



# 22<sup>nd</sup> Annual AST Educator's Conference

## Innovative Strategies for Selecting Your Next Cohort

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**Association of Resume Writers Professional Association of Resume Writers and Career Coaches**



# OBJECTIVES FOR THE DAY

Discuss past practices

Discuss Grit and how it can be applied to the selection process through data mining and AI based modeling methods

examine the methods being developed by researchers in the educational data mining, learning analytics, learning-at-scale, student modeling, and artificial intelligence communities.

Step by step practical uses of analytics based on positive and negative responses

Methods will be covered at a theoretical level.

Establishing how trustworthy and applicable the analysis works.

# DISCLOSURE: What works for you

SVF

- Student variability factor

Follow College policies

Is there any flexibility / freedom in your selection process?

Do what you can

*If you want to be a better teacher...start by asking better questions*

# PAST

- Used GPA and minimum grade of “C” (74.5%) in English Composition and A&P I
- College insisted that Academics was the only true indicator of success
- Ill-conceived and quick fix plan of action every year for falling below thresholds (college administration and ARCSTSA)



## PLAN OF ACTION:

Conducted interviews

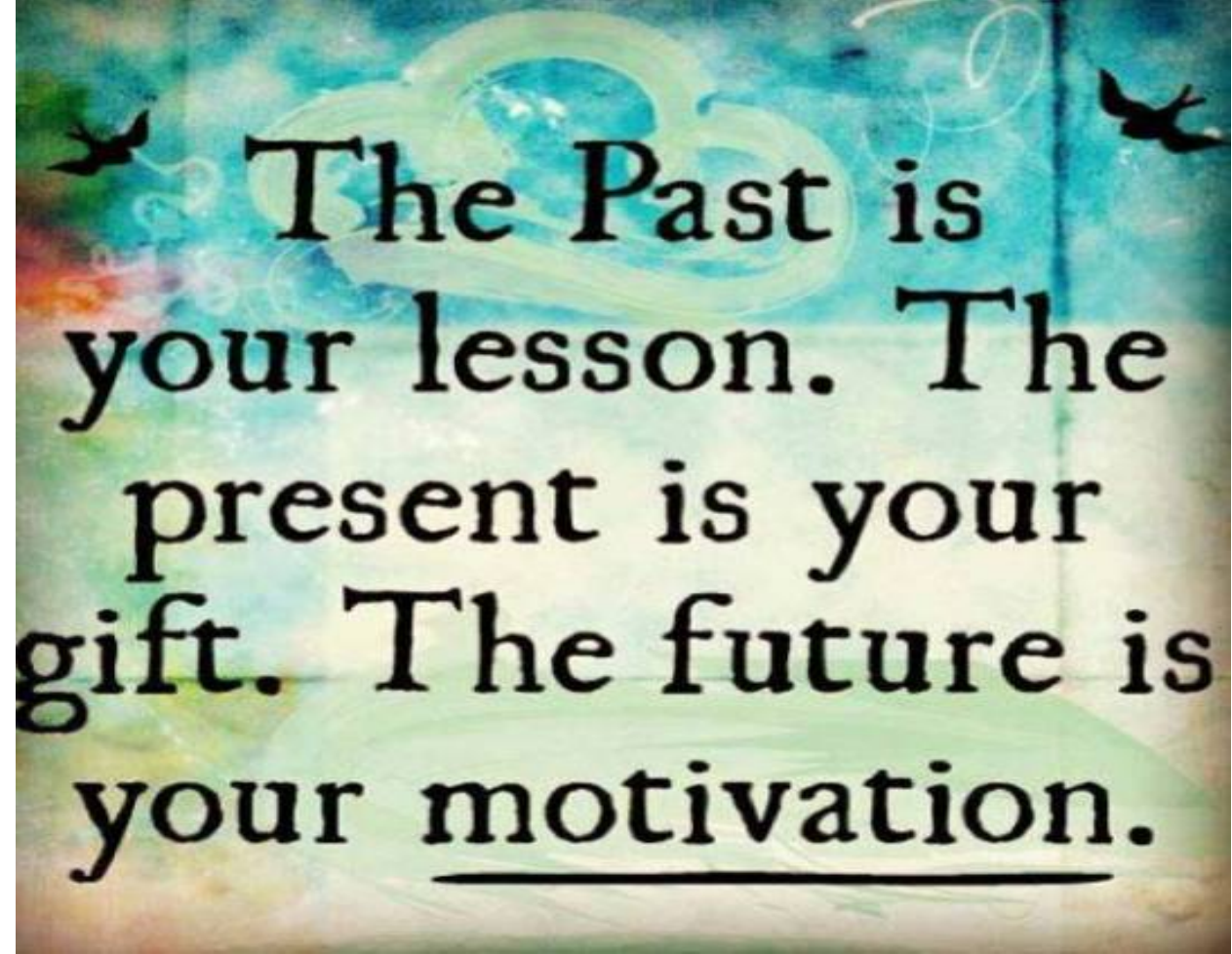
Questionnaire (interview on paper)

Fingers crossed



# PRESENT

Same academic standards  
Interview (questionnaire)  
using a rubric to measure  
GRIT, MOTIVATION and EQ



# What is Grit and Emotional Intelligence

## **GRIT**

positive, non-cognitive trait based on an individual's perseverance of effort combined with the passion for a particular long-term goal or end state

## **EQ**

Emotional self awareness

Being aware of our current state of emotions can have a direct positive effect on our behavior and how we interact with others

“I always wanted to help people”

# MOTIVATION

## Extrinsic Motivation

**arises from outside**

Participating to win awards

Doing homework to avoid being reprimanded by a teacher

Competing in a contest to win a scholarship

Studying because you want to get a good grade

## Intrinsic Motivation

**arises from within**

Participating in a sport because you find the activity enjoyable

Cleaning your room because you like tidying up

Solving a word puzzle because you find the challenge fun and exciting

Studying a subject you find fascinating



# What characteristics do you look for in a student?

The ideal student would be one who was not working for grades but was working because he was interested in the work and not trying to compete with fellow students.

Carl David Anderson

# Student Learning Outcomes

SLOs typically concern three broad types of student learning:

Content knowledge or understanding (cognitive – what we want students to know)

Abilities, skills, or competencies (behavioral – what we want students to be able to do)

Values, dispositions, or attitudes (affective – what we want students to care about)

*<http://www.learningoutcomesassessment.org/TFCComponentSLOS.htm>*

# Professional Strategies for the Surgical Technologist

## Student Learning Outcomes

If you stick with me, by the end of this course, I promise that you will be able to:

Identify curriculum content and master subject matter for the certification exam.

**Understand job seeking skills and create your own “brand” and “elevator pitch” by learning about resume writing, networking, and the entire job search process.**

Master interviewing techniques.

Identify requirements for continuing education for

## Assessment Measures

You will be able to demonstrate that you have achieved this outcome by:

Discussion, writing weekly assignments and examinations, proving mastery of the required curriculum for the National Certification Exam.

**Completing a cover letter and resume successfully to use in job seeking.**

**Comprehending the tactics necessary to establish a network of colleagues through personal, professional and social media interactions.**

**Prepare for a job interview to prove that you are the ideal candidate**

**Simulating an interview in the classroom setting and responding to interview questions while being reviewed and constructively critiqued by all class members.**

Identifying the requirements for certification/recertification.

# What characteristics do you look for in a student

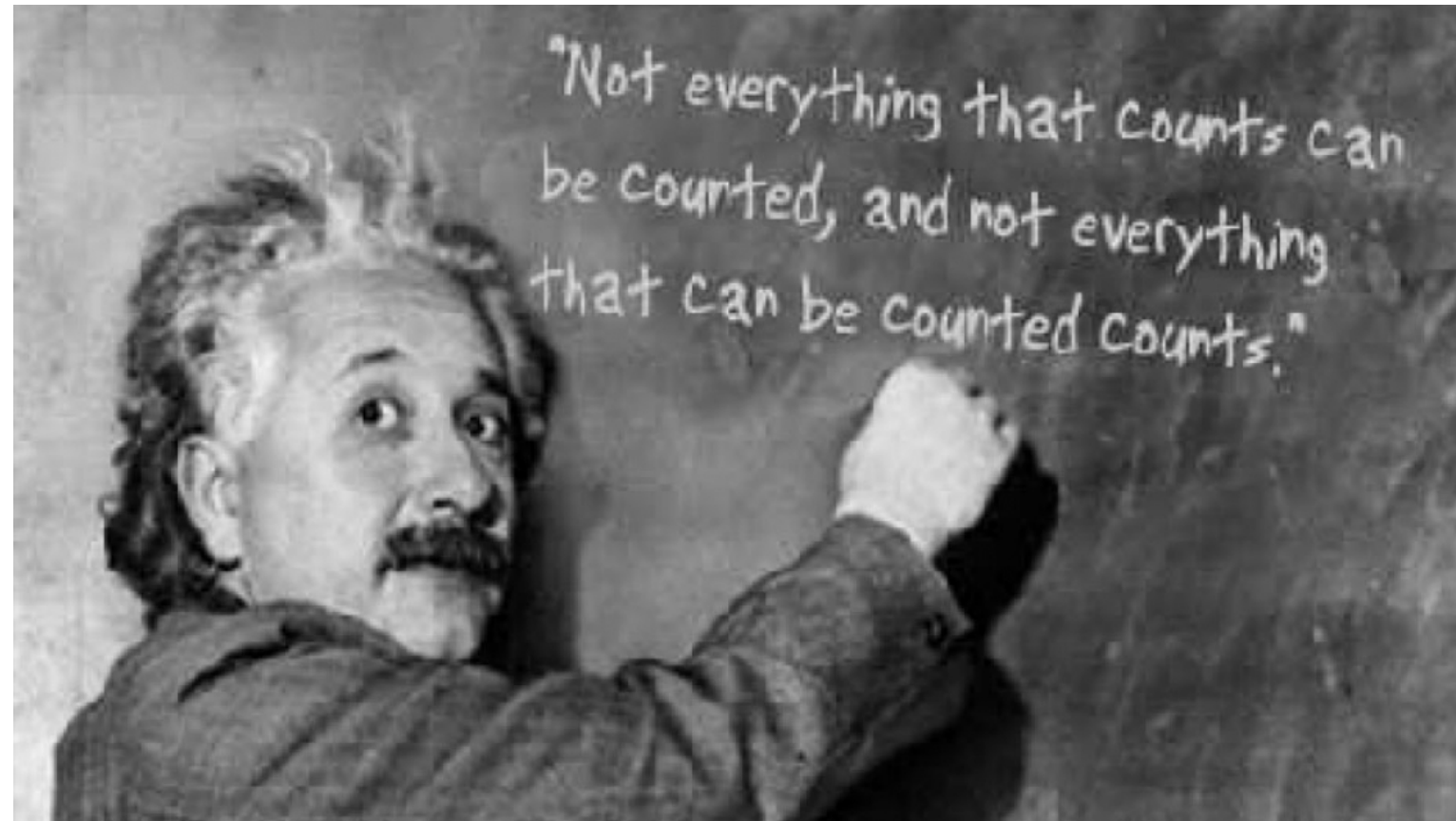
## **HARD SKILLS**

- GPA
- TEAS or other indicator/predictor exam
- life/work related experiences
- OR / healthcare familiarity

## **SOFT SKILLS**

- Communication
- Flexibility
- Motivation
- Teamwork
- Time management
- Ownership
- Curiosity

- Courage
- Conscientiousness: Achievement Oriented vs. Dependable
- Long-Term Goals and Endurance: Follow Through
- Resilience: Optimism, Confidence, and Creativity
- Excellence vs. Perfection





How can we quantify it?



# Agree / disagree questions

Limited standards of measurements for EQ :

<http://myframeworks.org/testmyeq/>

<https://www.ihhp.com/free-eq-quiz/>

<https://globalleadershipfoundation.com/geit/eitest.html>

Students do not understand the framework for the questions

Students understand and give the answer you want to see

SVF; socioeconomic backgrounds; may be biased

# Agree / disagree questions

- I enjoy projects that take years to complete.
- I am working towards a very long-term goal.
- What I do each day is connected to my deepest personal values.
- There is at least one subject or activity that I never get bored of thinking about.
- Setbacks don't discourage me for long.
- I am a hard worker.
- I finish whatever I begin.
- I never stop working to improve.



# FIRST IMPRESSIONS RUBRIC



✓ + - 3,2,1

- Applicant expresses optimism and energy in initial greeting; offers a solid handshake
- Applicant is well groomed, has good hygiene and is appropriately dressed
- Applicant smiles and speaks clearly and distinctly; words are not mumbled

## NON-VERBAL BEHAVIOR/BODY LANGUAGE

- Applicant demonstrates professionalism; sits squarely in chair; has good posture
- Applicant demonstrates openness and receptiveness; open position (arms are not crossed)
- Applicant demonstrates interest and enthusiasm; uses positive facial expressions
- Applicant demonstrates confidence and attentiveness; maintains good eye contact
- Applicant maintains poise; appears relaxed; doesn't shift and fidget excessively

## VERBAL COMMUNICATION/KEY INTERVIEW CONTENT

- Applicant responds with concise, organized and well thought-out answers
- Applicant articulates ideas clearly and uses proper grammar and appropriate vocabulary
- Applicant demonstrates research and understanding of the program
- Applicant demonstrates self-awareness of work values and personal motivators
- Applicant illustrates strengths and skills through specific examples
- Applicant avoids flat "yes" or "no" answers
- Applicant relates past achievements (and/or failures) to future success
- Applicant discusses a weakness honestly but by explaining steps taken to improve
- Applicant asks appropriate questions about the job and employer

## CLOSING THE INTERVIEW

- Applicant inquires about timeframe and next actions to be taken
- Applicant thanks interviewer by name and acquires appropriate contact info for follow-up

# Is EQ measurable?

There appears to be significant contention that EQ is still a colloquial concept but measurability is a fast growing field of interest in cognitive psychology.



“There is not one specific, universal, well-defined quotient in wide usage”

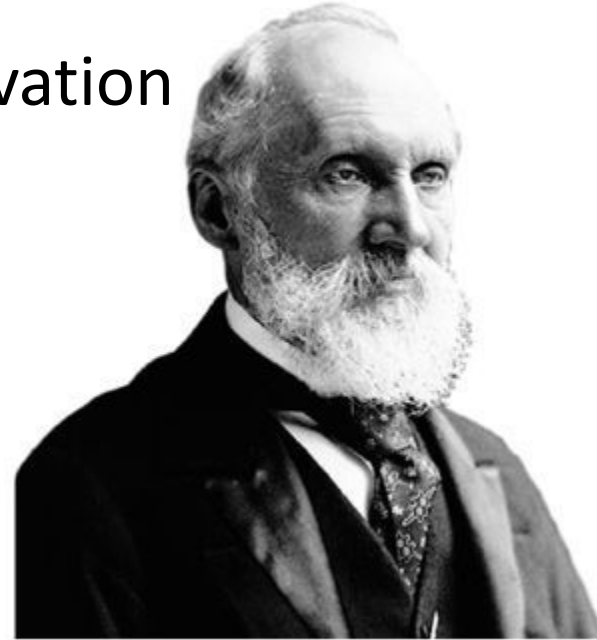
-Schulte, M. J.; Ree, M. J.; Carretta, T. R. (2004). "Emotional intelligence: Not much more than g and personality". *Personality and Individual Differences*. **37** (5): 1059–1068. [doi:10.1016/j.paid.2003.11.014](https://doi.org/10.1016/j.paid.2003.11.014).



# Not How, but What Do We Measure

What can we quantify for GRIT, EQ and Motivation

- completed courses
- co-requisites for graduation
- ST GPA (S.T.E.M.) vs. College GPA
- D, F, W, INC, WU
- Repeated a class with a B or better
- Initial assessment interview
- Initially denied and returns one year later still interested



To measure  
is to know.  
If you can not  
measure it,  
you can not  
improve it.

- Lord Kelvin

# QUESTIONNAIRE

## ***What do you know about Surgical Technology?***

### **POSITIVE RESPONSE**

Inspired, motivational story as to why they want to be in this field

Desire to be a part of a healthcare team

### **NEGATIVE RESPONSE**

“Just give it a try”

Applied to nursing, this is a backup

Gave a web based “cut and paste” job description

# QUESTIONNAIRE

***Can you tell me about a time you tried to do something and failed?***

***What did you learn from this experience?***

## POSITIVE RESPONSE

Takes full accountability and learned from it.

Able to fully bounce back from the issue without getting defensive.

Assesses troubling situations objectively, without harsh self-judgment or resorting to outward frustration. Can discuss details of a failed project with fair-minded focus.

## NEGATIVE RESPONSE

Bulk of the blame on other parties or unfortunate circumstances

No relevance to learning from their failure.

# QUESTIONNAIRE

***Can you tell me about a conflict at work that made you feel frustrated?***

## POSITIVE RESPONSE

Describes a situation that has relevance to their integrity and how they used it as a catalyst to manage their emotions

Had difficulty with controlling emotions, but was able to empathize with others involved

Worked through issues with conversations or actions

## NEGATIVE RESPONSE

Frustration, shifted blame to others

Patience lost and did not learn anything from the experience

Hesitant or embarrassed to admit they need help sometimes.

Think they can handle it by themselves, Self-reliance. No concrete results.

# QUESTIONNAIRE

***Tell me about a public figure who inspires you and why? What qualities do they possess that you admire most?***

## POSITIVE RESPONSE

A positive role model with real life attributes that can be applied to their matriculation and profession.

Highlights the sort of behavioral patterns that are respected

## NEGATIVE RESPONSE

A non-descript role model or family member that they identify with but has no applicable values

A pop culture role model with questionable characteristics that they strongly identify with.



# QUESTIONNAIRE

***If you were starting a company tomorrow, what would be the top values you would like to see in your company and your employees?***

## POSITIVE RESPONSE

TRUST/ Aligned Values / respect/ Teamwork / Honesty / Integrity/  
Professionalism / safety Authenticity/ Love / Passion / Positivity / Purpose /  
“WE” or “US”

## NEGATIVE RESPONSE

goals do not indicate success

Vague responses that do not truly speak of values.

“ME, ME , ME”

# QUESTIONNAIRE

***Tell me about a hobby you like to do outside of work and school. Can you teach me about it?***

***“Communication Challenge”***

## POSITIVE RESPONSE

Remains patient and calm. Sounds genuinely excited to share their special talents.

Has the ability to explain something to a person who is less knowledgeable in the subject

## NEGATIVE RESPONSE

Brief, short response without offering any insight

No hobbies or passion for anything other than immediate responsibilities

# QUESTIONNAIRE

***What would your co-workers say is the most rewarding thing about working with you? What about the most challenging thing?***

***“Self Awareness Challenge”***

## POSITIVE RESPONSE

Displays humility. Understand their own strengths and limitations

Explain how others perceive their positive and not-so-positive qualities.

Frank commentary without making excuses or immediately invalidating their co-workers' perceived criticisms

## NEGATIVE RESPONSE

Makes excuses

# ABILITIES ASSESSMENT

5=excellent

4=mostly

3=somewhat

2=below average

1=liability

## GRIT

The ability to stick with it when things get hard, when directions are not explicit and can make sense of ambiguous situations

## OWNERSHIP

### *COPING MECHANISMS*

Positive and empathetic. Ability to work in service of others. Also takes initiative when things need to be anticipated. Knows how to move on and examine a situation without bitterness or resentment clouding their judgment

## CURIOSITY

Ask why in reference to their role, the role of others  
Trying to be better informed, better eye for detail  
Asks the right questions  
Desire to learn

# ABILITIES ASSESSMENT

5=excellent

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## TEAMWORK

Willing to collaborate. Proven ability to work with others. Building relationships- A lasting friendship tells you that relationships and caring about people are important to the person

## RIGOR

Ability to read, interpret and process data quickly in a detail oriented way.

## IMPACT

*PRECEPTOR/*

*MENTOR MENTALITY*

Understanding their impact on their specific job as well as the profession. Concerned about the reputation of the program and the future success of it

Has the technical ability to explain something to a person who is less knowledgeable in the subject

## POLISH

Asks thoughtful questions at appropriate times. Flexible and possess the skills to help carry out change

# Results

<i>2004-2014</i>	<i>average class size was 20</i>	<i>average retention 60%</i>
2015	75 applicants 20 accepted	retention 90%
2016	65 applicants 20 accepted	retention 70%
2017	45 applicants 18 accepted	retention 66%*
2018	75 applicants 20 accepted	retention 70%

\* Average applicant eligibility only 40% SVF

CURRENT RUBRIC potential score is 75  
2019 Cut off is 35

4th year of implementation (looking to improve at least 1% every year)

15% increase in retention

10% increase in CST Exam scores

2004-2015 average grade was 124

2016-2018 average grade was 140

75% decrease in reported issues with:

student/student, student/instructor, student/preceptor, student ethics, morals, behavior  
(as assessed through weekly reporting and official remediation/mandatory meeting with PD)

Coordinated effort with staff  
Constant tweaking  
Peer review / Faculty input  
Advisory Committee involvement



Tis better to light one candle rather than curse the darkness

# QUESTIONS?





THANK YOU FOR YOUR  
TIME AND ATTENTION TODAY

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