

# ATLS AND INNOVATIONS IN TRAUMA CARE

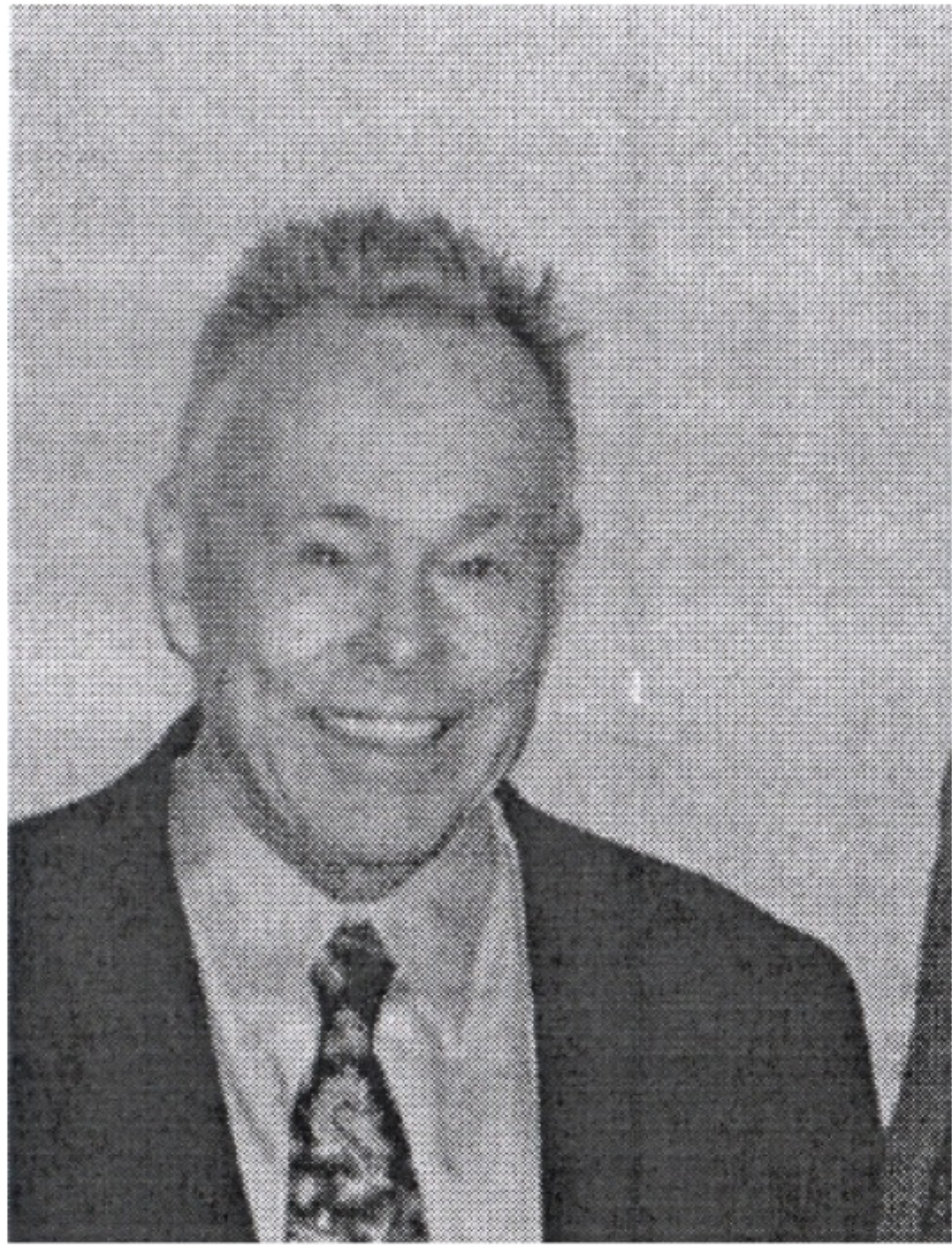
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Karen J. Brasel, MD, MPH

Professor, Oregon Health and Science University

Chair, ATLS International





Beechcraft N3600



17 February, 1976, 1800 hrs



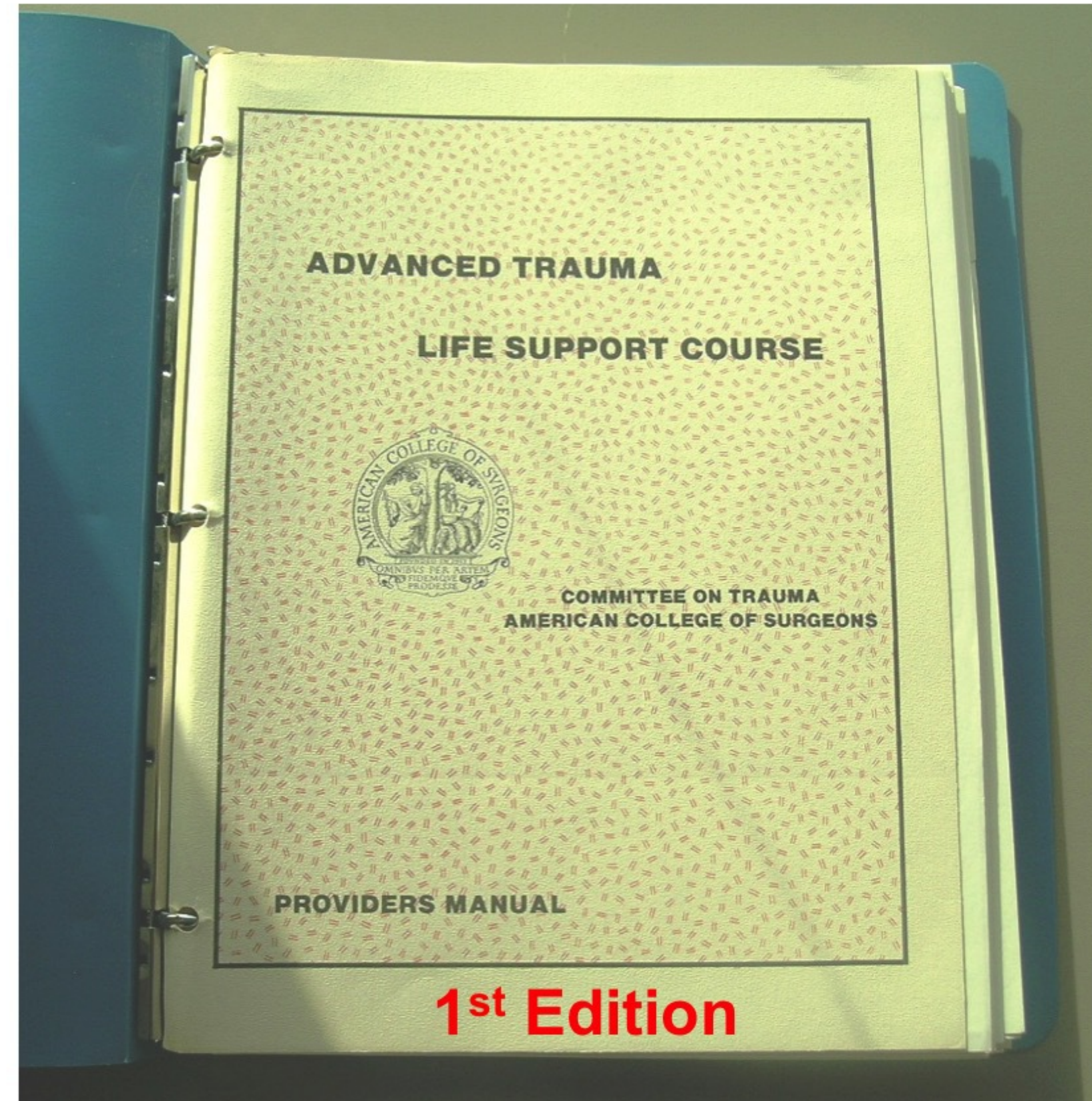


# Summer 1977 work begins on the first course

- *Paul E. (Skip) Collicott*
- *Irvine Hughes, RN*
- *Brent E. Krantz*
- *Others*

## Prototype course construction

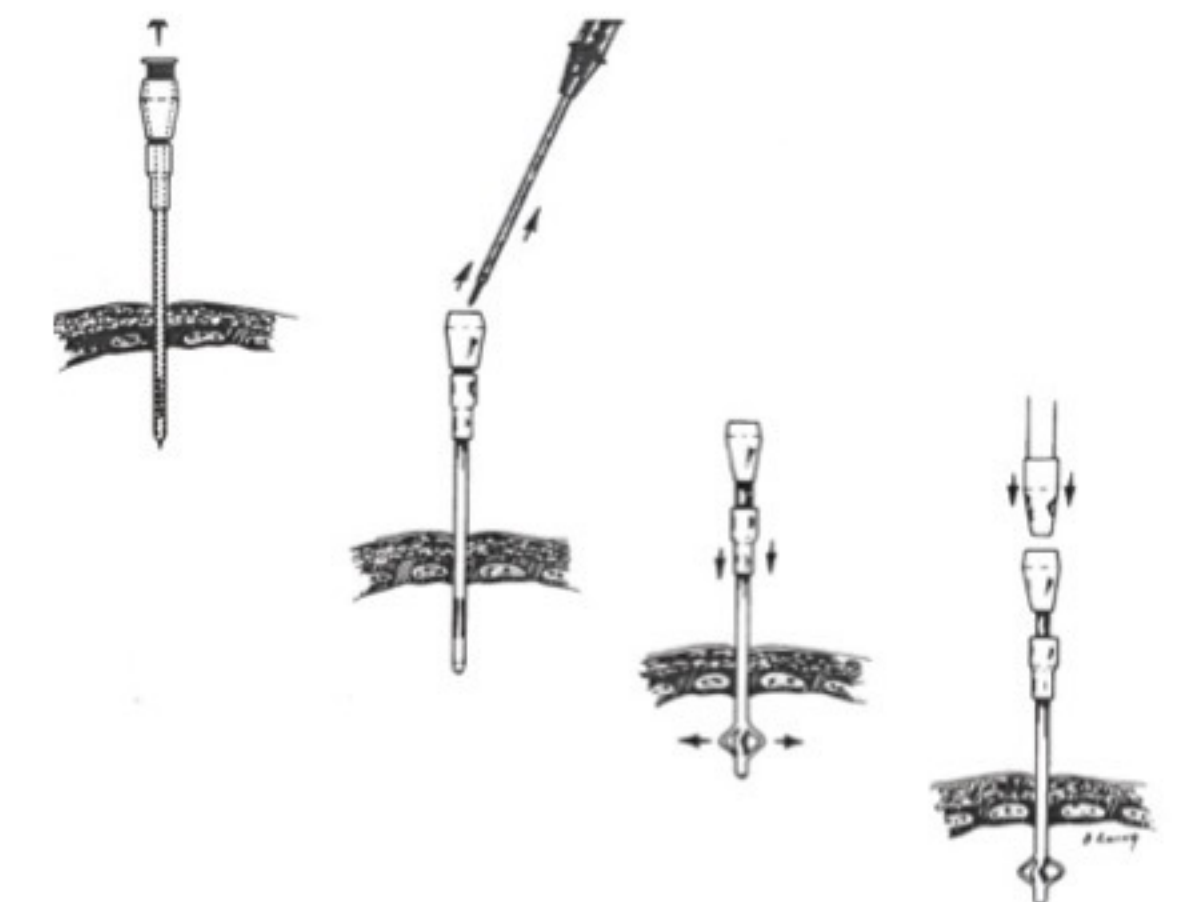
- basic chapters
- no new information
- different organization-ABCs
- treat life-threatening first, history later
- make-shift skills laboratory





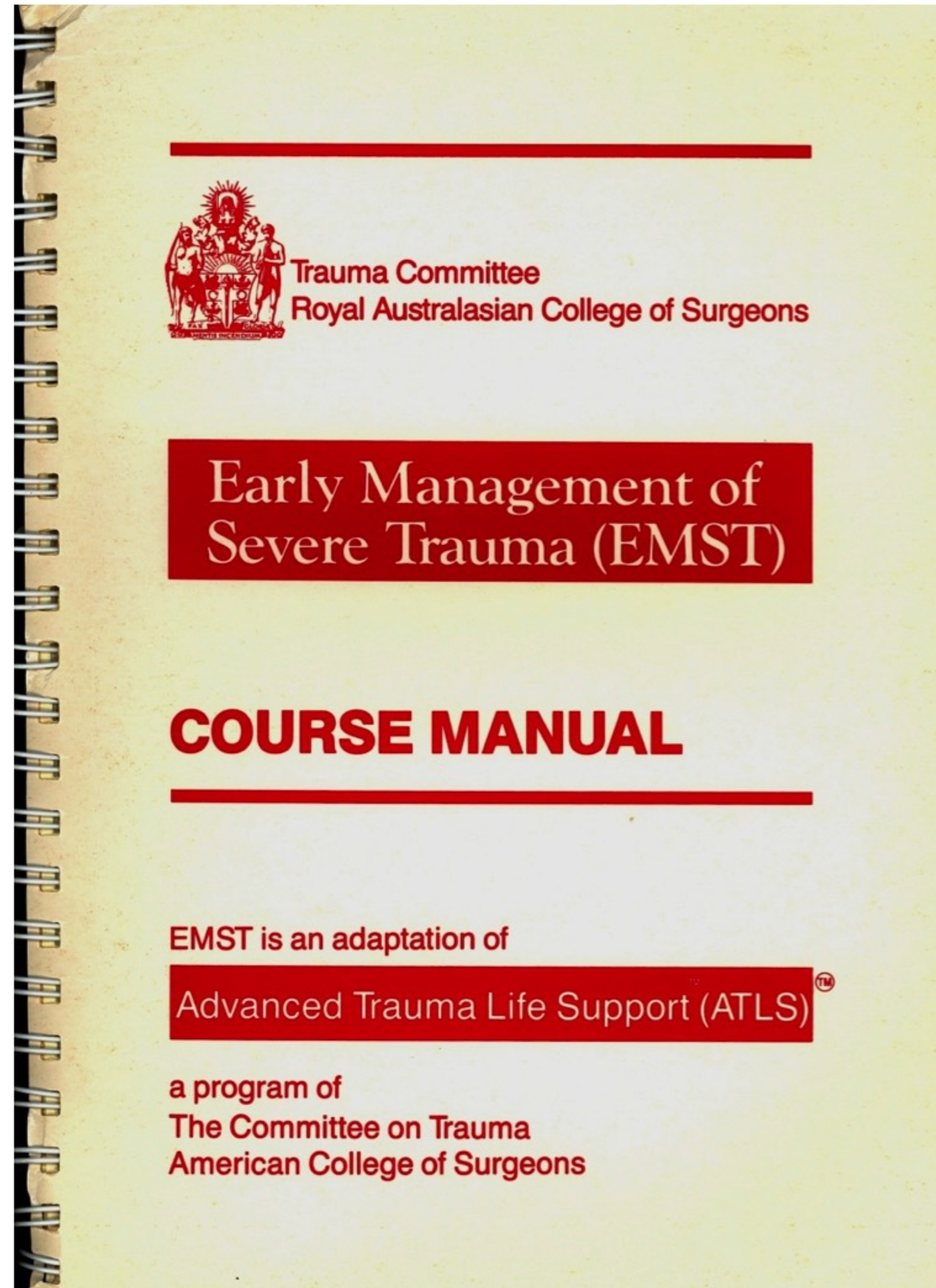
## What did the early course(s) look like?

- 2 ½ days
- Spiral bound notebook f
- Content-consensus at b
- No reference material
- Lectures
- Skill stations
  - MAST
  - Gardner-tongs
  - McSwain Dart
  - Venous cutdown
  - Spine boards





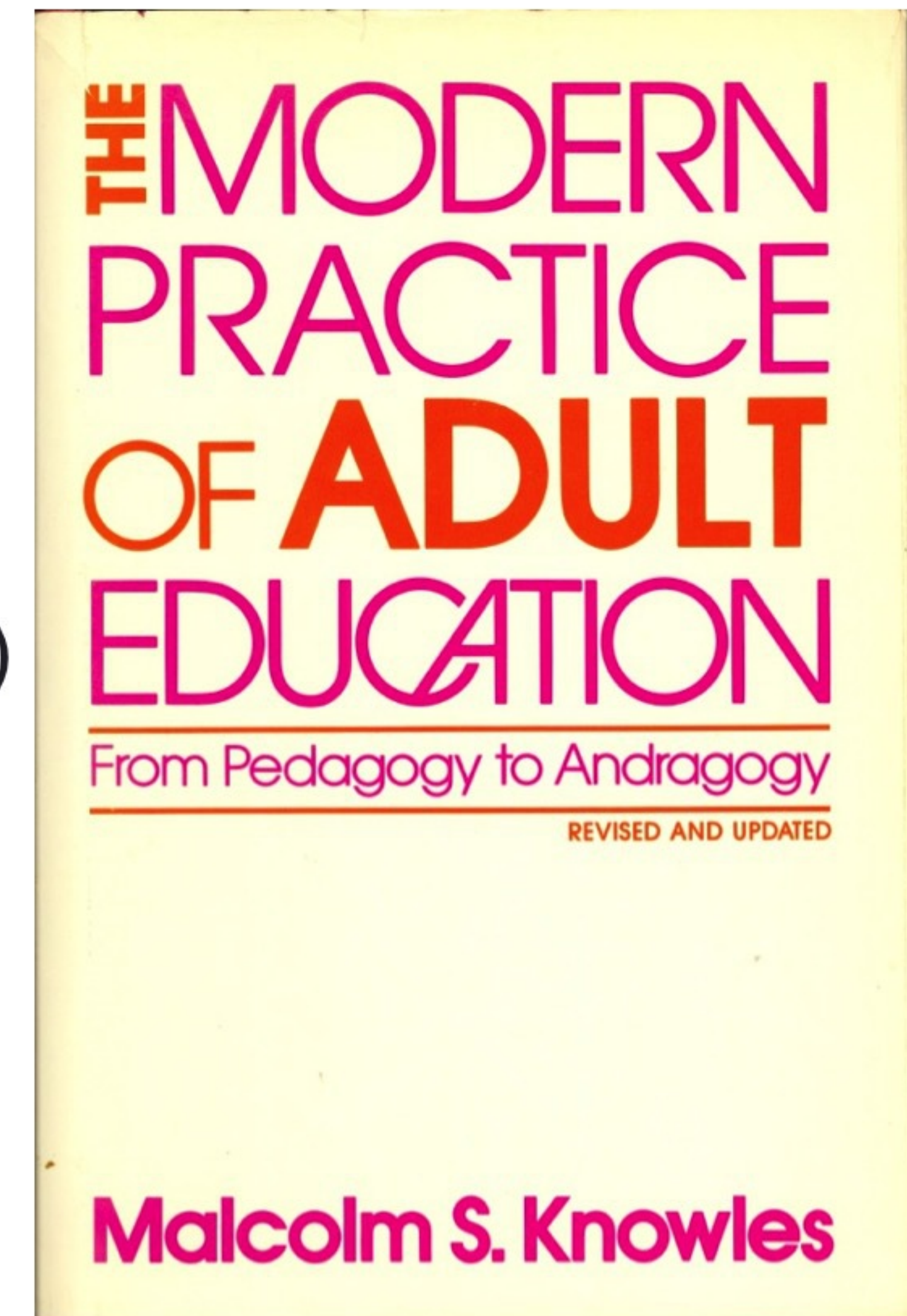
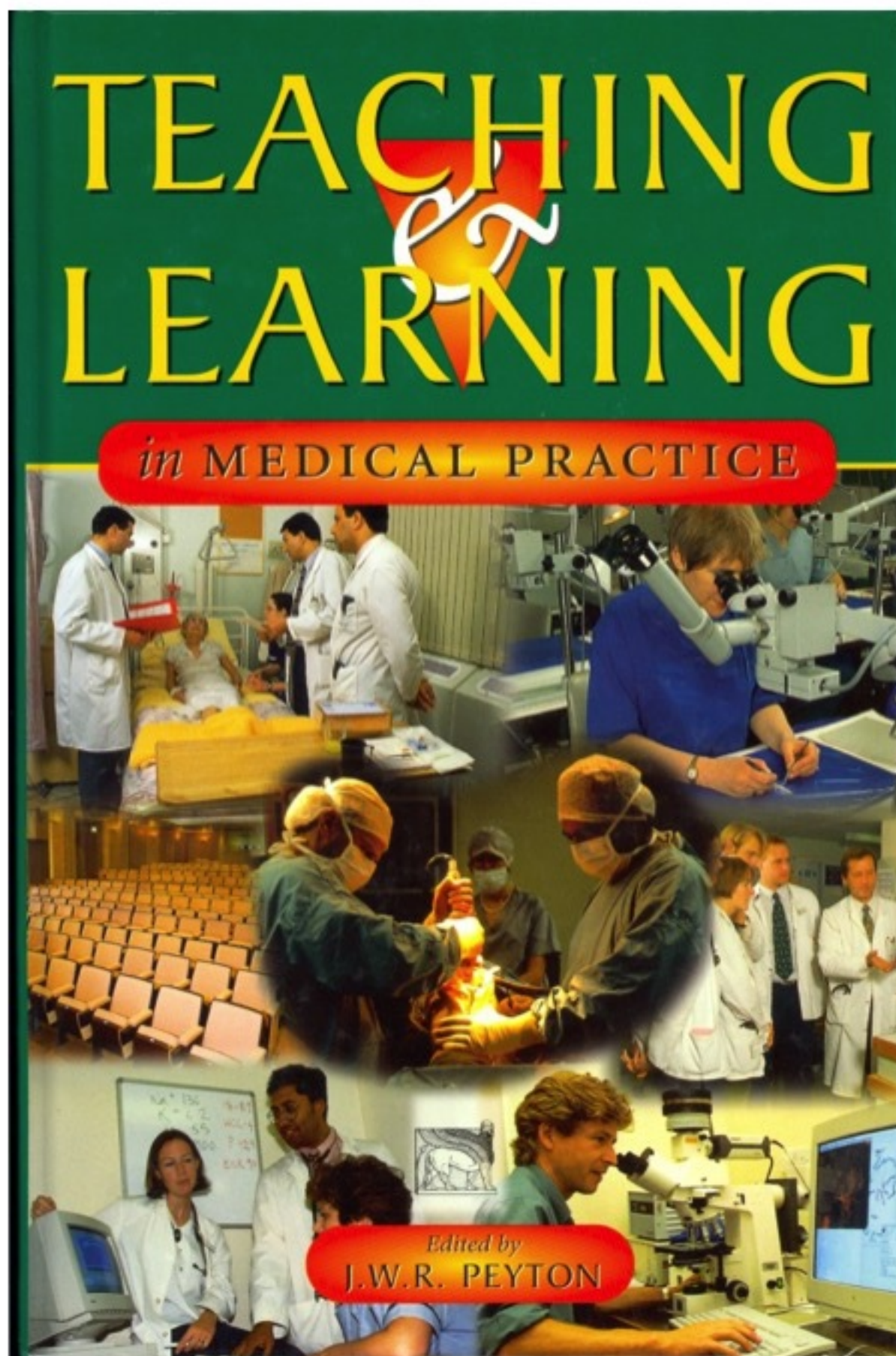
# EMST Australia/NZ 1988





# Instructors Course 1980-84

- 2 ½-3 days
- “ATLS®-approved” educator
- Educational theory
- How to teach
  - lecture (set, dialogue, closure)
  - group discussion
  - the “problem student”
  - skills





# Challenges/Solutions

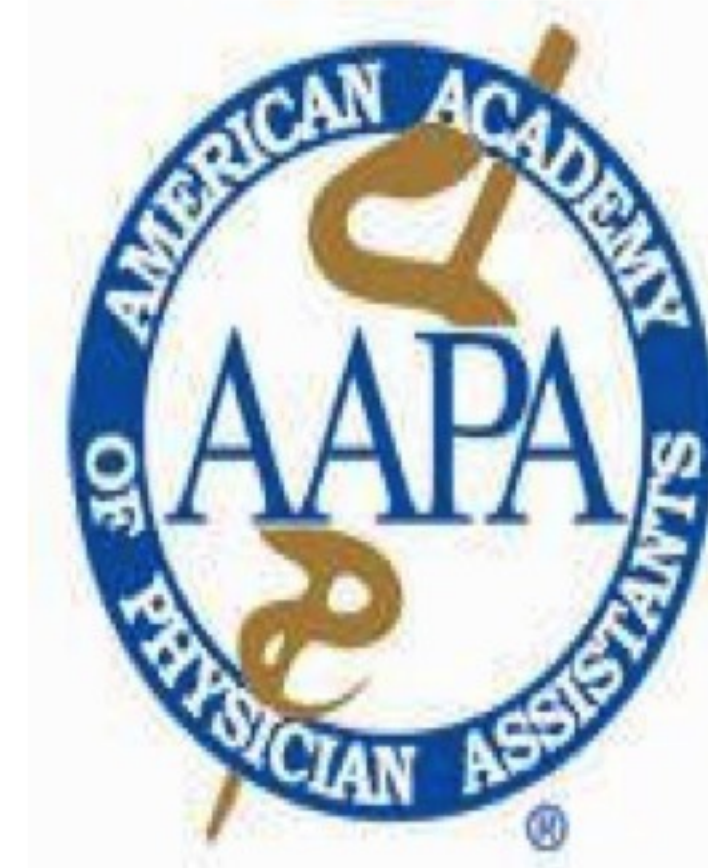




# Challenge: Additional learners

## Physician Extenders

- Critical part of healthcare team
- Only provider in some areas
- Skill equivalent to general practitioner
- Little applicability internationally



## Nurses

- Critical part of the trauma team
- Need similar skills
- Occasionally alone
- Common language
- Can learn the skills and develop the knowledge base



## Trainees/Medical Students

- Critical part of training
- All residents/students need this
- Capable

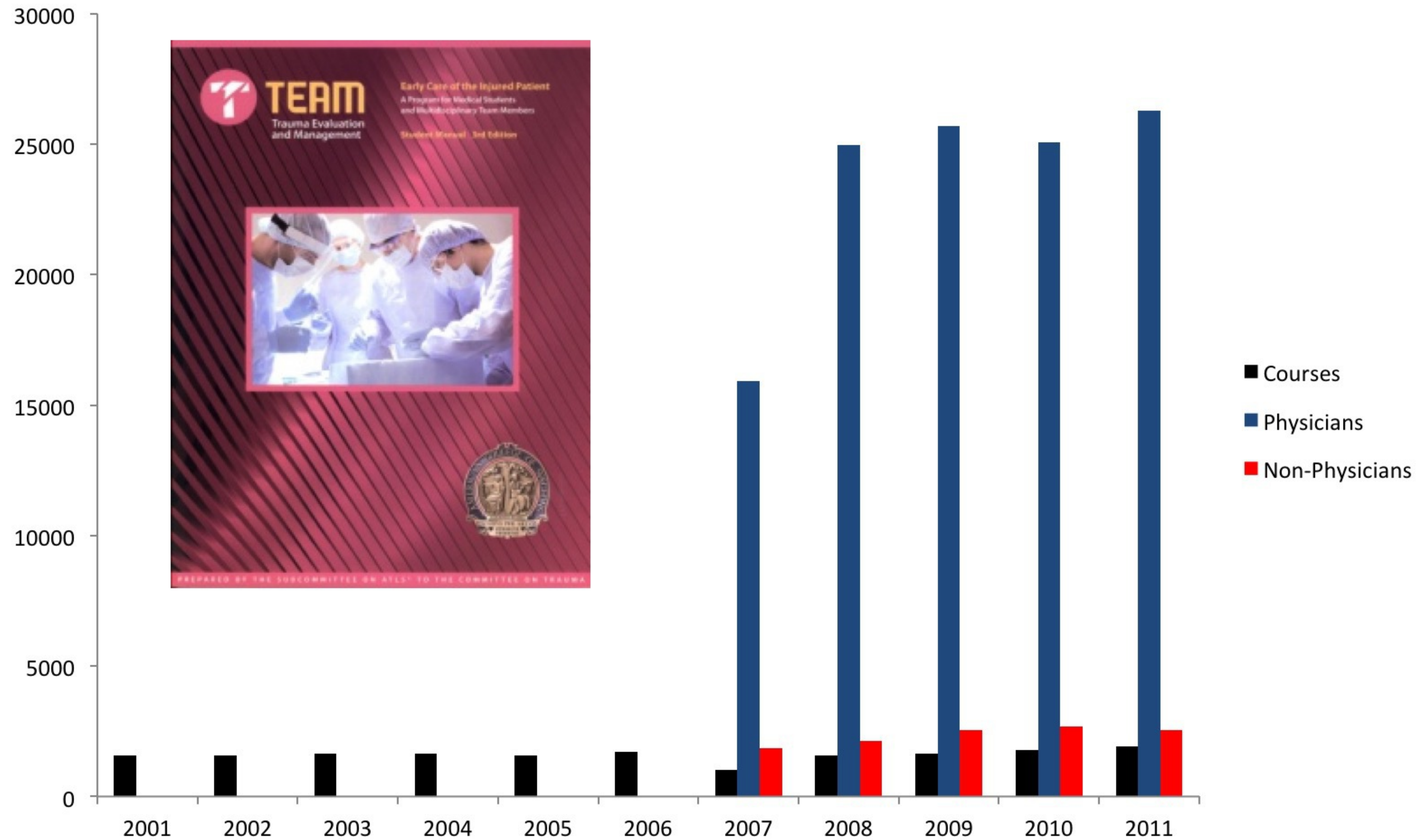
## Prehospital providers

- Existing course





# Solution: Embrace all participants





Clinical paper

Advanced Trauma Life Support certified physicians in a non trauma system setting: Is it enough?<sup>☆</sup>

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ARTICLE INFO

ABSTRACT



Have ATLS and national transfer guidelines improved the quality of resuscitation and transfer of head-injured patients? A prospective survey from a tertiary Neurosurgical Unit

Stephen J. Price<sup>\*</sup>

Department of Neurosurgery, Essex Cen

Injury, Int. J. Care Injured 34

**INJURY**  
INTERNATIONAL JOURNAL OF THE CARE OF THE INJURED  
[www.elsevier.com/locate/injury](http://www.elsevier.com/locate/injury)

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Notfallmedizin

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## Advanced Trauma Life Support® – ein Versorgung für Deutschlan

Keine wesentliche Verbesserung der Versorgung zu erwarten

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## Sechs Jahre Advanced Trauma Life Support (ATLS) in Deutschland – ein Wiederkurs in

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EDITORIALS

medicine, anaesthesia, and orthopaedics. This heterogeneity is reflected in the course participants—32.7% come from anaesthesia, 24.6% from emergency medicine, and 16.8% from orthopaedics (S. Dilger, personal communication). It is therefore interesting to note that up to the latest edition there were no emergency medicine or anaesthetists acknowledged as contributors to the course manual. Nolan and McKeown list further inconsistencies between the course and

Advanced trauma life support  
ATLS: past, present, and future  
P Driscoll, J Wardrope

ATLS is at a crossroads in its development

# Challenge: Evidence of Impact

- No improvement over existing protocols
- Expensive
- No impact
- Supersedes clinical judgment
- One size fits all



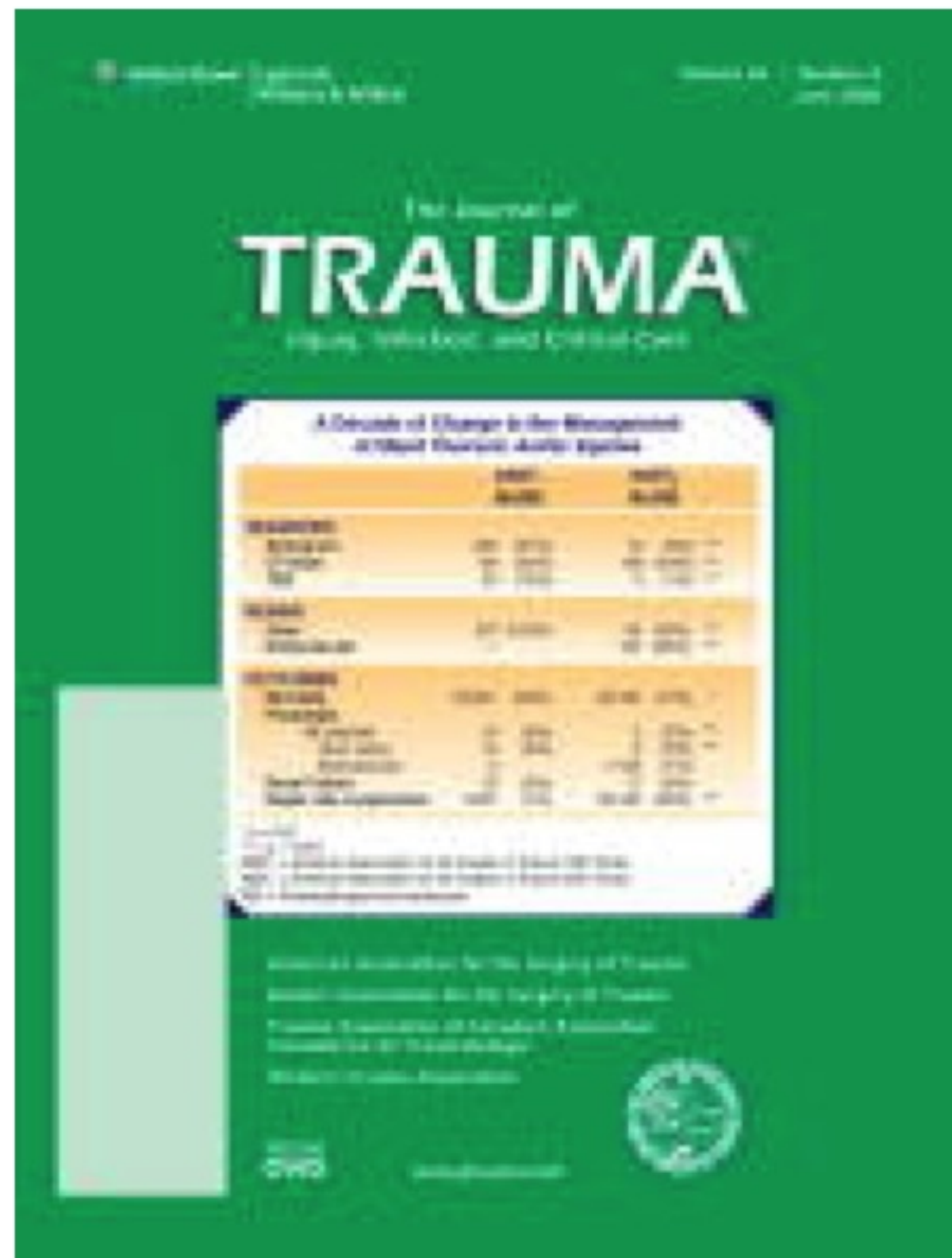
# Solution: Evidence-based changes

## Special Report

The Journal of TRAUMA® Injury, Infection, and Critical Care

## Advanced Trauma Life Support, 8th Edition, The Evidence for Change

John B. Kortbeek, MD, FRCSC, FACS, Saud A. Al Turki, MD, FRCS, ODTs, FACA, FACS, Jameel Ali, MD, MMedEd, FRCS, FACS, Jill A. Antoine, MD, Bertil Bouillon, MD, Karen Brasel, MD, FACS, Fred Brenneman, MD, FACS, Peter R. Brink, MD, PhD, Karim Brohi, MD, David Burris, MD, FACS, Reginald A. Burton, MD, FACS, Will Chapleau, EMT-P, RN, TNS, William Cioffi, MD, FACS, Francisco De Salles Collet e Silva, MD, PhD (med), Art Cooper, MD, FACS, Jaime A. Cortes, MD, Vagn Eskesen, MD, John Fildes, MD, FACS, Subash Gautam, MD, MBBS, FRCS, FACS, Russell L. Gruen, MBBS, PhD, FRACS, Ron Gross, MD, FACS, K. S. Hansen, MD, Walter Henny, MD, Michael J. Hollands, MBBS, FRACS, FACS, Richard C. Hunt, MD, FACEP, Jose M. Jover Navalon, MD, FACS, Christoph R. Kaufmann, MD, MPH, FACS, Peggy Knudson, MD, FACS, Amy Koestner, RN, MSN, Roman Kosir, MD, Claus Falck Larsen, DrMed, MPA, FACS, West Livaudais, MD, FACS, Fred Luchette, MD, FACS, Patrizio Mao, MD, FACS, John H. McVicker, MD, FACS, Jay Wayne Meredith, MD, FACS, Charles Mock, MD, PhD, MPH, Newton Djin Mori, MD, Charles Morrow, MD, FACS, Steven N. Parks, MD, FACS, Pedro Moniz Pereira, MD, FACS, Renato Sergio Pogetti, MD, FACS, Jesper Ravn, MD, Peter Rhee, MD, MPH, FACS, Jeffrey P. Salomone, MD, FACS, Inger B. Schipper, MD, PhD, Patrick Schoettker, MD, MER, Martin A. Schreiber, MD, FACS, R. Stephen Smith, MD, FACS, Lars Bo Svendsen, MD, DMSci, Wa'el Taha, MD, Mary van Wijngaarden-Stephens, MD, FRCSC, FACS, Endre Varga, MD, PhD, Eric J. Voiglio, MD, PhD, FACS, FRCS, Daryl Williams, MD, Robert J. Winchell, MD, FACS, and Robert Winter, FRCP, FRCA, DM\*



J Trauma 2008

The American College of Surgeons Committee on Trauma's Advanced Trauma Life Support Course is currently taught in 50 countries. The 8th edition has been revised following broad input by the International ATLS sub-

committee. Graded levels of evidence were used to evaluate and approve changes to the course content. New materials related to principles of disaster management have been added. ATLS is a common language teaching one safe

way of initial trauma assessment and management.

**Key Words:** Wounds and Injuries, Traumatology [education], Life Support Care, Emergency Treatment [standards], Resuscitation [education].

J Trauma. 2008;64:1638-1650.



# Challenge: international partnership



- systems differences vs. North America
- technological variation
- unique trauma issues
- geography
- \$\$\$\$\$\$\$\$\$\$





ATLS North America



ATLS Europe



ATLS Latin America



ATLS Middle East and North Africa



ATLS Asia and Australasia



# Challenge: Stale course design

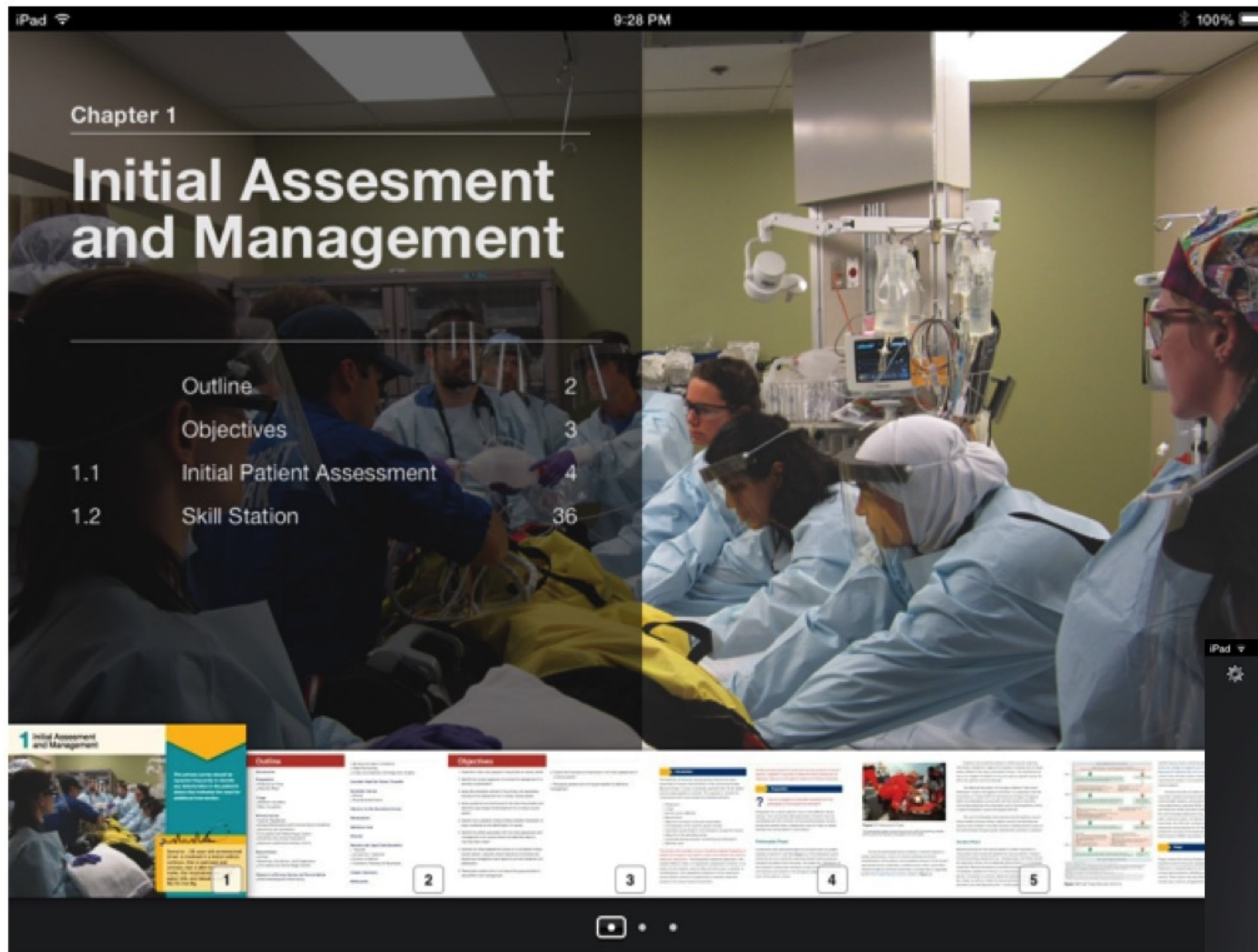
- Motivation
  - Certification
  - Credentialing
  - Relevance
  - Redundancy



“....time to practice what we preach, huh..”



# 9<sup>th</sup> Edition ATLS iBook

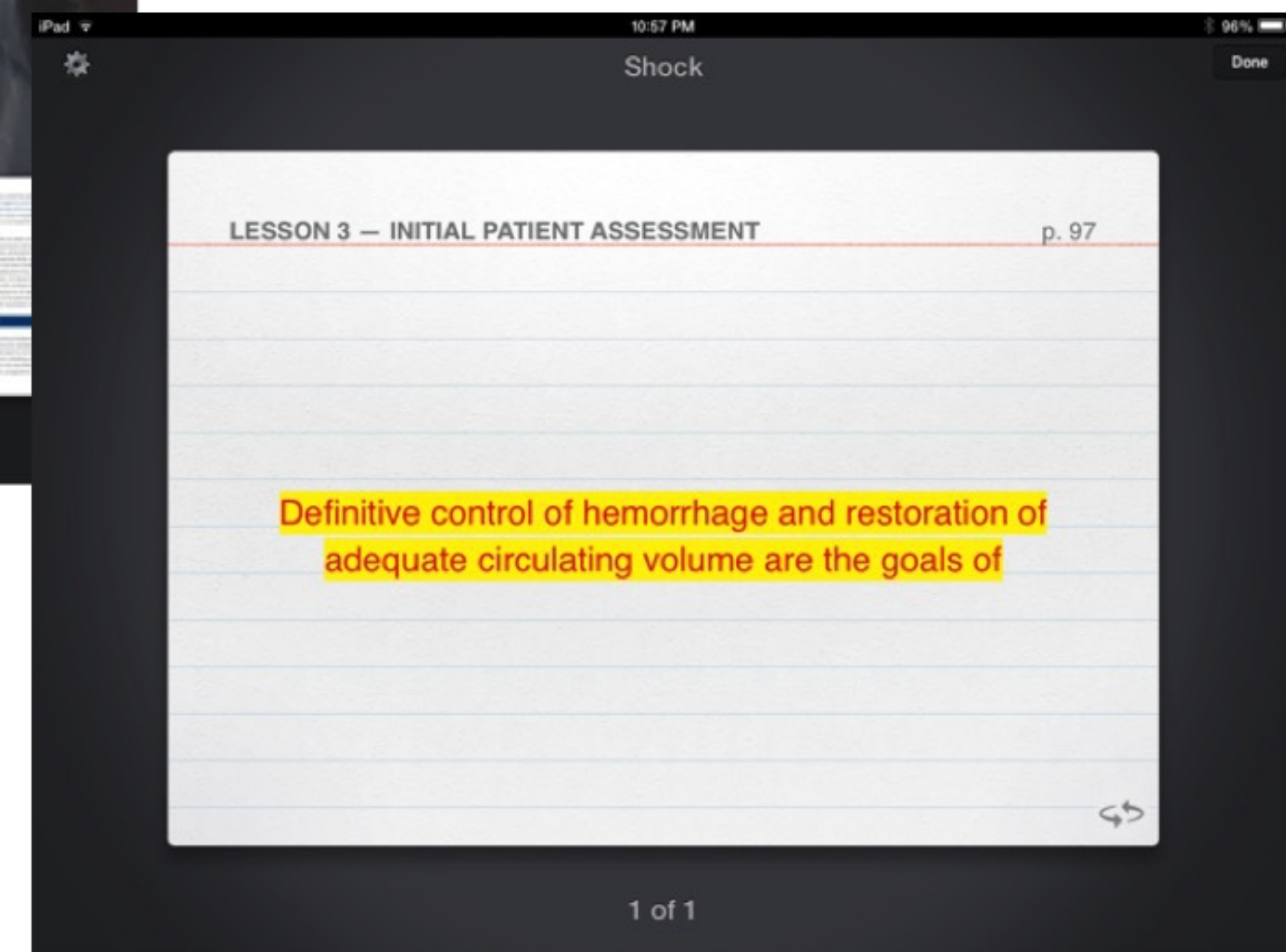


## Features

- Flash Cards
- Text highlighting
- Video Links
- End of Chapter self-check Questions

## Updates

- Several chapters complete
- Release: Clinical Congress 2014
- Android version to come



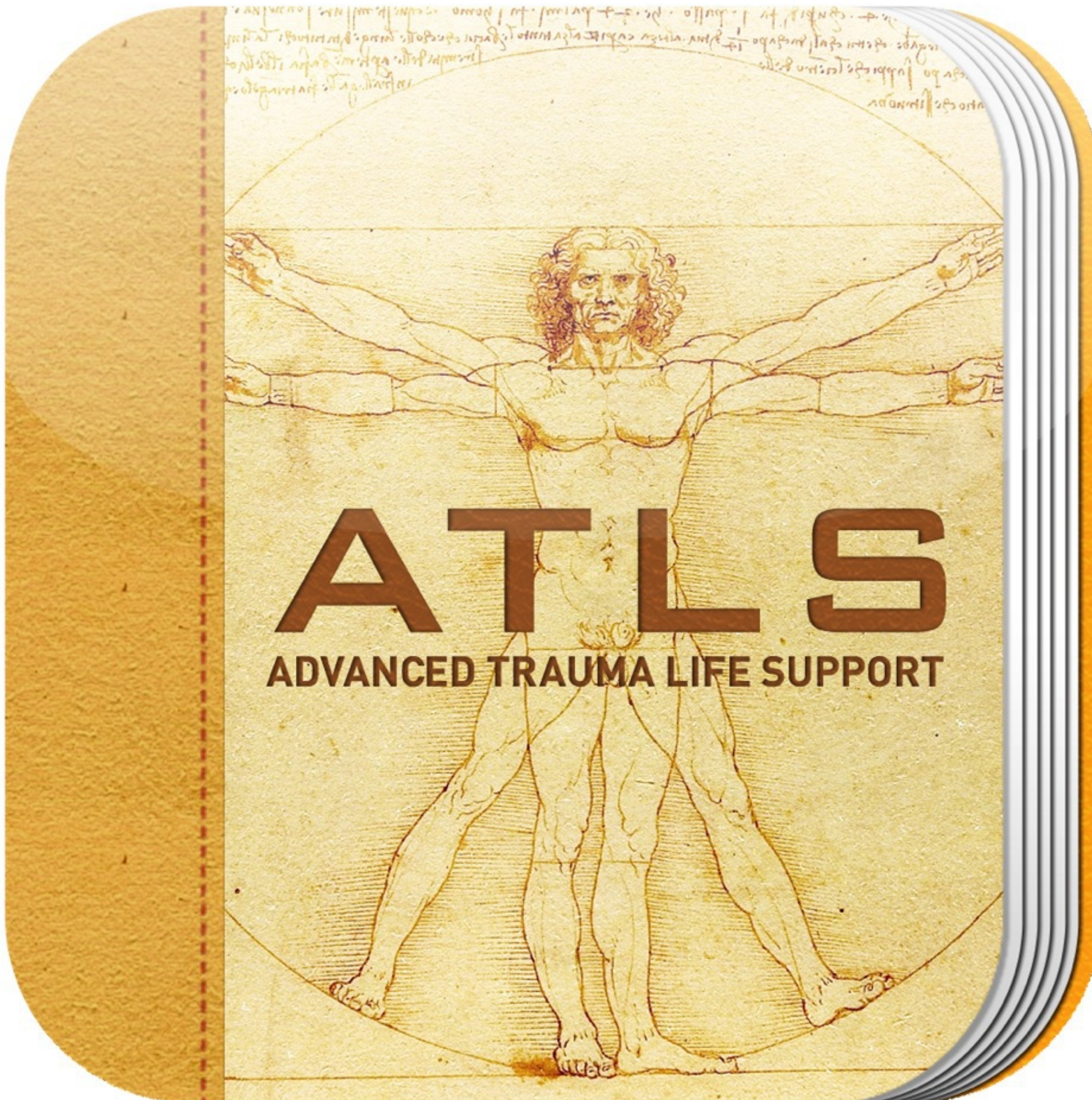


# Course redesign

- SEAB (Senior Educator Advisory Board)
- Instructor course redesign (9<sup>th</sup> edition)
- 10<sup>th</sup> edition changes
  - Skills station revisions
  - Schedule revisions
  - New content/concepts
    - Team training
  - Hybrid course
    - Online modules
    - In-person practice and testing



# ATLS app



Number of  
downloads:  
≈75,000

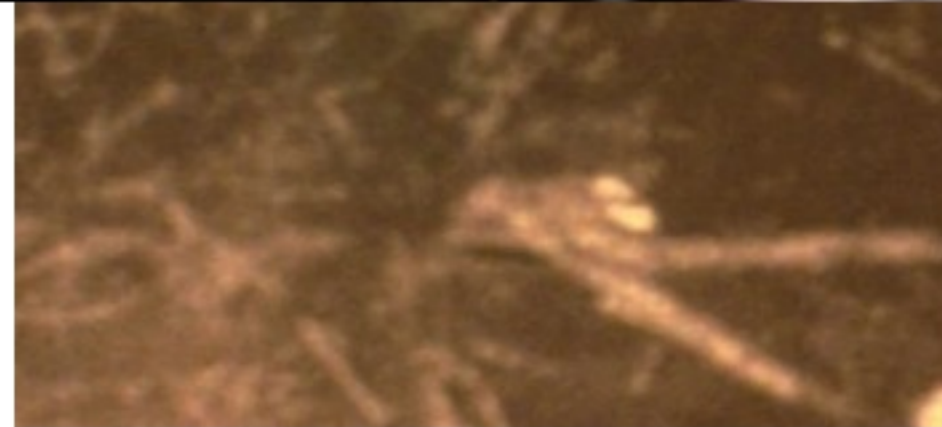
Number of  
countries : 176

Tajikistan  
Maldives  
Burkina Faso  
Gabon









# Happy Endings



# Summary

- The vision of a few can change the world
- Teaches *one* effective way-not the *only* way
- It *is not* cutting edge
- ATLS® will change
- The future?
  - Ongoing flexibility
  - Mobile learning platform
  - Modularity
  - Learn from other courses