

Teaching Aviation Terrorism: Making Theory Practical for the First Responder

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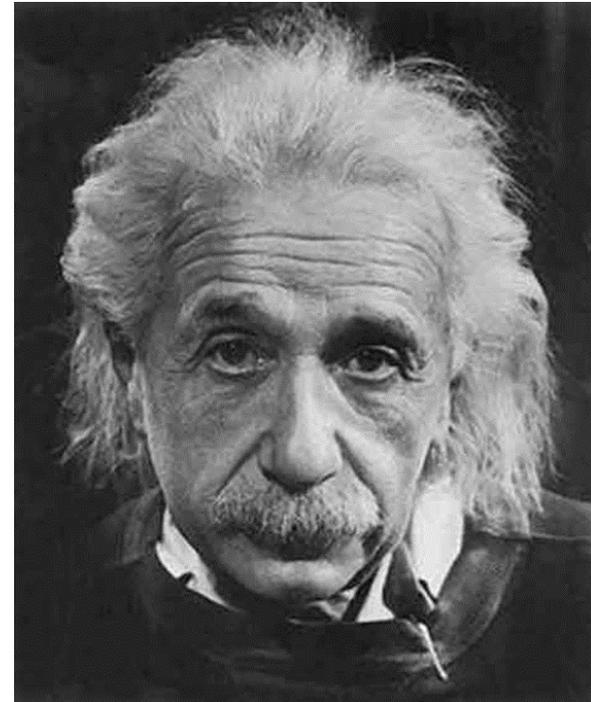
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Theoretical versus practical knowledge

Theoretical knowledge – teaches the why. It helps you understand why one technique works where another fails. It shows you the whole forest, builds the context, and helps you set strategy.... Theory teaches you through the experience of others.

Theoretical knowledge can often lead to a deeper understand of a concept through seeing it in context of a greater whole and understanding the why behind it..

Practical knowledge – helps you acquire the specific techniques that become the tools of your trade. It sits much closer to your actual day-to-day work. There are some things you can only learn through doing and experiencing. Where theory is often taught in the ideal of a vacuum, the practical is learned through the reality of life.



Albert Einstein, Theoretical Physicist

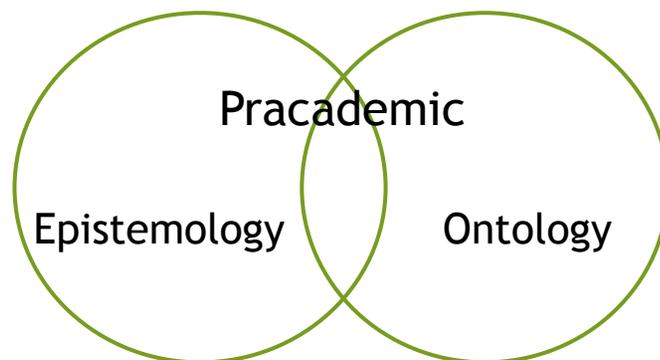
Bradley, Steven. (2012, February 2). The Value of Theoretical And Practical Knowledge. Retrieved from <http://vanseodesign.com/whatever/theoretical-practical-knowledge/>

How do you make online courses practical?

Pracademic - A **pracademic** is someone who is both an academic and an active practitioner in their subject area.

Epistemology is what is known, theories, etc. Epistemology is the consideration of knowing: when knowledge is valid and accepted as truth.

Ontology is lived experience and human dynamic. Ontology, the consideration of being or what is, what exists, or what it means to be (Packer and Goicoechea, 2000).



Universal Design for Learning (UDL)

Universal design for learning (UDL) model - a guiding set of principles for online curriculum development in higher education.

UDL provides the student with multiple means of accessing the course based on three overarching principles: presentation; action and expression; and engagement and interaction.

A UDL framework provides pedagogical strategies for instructors to maximize learning opportunities for diverse groups of students including those with physical and/or learning disabilities (Bernacchio & Mullen, 2007; Rose & Mayer, 2008).

- ▶ Dell, Cindy Ann, Thomas F. Dell, & Terry L. Blackwell. (2015, July). Applying Universal Design for Learning in Online Courses: Pedagogical and Practical Considerations. *The Journal of Educators Online-JEO*, Vol. 13 Number 2. Retrieved from <http://www.thejeo.com/Archives/Volume12Number2/DellDellBlackwell.pdf>

L Principle	Practical Steps for Implementation
Presentation	<ul style="list-style-type: none"><input type="checkbox"/> Create content first-then design<input type="checkbox"/> Provide simple and consistent navigation<input type="checkbox"/> Include an accommodation statement<input type="checkbox"/> Use color with care<input type="checkbox"/> Choose fonts carefully
Communication and Expression	<ul style="list-style-type: none"><input type="checkbox"/> Model and teach good discussion board etiquette
Engagement and Interaction	<ul style="list-style-type: none"><input type="checkbox"/> Choose content management system (CMS) tools carefully<input type="checkbox"/> Provide accessible document formats<input type="checkbox"/> Convert PowerPoint to HTML<input type="checkbox"/> If the content is auditory make it visual<input type="checkbox"/> If the content is visual make it auditory



DL versus ODS

L Principles

Presentation

Action and Expression

Engagement and Interaction

Online Development Strategies (ODS)

- ▶ Explorations
- ▶ Engagements/Discussion
- ▶ Application/Assessment



Web-based Learning

Step 6. Encourage active learning—self-assessment, reflection, self-directed learning, problem-based learning, learner interaction, and feedback

Step 7. Facilitate and plan to encourage use by the learner

Step 10. Plan to monitor online communication and maintain the site by resolving technical problems, periodically verifying hyperlinks, and regularly updating content

- Cook, David. A & Denise M Dupras. (2004, June). A Practical Guide To Developing Effective Web-based Learning. *Journal of General Internal Medicine*, 19(6): 698-707. doi: 10.1111/j.1525-1497.2004.30029.x



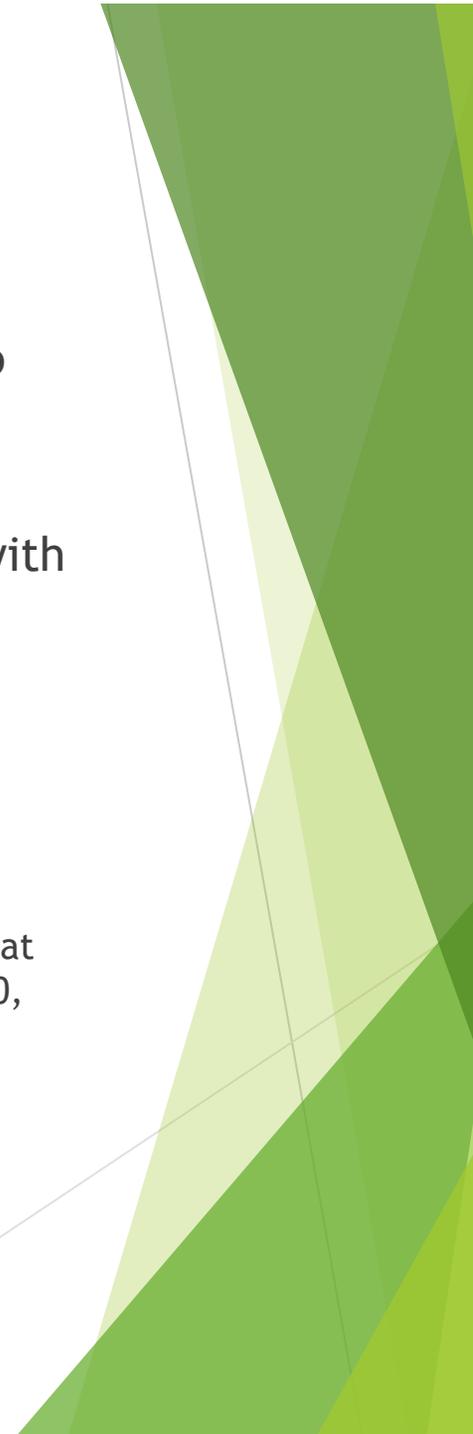
Effective student engagement

Employ active learning assignments, particularly discussion forums and web pages. These serve the secondary purpose of helping to develop students' social presence.

Consider learning assignments that engage students with the content and with each other.

Use several channels of interacting with students: announcements on the homepage of the course delivery system, e-mails to students, discussion forums in which the instructor interacts, and online lectures or connect sessions and chats, to enhance engagement.

- ▶ Dixon, Marcia D. (2010). Creating effective student engagement in online courses: What do students find engaging? *Journal of the Scholarship of Teaching and Learning*, Vol. 10, No. 2, pp. 1 - 13.



Multiple instructional strategies

Because learners have different learning styles or a combination of styles, online educators should design activities multiple modes of learning in order to provide significant experiences for each class participant. In designing online courses, use multiple instructional strategies.

Learning Contracts

Discussion

Lecture

Self-Directed Learning

Mentorship

Small Group Work

Project

Collaborative Learning

Case Study

Forum

University of Illinois. (2015, September 18). Instructional Strategies for Online Courses. Retrieved from <http://www.ion.uillinois.edu/resources/tutorials/pedagogy/instructionalstrategies.asp>

Use online resources

Informal learning

- ▶ Organize online discussion groups
- ▶ Link to relevant content on YouTube
- ▶ Have students use Google or YouTube to do in-class searches

Videos

- ▶ Create video
- ▶ Interview subject-matter experts
- ▶ Show demonstrations

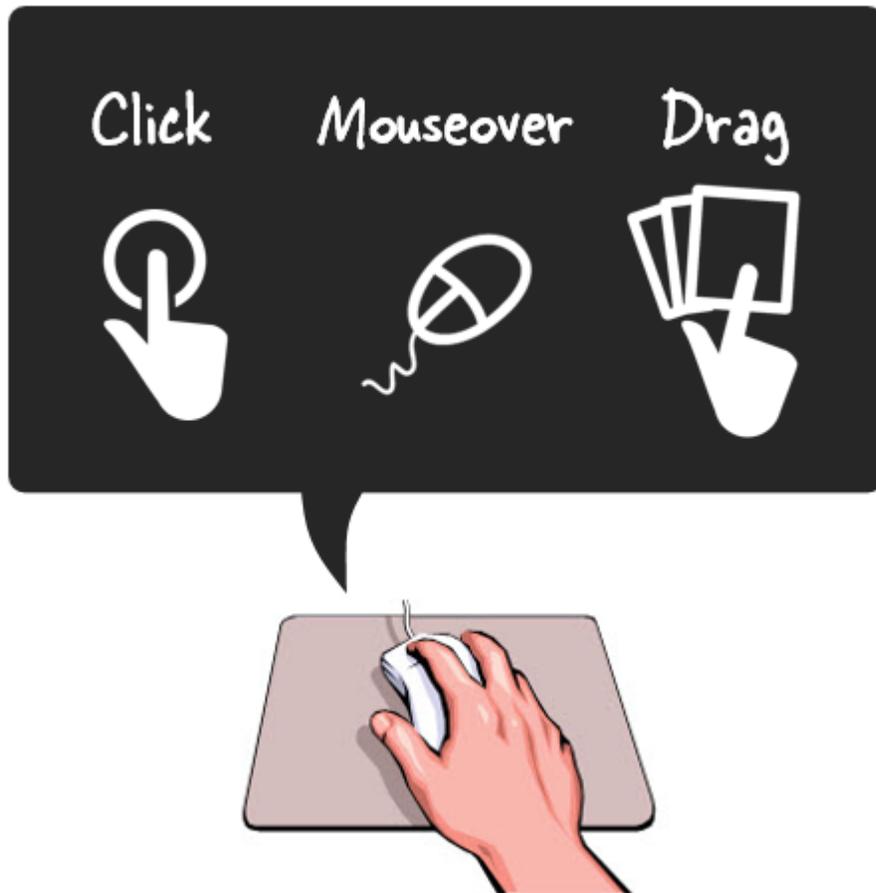
Share information using the Cloud

Break large sections into small chunks

Keep information up-to-date

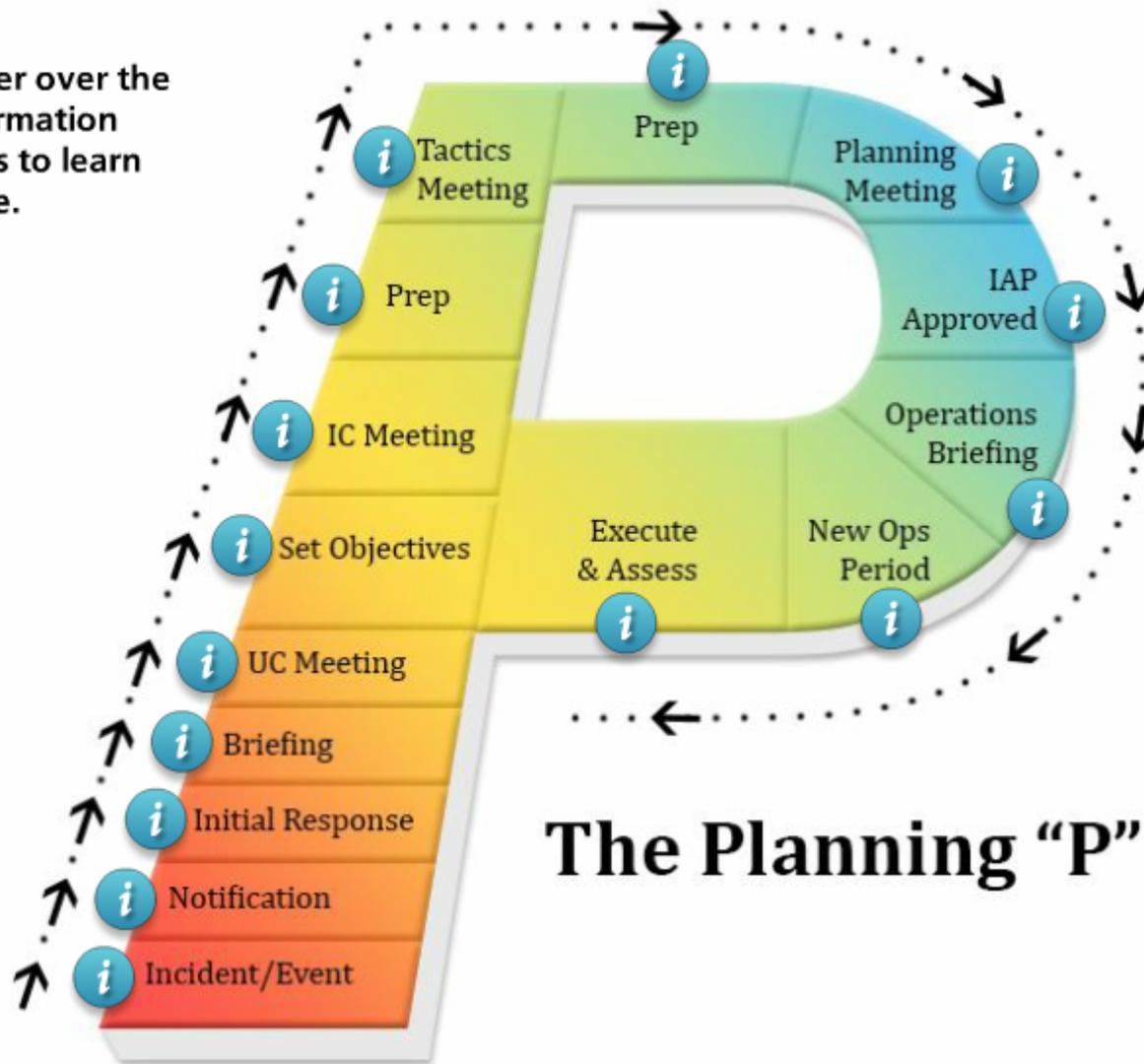
- Cushard, Bill. (2014, March 17). 5 Practical Online Training Trends You May Have Overlooked. Retrieved from <https://www.mindflash.com/blog/2014/03/5-practical-online-training-trends-you-may-have-overlooked/>

Use interactive tools



Kuhlmann, Tom. (2014, Sept. 16). Here's the First Step When Building Interactive E-Learning Courses Retrieved from <http://blogs.articulate.com/rapid-elearning/heres-first-step-building-interactive-e-learning-courses/>

Hover over the information icons to learn more.



https://uvu.instructure.com/courses/381960/pages/interactive-planning-p?module_item_id=3151983

What is Aircraft Rescue and Firefighting?

Aircraft rescue and firefighting (ARFF) is a special category of firefighting that involves the response, hazard mitigation, evacuation and possible rescue of passengers and crew of an aircraft involved in (typically) an airport ground emergency.

UVU Certificate in Aircraft Rescue Firefighting

ESAF 2100

Airport Firefighter

ESAF 2110

Aircraft Related Mass Casualty Incidents

ESAF 2120

Aircraft Mishaps

ESAF 2130

Aviation Terrorism Response

ESAF 2140

Airport Operations



Aircraft Rescue and Firefighting Retrieved from https://en.wikipedia.org/wiki/Aircraft_rescue_and_firefighting



SAF 2130 Aviation Terrorism Response

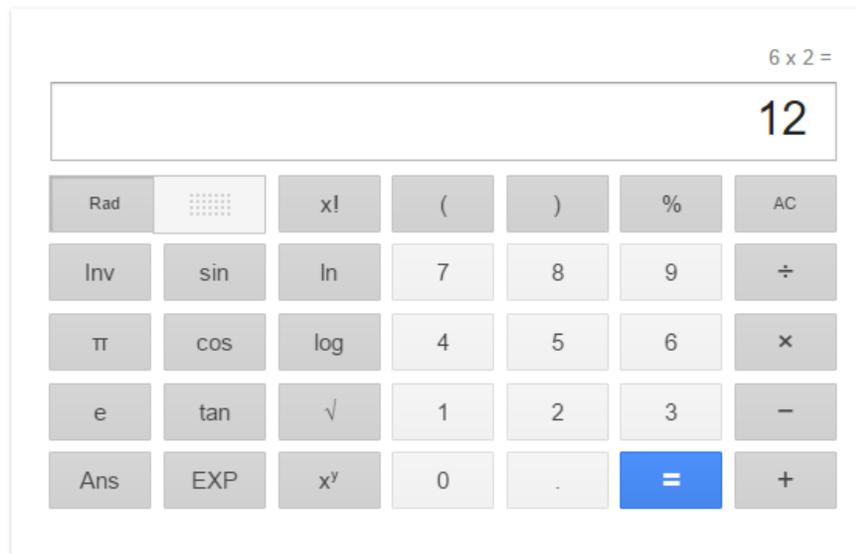
Deals with the threats associated with terrorism and the aviation industry as they relate to the emergency service response. Examines past acts of terror along with present and future threats and their connection to aerospace emergency services planning and response. Identifies various aspects of aviation security and control in correlation to the emergency responders' responsibilities.

Course Objectives:

- ▶ Upon successful completion of this course, students should be able to:
- ▶ Discuss the threats towards the aviation industry involving terrorism
- ▶ Describe the historical components and the extremist groups associated with terrorism
- ▶ Identify counter-terrorism groups and the aspects of preventing terrorist acts
- ▶ Describe the aspects of aviation security
- ▶ Review concerns and controls associated with aviation security

Six lessons, 12 weeks

- Psychology behind terrorism threats
- Historical perspectives of aviation terrorism
- Government response to aviation terrorism
- Security measures
- Security personnel and first responders
- Future trends in aviation security



Assignments

- 6 Discussion forums (15 points each)
- 6 Current events (15 points each)
- 6 Literature reflections (20 points each)
- 12 Assignments (various points)

**ONLINE
ASSIGNMENTS**



Assignments

Terrorist versus criminal acts

Job shadowing a terrorist

United 93 movie review

Aviation terrorism incident timeline

- ▶ Prepare a timeline that shows terrorist acts on aviation, beginning with hijackings in the 1960s. Use your creativity in presenting the timeline. In a paper of about 500 words analyze the terrorist acts, and comment on how terrorist acts have changed and then provide an evaluation about the state of terrorism and its affect on the aviation industry today. You can use the LA Times timeline as a model for your own timeline. Use APA style to format the paper, in-text citations, and references. Use sub-titles in your paper.

Glossary of security measures

Security measures position paper

Security personnel interview

- ▶ Interview a counter-terrorism person and take notes. Submit your questions and the answers you received through this assignment. From what you discovered in this interview, what impact do you expect this experience will have on how you carry out your responsibilities as an airport firefighter?

Aviation terrorism case study

Critical reflection

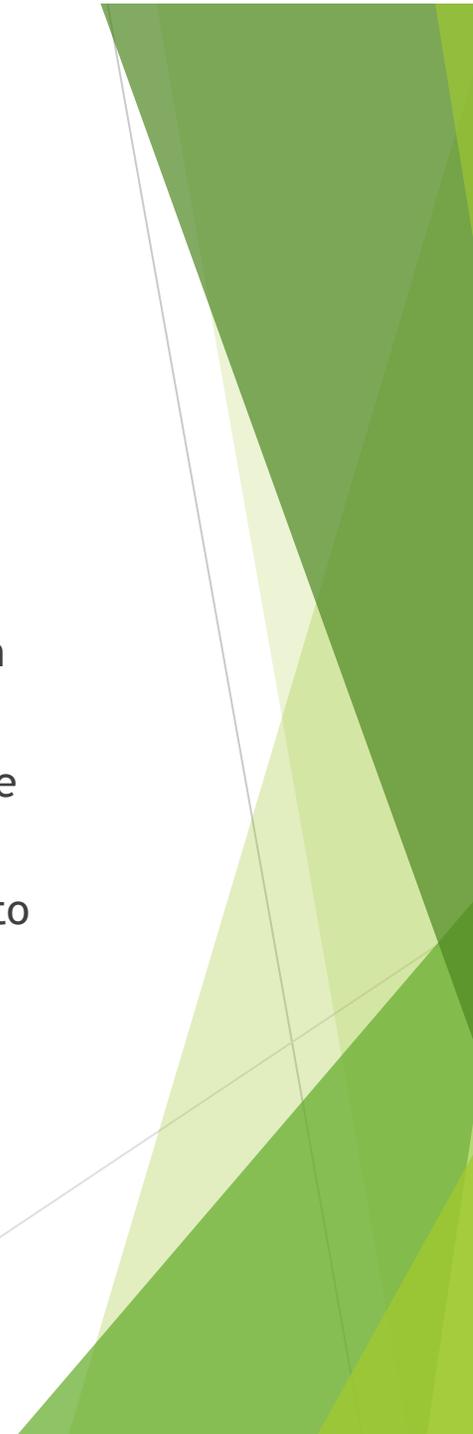


Lesson 1

Psychology Behind Terrorist Threats

Objectives:

- ▶ Upon successful completion of this lesson, students will be able to:
- ▶ Explain the psychology behind terrorism, by examining the terrorists' motivation for specific events.
- ▶ Differentiate between criminal and terrorist acts and explain their impact on the public.
- ▶ Show how recognizing terrorist motivations can aid in appropriately responding to terrorist threats.



Lesson 1

Psychology Behind Terrorist Threats

Activities:

Read:

- Article: [Fully Committed](#)  : Suicide Bombers' Motivation and the Quest for Personal Significance

Watch:

- Current Events News
- GRID 13: Jessica Stern - Talking to Terrorists

Discuss:

- Jessica Stern
- Literature Reflection
- Lesson 1 - Current Events

Submit:

- Terrorist versus Criminal Acts paper
- Job Shadowing a Terrorist

Lesson 1 Discussion Forum

After watching the Jessica Stern - Talking to the Terrorists (Links to an external site.) (18:19) video post an initial response with your answer to what motivates a person to become a terrorist. Comment on other things you learned from her presentation.

Read all the responses and comment on two other student responses to the video. Return later and comment on responses that other students have made to your comments.

- ▶ Is it possible that some people do not actually "join" terrorism, but are either forced or coerced to be terrorists? I found it interesting that, from her own experience with rape, Dr. Stern came to the conclusion that rape is not about sex, but rather imposing power over someone else and about humiliation. One motivating factor for terrorists is the belief that westerners are humiliating Islam. Boys and young men in terrorist training camps are sexually abused and raped, resulting in their own personal humiliation, thus adding to the whole narrative of humiliation. An element of fear must also exist. Humiliation and fear combined are great forces of coercion.
- ▶ I think it not only possible but extremely common to find individuals who are coerced into be terrorists. Pride is a large part of many cultures so it is something that is always being searched for. A simple scenario where a family member has been humiliated by the United States or even the local government could make an individual vulnerable to be coerced into terrorism as a form of retribution.

Lesson 1 Current Events Discussion

In your regular consumption of current events news watch for topics related to how to recognize and respond to terrorist threats. Include links to the stories along with your 250 word minimum summary and reflection on the topic.

Review all other student posts and reply to at least two that interest you with your comments that significantly add to and promote further discussion.

- ▶ Associated Press. (2015, August 22). Americans stop train attack in Europe. Retrieved from <http://wgntv.com/2015/08/22/americans-stop-train-attack-in-europe/>
- ▶ Summary: Recently three Americans on a train in Belgium encountered a gunman. The train was traveling from Amsterdam to Paris when the attack took place. The man stormed out of the bathroom with an automatic rifle, handgun as well as a box cutter. After causing injury to one passenger, the Americans as well as one British citizen intervened. They subdued the gunman, hitting him until he was unconscious. One of the Americans, who was a member of the United States Air Force, was wounded in the struggle with multiple stab injuries to his forearm.
- ▶ After 9/11 Americans are more likely to take action in a terrorist situation.... In *Government Security News*, Eric Russell (2011, [The homeland security "end-user"](#)) claims that many of the terrorist threats to American have been foiled by members of the public. "Understanding the power of the individual and its relationship to the security and protection of the U.S. is an integral part of effective homeland security delivery."

How to do a literature reflection

1. Reference: Prepare a reference for the research article in APA format. (See the handouts from the UVU Writing Center for instructions about how to do APA style for in-text citations and references. <http://www.uvu.edu/writingcenter/student-resources/handouts.html>)
 2. Theme: Write a statement describing the thesis or theme of the article.
 3. Summary: Write a minimum of 250-300 words.
 4. Application to Lesson: In a sentence or two apply the reading to the content of this lesson.
 5. Application to Career: In a sentence or two apply the reading to your career or future career interests.
 6. Comment on two other student Literature Reflections. Ensure your comments add significantly to the discussion. Comments such as “Great Article” or “I agree” will receive no points.
- ▶ **Reference:** Pilat, J. F. (2009). The Causes of Terrorism. *Journal of Organizational Transformation & Social Change*, 6(2), 171-182. doi:10.1386/jots.6.2.171_1
 - ▶ **Theme:** Terrorism is complex and choosing one root cause is not feasible, many factors are present on a global scale.
 - ▶ **Application to Career:** Having a general understanding of what motivates a person to participate in terrorism as well as their objectives gives me a better understanding of the overall picture during response to a terrorism event.

Final Project - Aviation Terrorism Case Study

Present a case study about a problem or issue in aviation terrorism. Base the case study on a specific aviation terrorism event. Use the attached case study format to develop a case study that is at a minimum of four pages, excluding the title page and optional appendices. Include a minimum of five good references. Follow APA style for in-text citations and references.

The case study should have the following sub-heads:

- ▶ Title Page
- ▶ Executive Summary
- ▶ Case Description (Tell the story in enough detail that readers can do their own analyses.)
- ▶ Problem (Issue) Statement
- ▶ Data analysis (include (a) key decision or evaluation criteria and (b) alternative analysis).
- ▶ Recommendations
- ▶ Action and Implementation Plan
- ▶ Appendix (optional exhibits)

Critical Reflection

The purpose of the critical reflection is to allow you to think about and summarize what you have learned from this course. It also provides me valuable feedback which I will use in revising and teaching the course in the future. Use the following questions in writing your critical reflection.

What did I learn?

- ▶ Identify and explain (so that someone who doesn't know you can understand it) a principle, concept, or value that you may have developed or that you understand better from the course.
- ▶ Express what you have learned about the principle, concept or value in general terms, as well as in the context of the course, so that it can be applied more broadly to other areas of your life (personally or professionally) and help you in your ongoing personal growth process.
- ▶ Introduce a judgment regarding whether the principle, concept or value can serve you in your career. How would you apply the value? Is the value enduring or will it change as you grow older? How and why?

How did I learn it?

- ▶ Clearly connect the principle, concept or value to your specific learning activities in the course so that someone who was not involved would understand, including discussion of the positive and negative aspects of your learning experience. How did you learn about the principle, concept or value? What course activities helped you in the formation of your feelings about the principle, concept or value?

Why does it matter?

- ▶ Consider how what you have learned has worth over the short and long term, both in terms of your other learning activities and in terms of your life more generally.

What will I do in light of it?

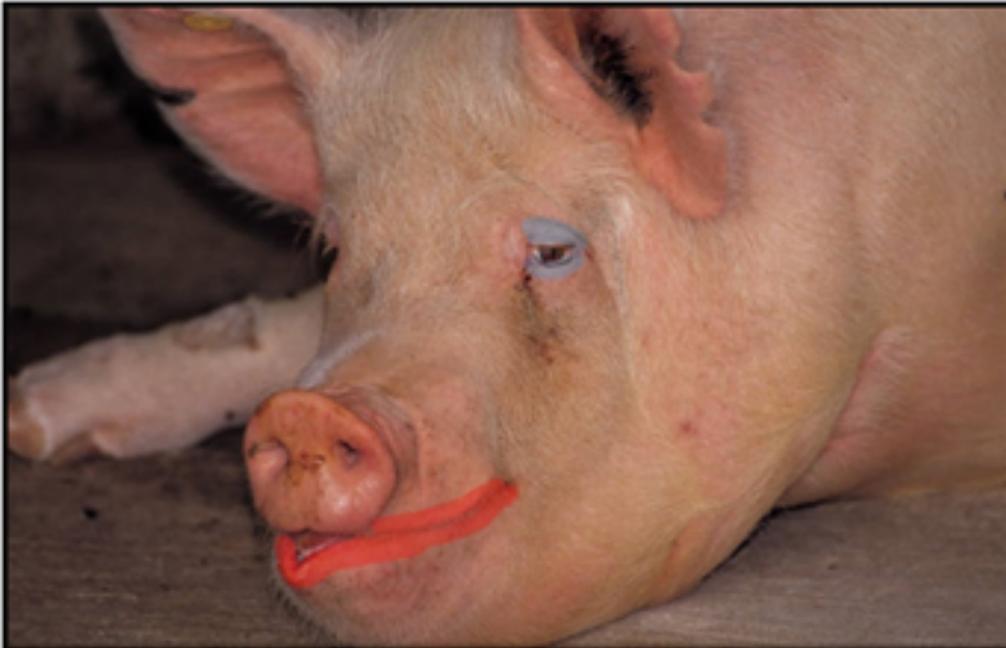
- ▶ Set specific goals and assessable goals (that you could come back to and check on to see if they are being met) relative to this principle, concept or value over the short and long term.
- ▶ Consider the benefits and challenges associated with fulfilling these goals, especially in light of the sources of or reasons for the learning.

Your critical reflection should be 2-3 pages in length (500-750 words). Include an abstract (or executive summary), an introduction and conclusion. Use the questions as subheads. References are not required; however, if you use outside sources, be sure to include references and in-text citations, following APA style.

Characteristics of the practical online course

Literature review	The Practical Online Course
Theoretical and practical elements	Non-traditional student
Learning principles: presentation; action and expression; and engagement and interaction	Explorations Engagements/Discussion Application/Assessment
Learning styles, special needs	Visual and audio
Encourage active learning	Self-assessment, reflection, self-directed learning, problem-based learning, learner interaction, and feedback
Promote active student engagement	Engage students with the content and with each other
Multiple instructional strategies	Discussion, cases, reflection, teams
Online resources, interactive tools	Informal learning, creativity

Putting lipstick on a pig is hard enough
but adding eye shadow is impossible.



Loves interactive elearning, long walks on
the beach, and listening to Twisted Sister.

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