

## **The Keyword Database; Implications for Resident Education and Curriculum Construction**

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**Learner Audience:** Anesthesia Educators and Anesthesia Residents

**Needs Assessment:** The concept of the “adult learner” is something we are mandated to embrace as professionals. Traditionally, students benefit from course outlines, lecture notes, and the ministrations of teachers to guide them. Beginning in the third year of medical school the formal structure is lost. It becomes incumbent on students to delineate the relative importance of various topics and devise their own study plans. The lack of formal structure continues throughout residency training.

**Curriculum:** The American Board of Anesthesiology (ABA) distributes a listing of keywords associated with the In Training examination annually. Residents receive a listing of the keywords they answered correctly. The residents also receive demographic data which allows them to assess their performance within their peer group nationally. At St. Louis University, we have developed a Keyword Database using Microsoft Access®. This database encompasses the keywords associated with the in-training examinations administered from 1996 to the present. Examples of search criteria (Table 1) include: Year Administered, Question Category (per the summary sheet associated with the keyword listing), Physiology and Pharmacology topics-subsets where appropriate.

**Impact:** In addition to providing safe and effective care to patients, Anesthesia residents are faced with the task of learning a tremendous volume of material. In order to obtain board certification, residents are faced with the daunting task of devising an effective study plan. The utilization of a Keyword Database allows residents to focus on appropriate topics in a timely manner. The Keyword Database also provides Anesthesia program directors a means of assessing education programs within their departments. In addition, the Keyword Database provides faculty instructors a tool for structuring their curriculum.

**Table 1. Major Heading and Search Terms – Keyword Database**

<b>Anesthetic Diseases</b>	<b>Emboli</b>	<b>Physiology</b>
Anaphylaxis	Amniotic	Cardiac
Latex Allergy	VAE	Coagulation
MH	PE	Endocrine
MH Triggers	<b>Endocrine</b>	GI
Nausea	ADH	Hematology
Porphyria	Catachols	Metabolism
Pseudochol	Diabetes	Neuro
Trans Rxn	Thyroid	Pulmonary
<b>Anesthesia Equip</b>	<b>Integrated Curriculum</b>	Renal
A-Line	Cardiac	<b>Pulmonary</b>
Absorbers	Critical Care	ABG
Breathing Systems	Misc	ARDS
Capnograph	Neuroanesth	Asthma
CVP	Obstetrics	Diagnostics
Cylinders/Tanks	Pain Mgt	Hypovent
DLT	Pediatrics	Obst Dz
Defib	Physics	Rest Dz
Doppler	Pulmonary	<b>Regional</b>
LIM	Regional	Adbominal
LMA	Safety	Brach Plex
Machine	Thoracic	Epidural
NIBP	Vascular	Head & Neck
Oximetry	<b>Neuroanesth</b>	LE Anatomy
PA Cath	ECT	LE Block
Pacer	ICP	Thorax
TEE	Monitoring	UE Anatomy
Twitch Monitor	Neuro Dz	UE Block
Vaporizers	Neuro Vasc	<b>Vascular Disease</b>
<b>Airway Management</b>	Tumors	AAA
Airway Anesth	<b>Obstetrics</b>	Arterial Injury
Congenital	Fetal Monitor	Carotid aa
Diff Airway	Tocolytics	PVD
Fire	Pain Mgt	TAA
FOB	Maternal Dz	
Jet Vent	Ob Pharm	
Laryngospasm	<b>Ophthalmic</b>	
One-Lung Vent	Occulocardiac	
Stridor	Ophth Meds	
<b>Anesth Mishaps</b>	Retrobulbar	
Airway Fire	<b>Perioperative</b>	
Aspiration	Peri-Op Care	
Epidural Hematoma	Tests	
High Spinal	<b>Pharmacology</b>	
Hypotension	Anes Adjuncts	
Hypoxia	Antichol	
LA Toxicity	Anticoag	
Positioning	Antiemetics	
Prolonged Block	BP Meds	

Recall  
VAs  
**Cardiac**  
CAD  
CPB  
Echo  
Heart Failure  
Heart Function  
Oxygen Delivery  
Rhythm  
Valvular

Cardiac Meds  
Ind Agents  
Fibrinolytics  
LES Meds  
Mus Relax  
NSAIDS  
Opiates  
Sedatives  
Steroids  
Subs Abuse  
Volatiles