them in the event that they find themselves involved with an entrapment scenario, as well as prevent the event from ever occurring.

- Turn off the auger or unloading equipment. This action can prevent entrapments from ever occurring.
- Call 911 immediately.
- Wait for the rescue squad before attempting rescue.
- Offer assistance to rescuers, but follow the directions of the incident commander.

For more information on grain entrapments, please visit the National Grain Safety Coalition website. http://grainsafety.org/

This site is supported by the CDC/NIOSH. It may serve you well in your classroom to discuss with students and make them aware of these organizations:

* CDC – Centers for Disease Control and Prevention

* NIOSH – The National Institute for Occupational Safety and Health

Social Media

Website - https://silothefilm.com

Facebook - Encourage students to go "Like" the "Silo the Film" Facebook page.

Link: https://www.facebook.com/silothefilm1/about/

@silothefilm1

- Here you can keep up with the progress of the larger motion picture, "Silo." You can also find resources and articles pertaining to grain bin safety.





Instagram - @silothefilm

- Encourage students to "join the conversation" about farm safety and grain bin entrapment.
- Start a #hashtag about "Silo" or grain entrapment, farm safety, etc.

Follow-Up

Sometime after the class period in which you discuss this film, reinforce the conversation and remind students once more of the importance of being safe on the farm. Some ideas on how you could do this:

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- Bellringer/start of class review on the highlights of your discussion
- On the day of the discussion, assign students the task of identifying safety hazards they see in their daily lives. Refer back to this assignment a week later. Have another class discussion/brainstorming session on how to avoid or correct these hazards.
- Create a Google Doc, Survey Monkey, etc. that "quizzes" students on what they remember learning about grain entrapments. Identify areas of concern where students may not fully recall the procedures or necessity of grain bin safety from the Grain Safety Coalition website information. Readdress these topics.
- Advocacy project: have students create posters, brochures, blog posts, commercials/videos, etc. to distribute within their school or community to raise awareness about grain entrapments and farm safety.
- Host a farm safety day in your local elementary school.
- Set up interviews, guest speakers, or field trip opportunities with local farmers to discuss the "real world" of grain production.
- Have students research grain entrapments, grain bin technology, stories and real accounts, etc. to get a deeper understanding of the topic.

Supplemental Materials & Classroom Activities

More ideas to spark connections to the material.

- In the scene where the agriculture teacher is talking to the class, there is a model in the background that appears to be an upturned water cooler jug filled with corn. Along the lines of this thought process, students could create a model of a grain bin, filled with corn, soybeans, etc., and observe in the classroom how grain flows. Ideas and logistics for this type of activity could be taken from Dale Dobson at the Kentucky Department of Agriculture, where they have developed a traveling grain bin model complete with a turning auger and Barbie doll victim.
- Activities to enhance the impact: one quote from the film relates a grain entrapment to drowning, and expresses that the victim would not be able to yell for help.

* Have student wear headphones with loud music/noise playing, close eyes or turn away from a person trying to communicate with them. (Or have access to a shop with tools, or any noisy environment.) Explain how it would be noisy in a grain bin while the auger or tractor outside is running.

* Have student hold their arms above their head, with their cellphone in a pocket. Wrap the torso/pocket area of the student in plastic wrap, tight enough that they cannot remove the phone from their pocket. Explain how someone trapped in suffocating, heavy grain up above their waist may not be able to reach a cell phone to call for help (assuming the cell phone has service at all out in a rural area, inside of a grain bin).

Potential Ag Mech. KOSSA (Kentucky Occupational Skills Standards Assessment) Standard Connections:

| OB | 1 | Discuss the importance and function of safety systems on tools and equipment |
|----|---|--|
| OB | 2 | Demonstrate safe practices in the operation of power units and equipment |
| OB | 3 | Demonstrate safe practices specific to agriculture power, structural, and technical systems (e.g., PPE, materials handling, shop/laboratory operation) |
| OB | 4 | Outline power unit and equipment controls, startup and shut down procedures, and pre operation inspections using owners/service manuals |

References

Grain Handling Safety Coalition. http://grainsafety.org/ National Ag Safety Database. http://nasdonline.org/ Silo: Edge of the Real World. https://silothefilm.com

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