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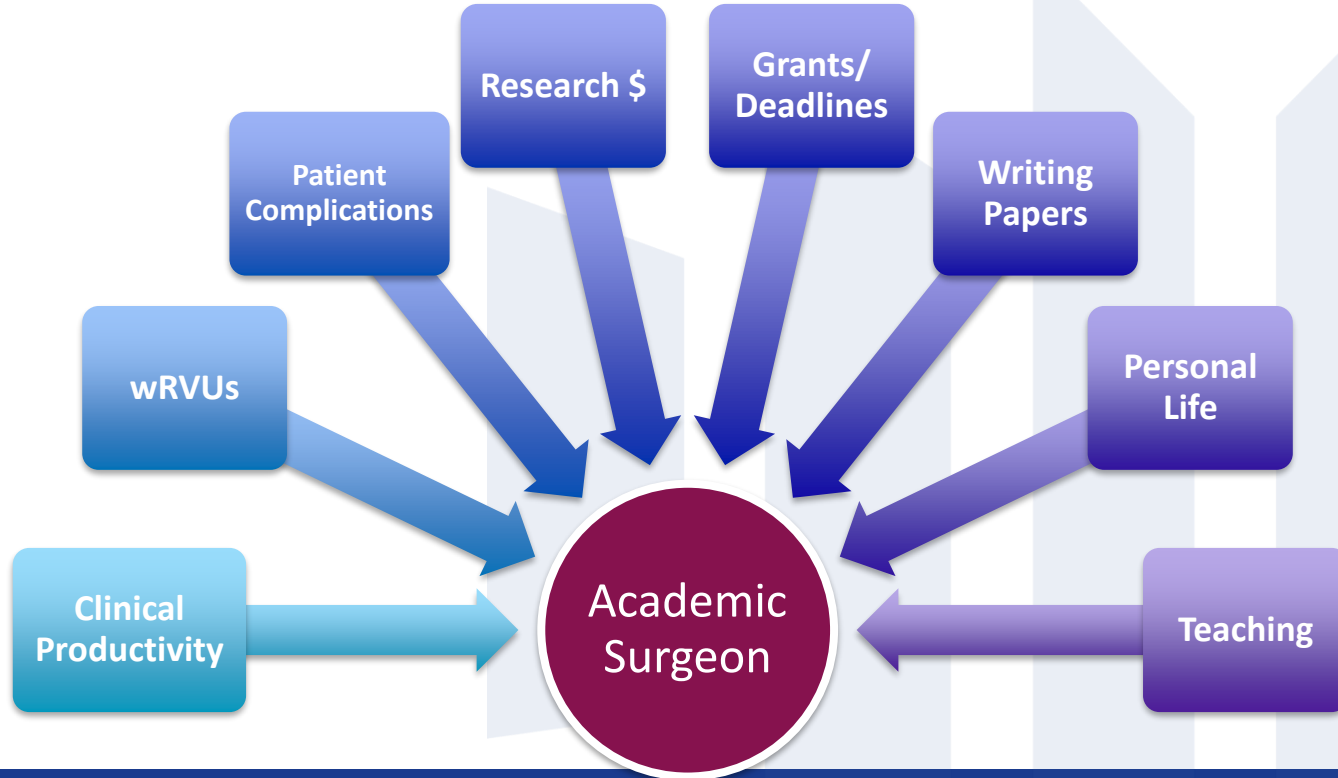
Association for  
Academic Surgery

# Effective Teaching in Practice

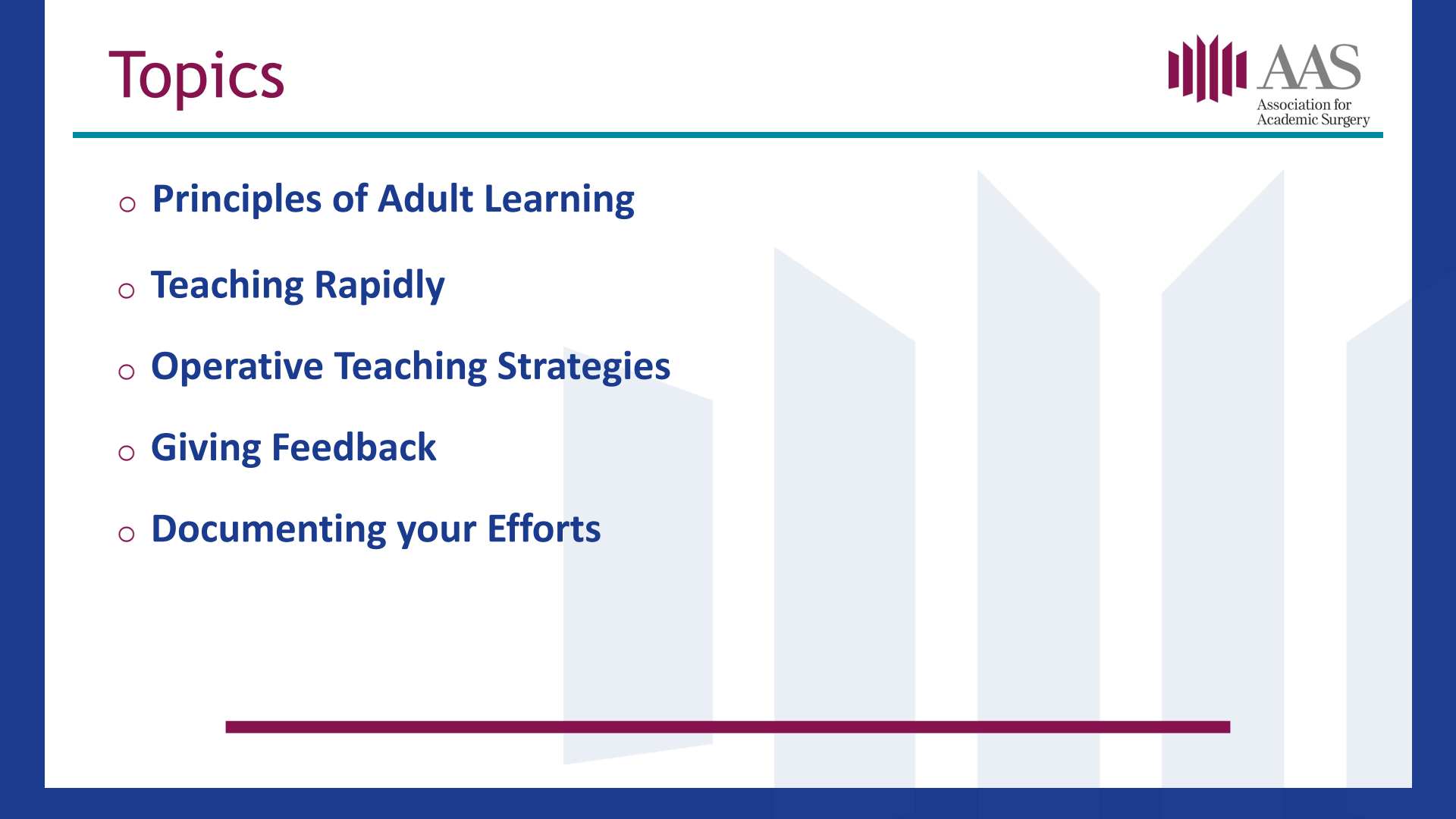
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# Disclosures

- No financial disclosures



# Topics

- **Principles of Adult Learning**
  - **Teaching Rapidly**
  - **Operative Teaching Strategies**
  - **Giving Feedback**
  - **Documenting your Efforts**
- 

# Principles of Learning

Learning is more likely to stick when it is...

Problem-  
Centered

Supportive  
Environment

Experience  
Oriented

Active, not  
Passive

# Principles of Learning



Orient the  
learners

Set expectations and  
negotiate goals



Experience  
Oriented

Supportive  
Environment

Their goals

Your goals

# Principles of Learning

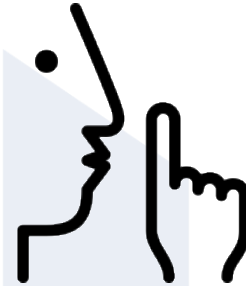
## Practical Tips:



Tell real stories



Put the learner in  
your shoes



Be QUIET

Problem-  
Centered

Active,  
not  
Passive



Think out loud

# Principles of Learning

Based on this segment, what are things that you will:

**START DOING**

**STOP DOING**

**CONTINUE DOING**

Problem-  
Centered

Supportive  
Environment

Experience  
Oriented

Active, not  
Passive

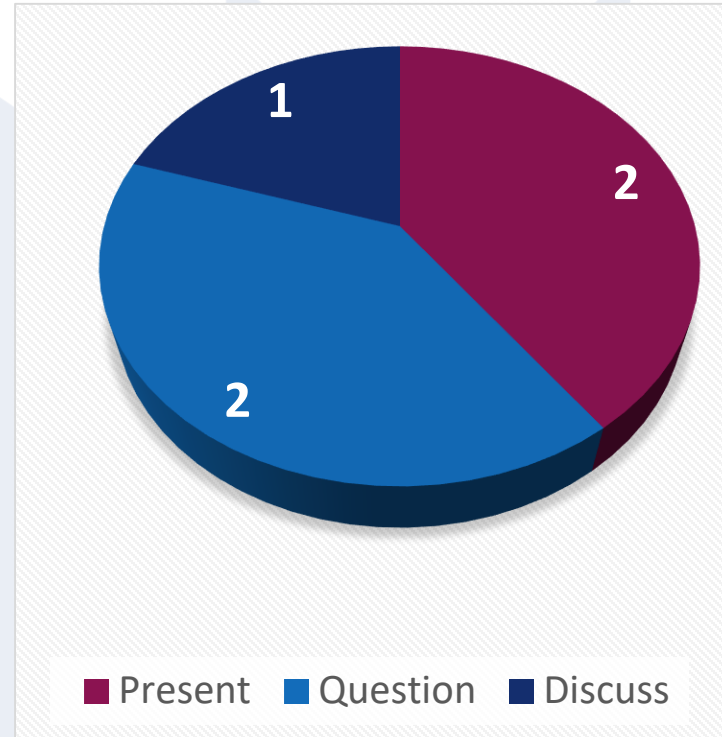
Teaching Rapidly...

...aka “Five Micro-Skills for Teaching”



- Identify the learner's needs
- Teach rapidly
- Provide feedback

**Can it be done in 5 minutes?**



# Five Micro-Skills of Teaching

1.

Get a  
commitment

What do you  
think is going  
on with this  
patient?

What  
investigations  
do you want?

2.

Probe for  
evidence

What led you  
to that  
conclusion?

What else  
did you  
consider?

3.

Teach  
general  
rule

All adrenal  
nodules >4cm  
in size should  
be referred for  
surgery,  
although you  
must rule out a  
functional  
tumor first

4.

Reinforce  
positives

It's great that you  
considered  
pheochromocytoma

Getting an  
adrenal protocol  
CT was the best  
next step

5.

Correct  
errors

Biopsy of an  
adrenal mass is  
almost never  
indicated

The most  
sensitive test for  
pheo is plasma  
metanephrines

# Operative Teaching Strategies

# Operative Teaching Strategies

This case  
needs to  
be quick

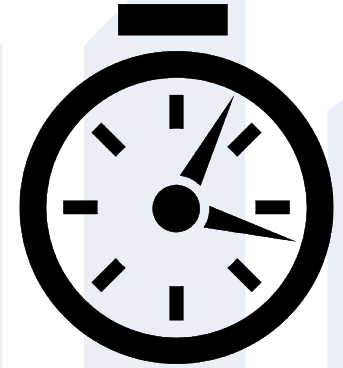
How much  
can I trust  
the resident?



Pre-Briefing



De-Briefing



“Set a Timer”

# General Feedback Strategy

# General Feedback Strategy

## Giving

- *Label feedback*
- *Establish a respectful dialogue*
- *Create shared goals*
- *Share descriptive, constructive details based on direct observation*
- *Ask for understanding*
- *Develop an action plan*

## High Yield Feedback Tips



ASK



ASK



TELL

# Documenting Your Efforts

# Documenting Your Effort

## On your CV

- Teaching in Courses
- Formal Teaching
- Clinical Supervisory/Training Responsibilities

## Overview of your activities

- Include description, location, time

Omits educational impact

### Report of Local Teaching and Training

#### Teaching of Students in Courses

2009	Gross anatomy 1 <sup>st</sup> year medical students	Vanderbilt University 8 hours per week for 8 weeks
2012-2014	Surgical instrument review 2-4 <sup>th</sup> year medical students	Johns Hopkins University 4 hours per clerkship quarter
2013-2014	Transition to Residency course 4 <sup>th</sup> year medical students	Johns Hopkins University 8 hours each year
2013-2015	Physician Assistant Residency orientation Surgical and Critical Care PA residents	Johns Hopkins Hospital 2 hours each year
2018-	Students as Teachers 4 <sup>th</sup> year medical students	University of Alabama at Birmingham 2 hours each year

#### Formal Teaching of Residents, Clinical Fellows and Research Fellows (post-docs)

2011-2015	Intern Pearls for Orientation Incoming 1 <sup>st</sup> year residents	Johns Hopkins University 1 hour annually
2012-2013	OSATS Exam 1 <sup>st</sup> year residents	Johns Hopkins University 4 hours annually
2016-2017	Endocrine Surgery Topics	Brigham and Women's Hospital 4 hours annually
2017-	Endocrine Surgery Topics	UAB Hospital 8 hours annually
2017-	Endocrine Surgery Conference	UAB Hospital 2 hours weekly
2018-	General Surgery Intern Conference	UAB Hospital 4 hours annually

#### Clinical Supervisory and Training Responsibilities

2009-2016	Supervision of medical students and residents on surgical rotations at Johns Hopkins Hospital	Daily teaching efforts on rounds Weekly small group teaching conference
2016-2017	Supervision of medical students and residents on the endocrine surgery rotation at Brigham and Women's Hospital	Daily teaching efforts on rounds Weekly small group teaching conference
2017-2018	Supervision of medical students and residents on the endocrine surgery rotation at UAB Hospital	Weekly teaching efforts in the operating room and on rounds



# Documenting Your Effort

## Teaching Portfolio

- Education Philosophy
  - 2-3 paragraphs
- Educator Effectiveness Evidence
  - Teaching Activities
    - Include learner comments
  - Educational Scholarship
  - Educational Leadership
    - Curriculum Development
    - Program Development

More descriptive, includes evidence of impact

### Teaching Activities

Learner/Period	Faculty	Residency	Medical Student	College Student
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#### Medical Student Surgery Clerkship Evaluation Comments

At the Johns Hopkins University School of Medicine, medical students are asked to

#### Educational Scholarship Agenda

ev:  
rec:  
bo:  
Re  
for

#### Can I Have a Minute of Your Time?

Clin

#### Resident Skills for Teaching in Time-Limited Settings

#### Table 1. Resident Skills for Teaching in Time-Limited Settings Course Structure

skill:	Curriculum Element	Time Allotted (minutes)
•	Introduction, Summary of Course Goals/Objectives	5
•	Teaching Challenges Discussion	10
•	Teaching Characteristics Worksheet/Discussion	20
•	One Minute Preceptor Model	20
•	Negotiating Learning Agendas	15
•	Principles of Effective Feedback	15
•	Role-Play Exercises	60
•	Wrap-Up, Course Evaluation	5
	<b>Total</b>	<b>150</b>

# Key Points

- Learning is more likely to stick when it is:
  - Problem-centered
  - In a supportive environment
  - Experience-oriented
  - Active, not passive
- **5 Micro-Skills for Teaching:**
  - Commit → Probe → Teach General Rule → Reinforce → Correct
- **Operative Teaching Strategies:**
  - Pre-brief & De-brief
  - Set a timer

# Thank You!

## Questions?

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[@UABSurgery](https://twitter.com/UABSurgery)

- **Teaching Portfolio Resources:**

<https://www.duq.edu/about/centers-and-institutes/center-for-teaching-excellence/academic-careers/landing-an-academic-job/teaching-portfolio>