22nd Annual AST Educator’s Conference
Innovative Strategies for Selecting Your Next Cohort

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CST since 1999 AST EPSC NY State Assembly of Surgical Technologists 2008-2018 NBSTSA Item Writer
Administrator of the “SURGICAL TECHNOLOGIST” Facebook page Career Coach since 1997
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 ARCSSTA)

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 perseverence 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/TFComponentSLOS.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:

<table>
<thead>
<tr>
<th>Identify curriculum content and master subject matter for the certification exam.</th>
</tr>
</thead>
</table>

### 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. |

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

| 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 |

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

| Identify requirements for continuing education for |
| 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

"Not everything that counts can be counted, and not everything that can be counted counts."
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/eittest.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

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 openess 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”

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 mode 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 invaliding their co-workers' perceived criticisms

NEGATIVE RESPONSE
Makes excuses
<table>
<thead>
<tr>
<th>ABILITIES ASSESSMENT</th>
<th>5=excellent</th>
<th>4=mostly</th>
<th>3=somewhat</th>
<th>2=below average</th>
<th>1=liability</th>
</tr>
</thead>
</table>

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

**OWNERSHIP**
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.

**COPING MECHANISMS**
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

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
- 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.

PRECEPTOR/MENTOR MENTALITY
- 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

<table>
<thead>
<tr>
<th>Year</th>
<th>Applicants</th>
<th>Accepted</th>
<th>Retention</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004-2014</td>
<td>2004-2014</td>
<td>20</td>
<td>60%</td>
</tr>
<tr>
<td>2015</td>
<td>75</td>
<td>20</td>
<td>90%</td>
</tr>
<tr>
<td>2016</td>
<td>65</td>
<td>20</td>
<td>70%</td>
</tr>
<tr>
<td>2017</td>
<td>45</td>
<td>18</td>
<td>66%*</td>
</tr>
<tr>
<td>2018</td>
<td>75</td>
<td>20</td>
<td>70%</td>
</tr>
</tbody>
</table>

* 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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