



Wisdom to make a difference.

The Creative Tension Between Safety Education and Training

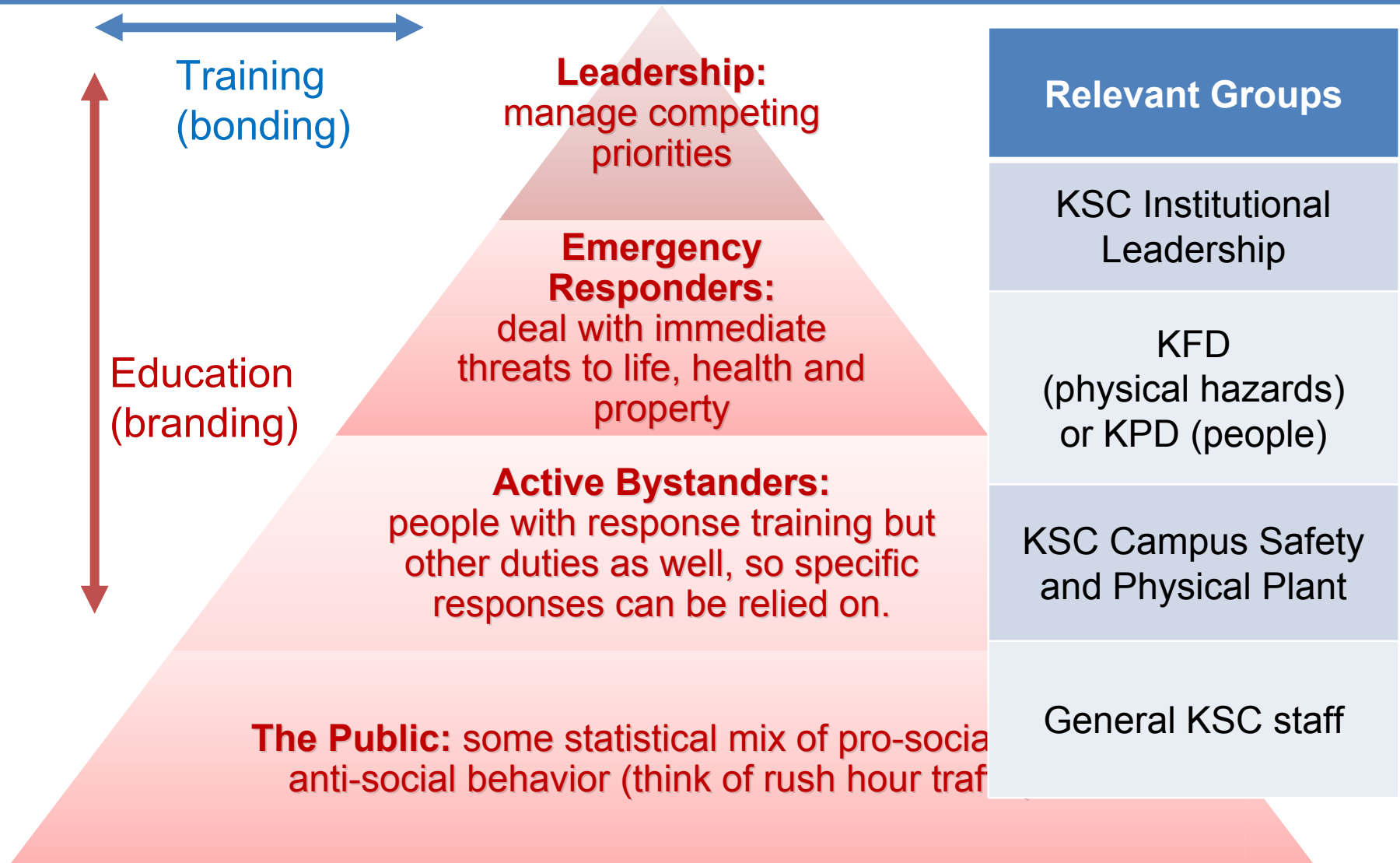
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My *Training vs. Education* Question for 2019

- ❖ In 2020, there will be a presidential election in the US. It is likely to be controversial.
- ❖ New Hampshire will hold the first primary and can expect to have a significant media presence in the state for 6 months before the event
- ❖ It is likely that many candidates will visit Keene State over the next 9 months. (They started this month.)
- ❖ The campus administration is concerned about a possible social media storm. How can I help?
- ❖ A tabletop scenario that mixes hazmat and social media considerations



My Strategy: Focus on General Roles and Responsibilities in Unexpected Events



How Does the General Aviation Sector Approach Training / Education Challenge?

General Aviation Summary Data

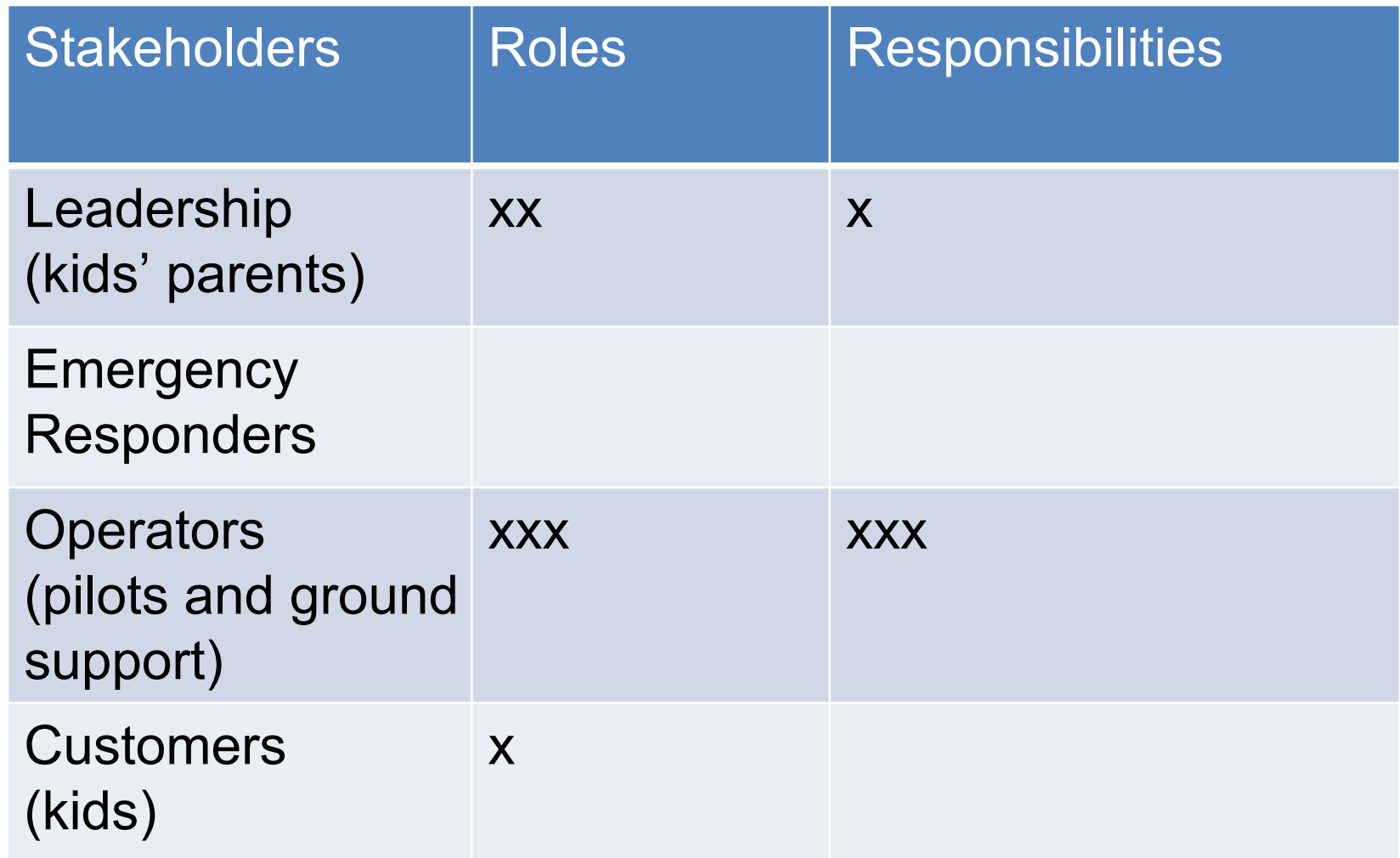
Flight Activity	2017	2016	2015
Centers-Aircraft Handled (GA Aircraft)	7,451,713	7,334,296	7,106,001
About 85,000 GA pilots/year			
Pilot Certifications	2017	2016	2015
Student Issuances	38,401	38,712	49,062
Private Issuances	17,752	17,082	16,473
Commercial Issuances	10,506	10,191	9,211
ATP Issuances	4,449	9,520	6,544
CFI Rating Issuances	5,310	5,043	4,544
Instrument Rating Issuances	11,443	11,020	10,103
GA Shipments - includes piston, turbo prop, and business jets	2,324	2,268	2,331
Active GA Aircraft	213,050	211,794	210,031
GA Aircraft AVGAS Consumption (Millions of Gallons)	209	206	196
GA Aircraft Jet Fuel Consumption (In Millions of Gallons)	1,535	1,437	1,383
Aviation Safety	2017	2016	2015
GA (Fatal) Accidents	330	386	378

About 20,000 Physical sciences B.S.'s/year

Training or Education? The more roles addressed, the more educational it is

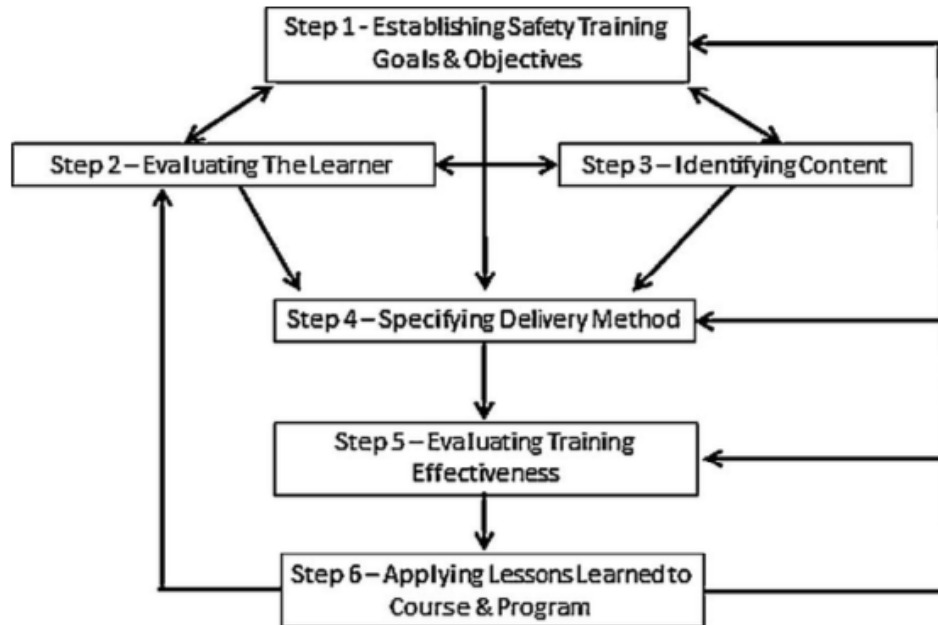
Education

Training



Stakeholders	Roles	Responsibilities
Leadership (kids' parents)	xx	x
Emergency Responders		
Operators (pilots and ground support)	xxx	xxx
Customers (kids)	x	

The Training Model



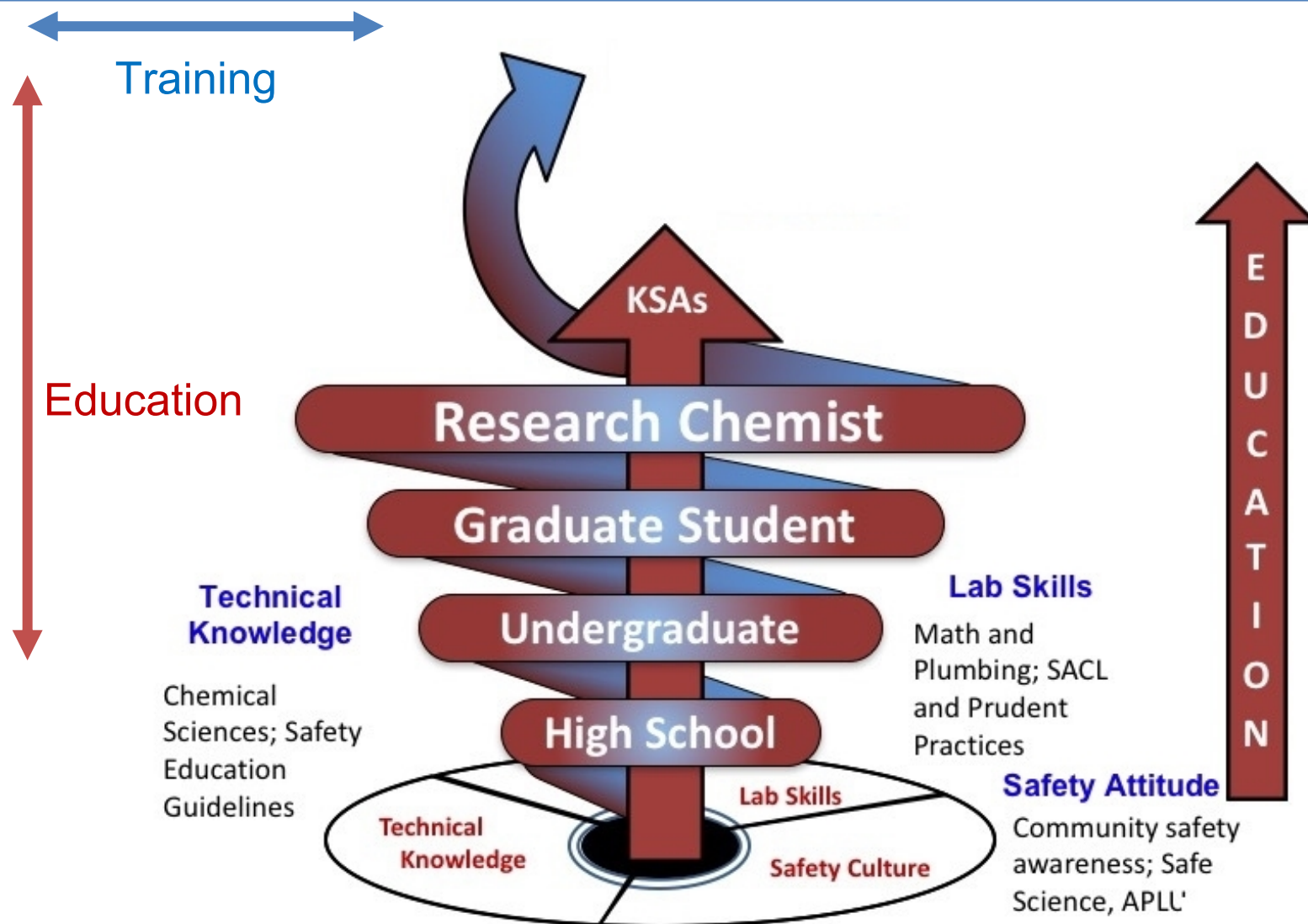
Notice that this model focuses on program management rather than learning.

Figure 1. Proposed Model for Development and Evaluation of Safety Training.

Learning and retention of chemical safety training information: A comparison of classroom versus computer-based formats on a college campus

[doi:10.1016/j.jchas.2011.12.001](https://doi.org/10.1016/j.jchas.2011.12.001)

The Chemical Safety Spiral Education Model



Back to My Problems

- What should my learning objectives be for KSC for the next 9 months?
- Should they vary by audience?
- What media are best suited to deliver these objectives?



Who Needs What Kind of Instruction?

Response Leaders	Objectives	Constraints
KSC Institutional Leadership	Recognize challenges to continuity of institution's work	Personnel turnover; mission distractions
City Emergency Services	1) Responder safety; 2) Protection of people and property	Information resources
KSC Campus Safety and Physical Plant	Identify problems and rally resources	Ratio of opportunities to resources
General KSC staff	Prepare to be active bystanders	Unclear expectations and personal distractions

The Partnership Between Training and Education

Training helps you learn the rules;

Education helps you know when to ask questions about them.

For example, the new ACS high school safety videos will start conversations rather than end them.

For further thoughts on this topic, come to Part 2 on Tuesday:

Leadership and Empowerment: How to Ask and Answer Safety Questions Well

