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Developing Guidance for Low Volume Exam Programs: A Foundation to Address the Challenges

Dawn R. Gibas, PhD, ASA/SSSA
Manny Straehle, PhD, AERE
Low Volume Exam Subcommittee

Dawn Gibas, PhD, PSS, CPSS

Assessment Specialist

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Manny Straehle, Ph.D., GISF

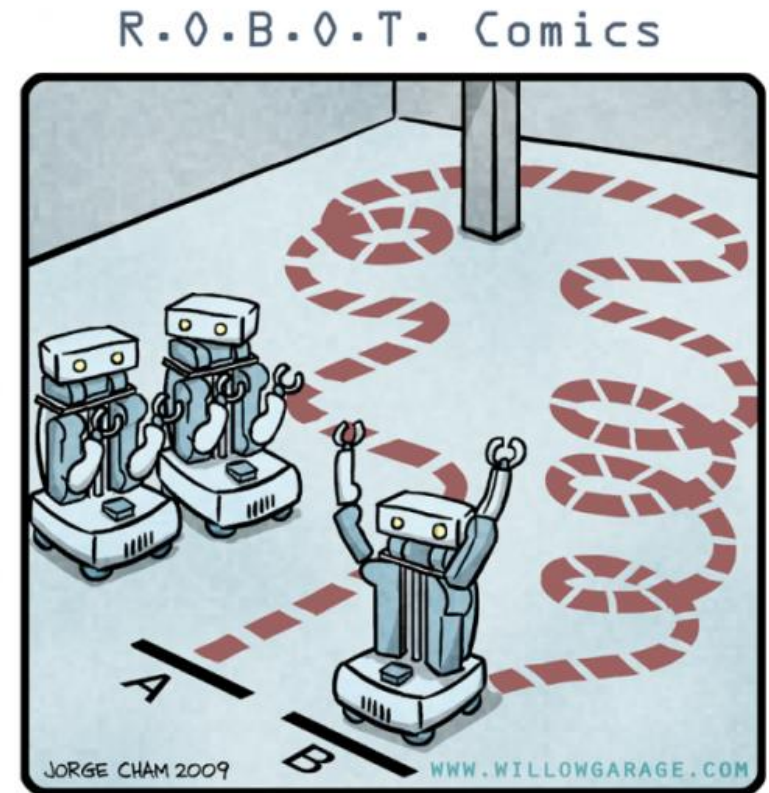
Founder and President
manny@aerexperts.com



Where is this session going to go today?

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- Background
- Goals and Objectives
- Survey Responses
 - Discussion
- Next Steps



"HIS PATH-PLANNING MAY BE SUB-OPTIMAL, BUT IT'S GOT FLAIR."

Background



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Part of C/L
Division

Formed
2014

Distinct
Challenges

Wide
Interest

Low Volume Exam (LVE) Subcommittee



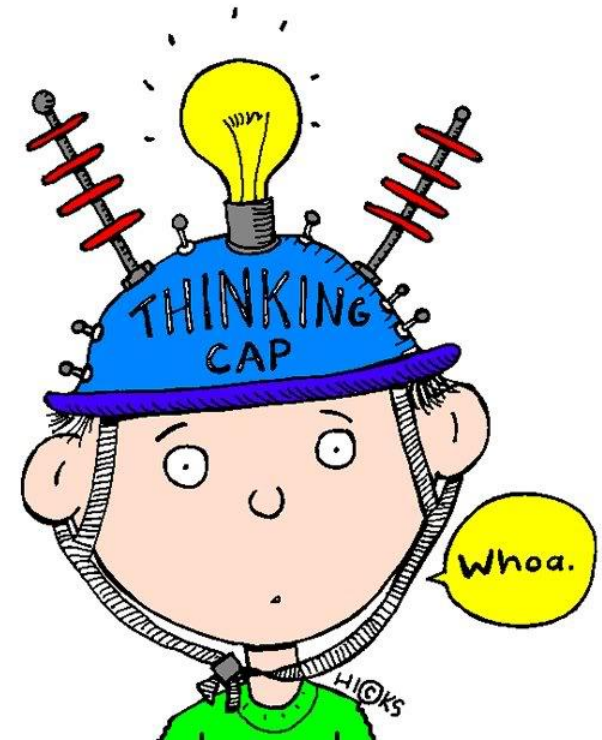
Variety of member affiliations:

- **Non-profit**
- **Testing Industry**
- **Education**
- **Government**

LVE Committee Goals/Objectives

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- What is **Low Volume Exam**?
- What is a “good” **sample size**?
- How do we properly **frame inferences**?
- How do we provide **meaningful guidance** to low volume programs??



Test Development Lifecycle



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Survey Results

Gathering Insight and Information

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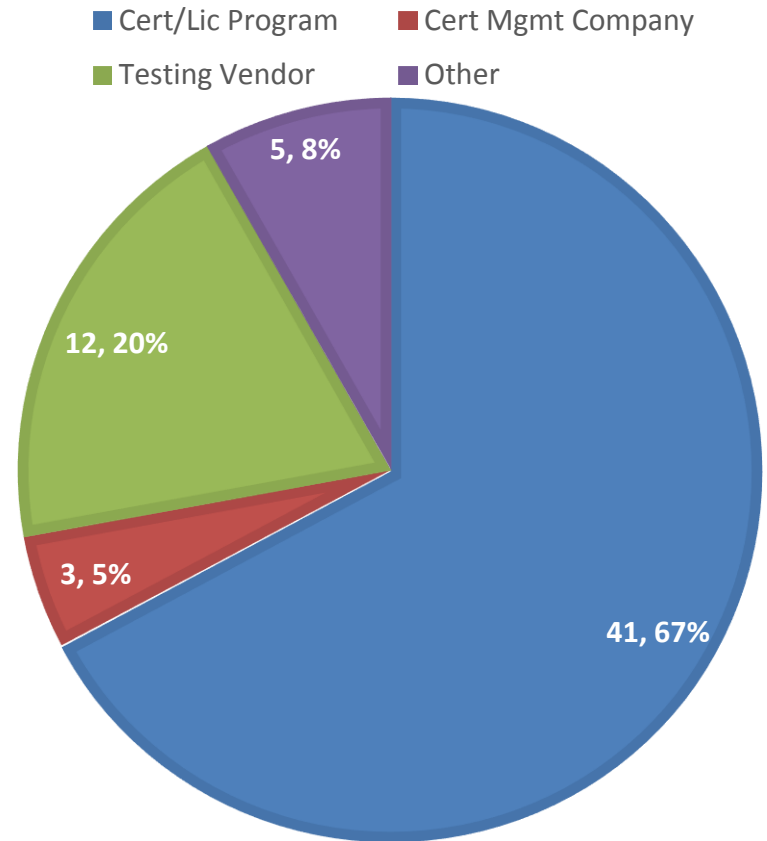
61

- 25 questions on survey.
- Posted to ATP member websites and LinkedIn outlets.

Survey Results

■ Type of Organization?

- 67% Certification/Licensure Program
- 20% Testing Vendor
- 5% Certification Management Co.
- 8% Other
 - Included test development, consulting, and testing organizations

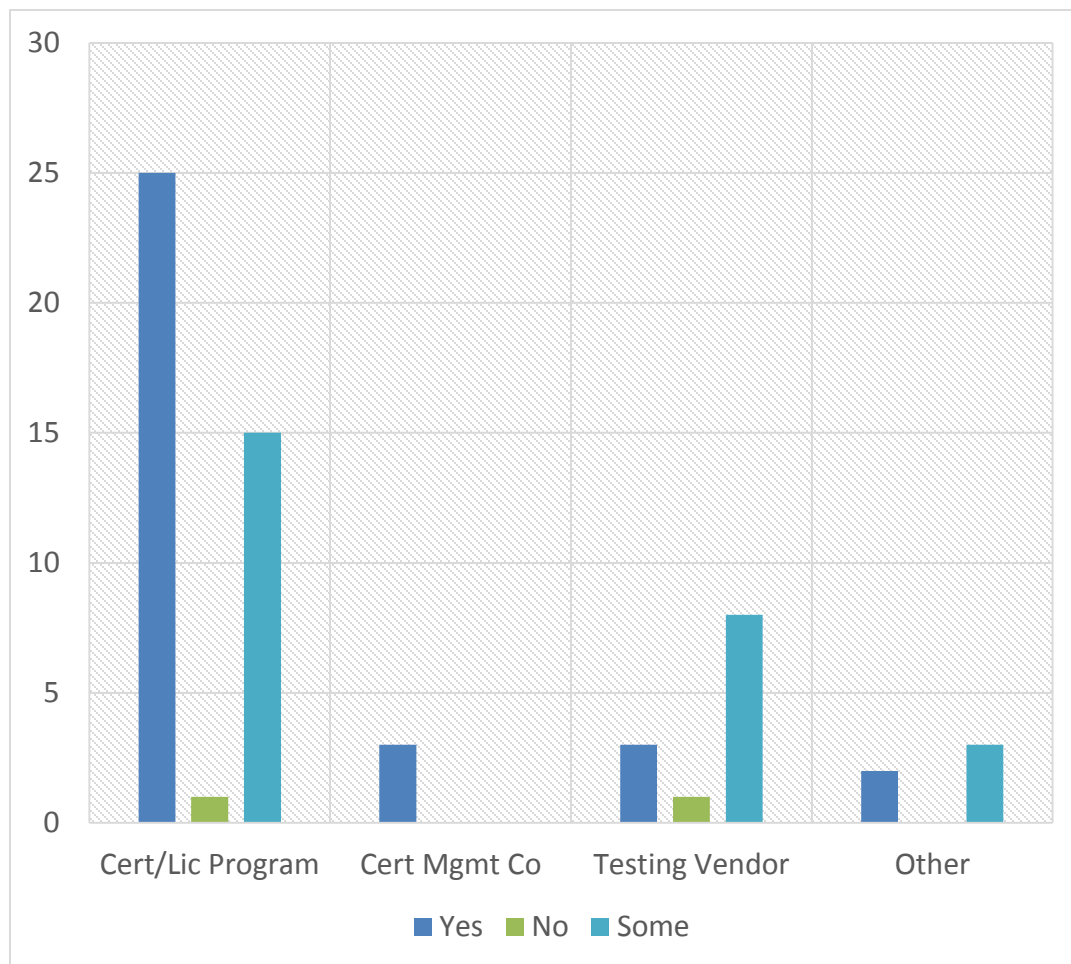


Survey Questions and Responses

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■ Do you consider your program(s) to be "low volume"?

- Overall
 - Yes: 33 (54%)
 - No: 2 (3%)
 - Some of each 26 (43%)



Let's talk about low
volume exams...

What defines a Low
Volume Exam?

List top 2 definitions
within your groups.

5 minutes

Survey: What defines Low Volume to you?

- As with the Low Volume Subcommittee discussions, definitions are all over the board.
- Range from <10 to ≤ 5000 annually.
 - One response of <50 per month.
- Some said they weren't sure.
- Many had definitions other than numbers:
 - Does not pay for itself.
 - Does not update exams frequently due to exposure.
 - When classical item stats cannot be trusted.
 - Pool of potential candidates is small.

Survey Questions and Responses

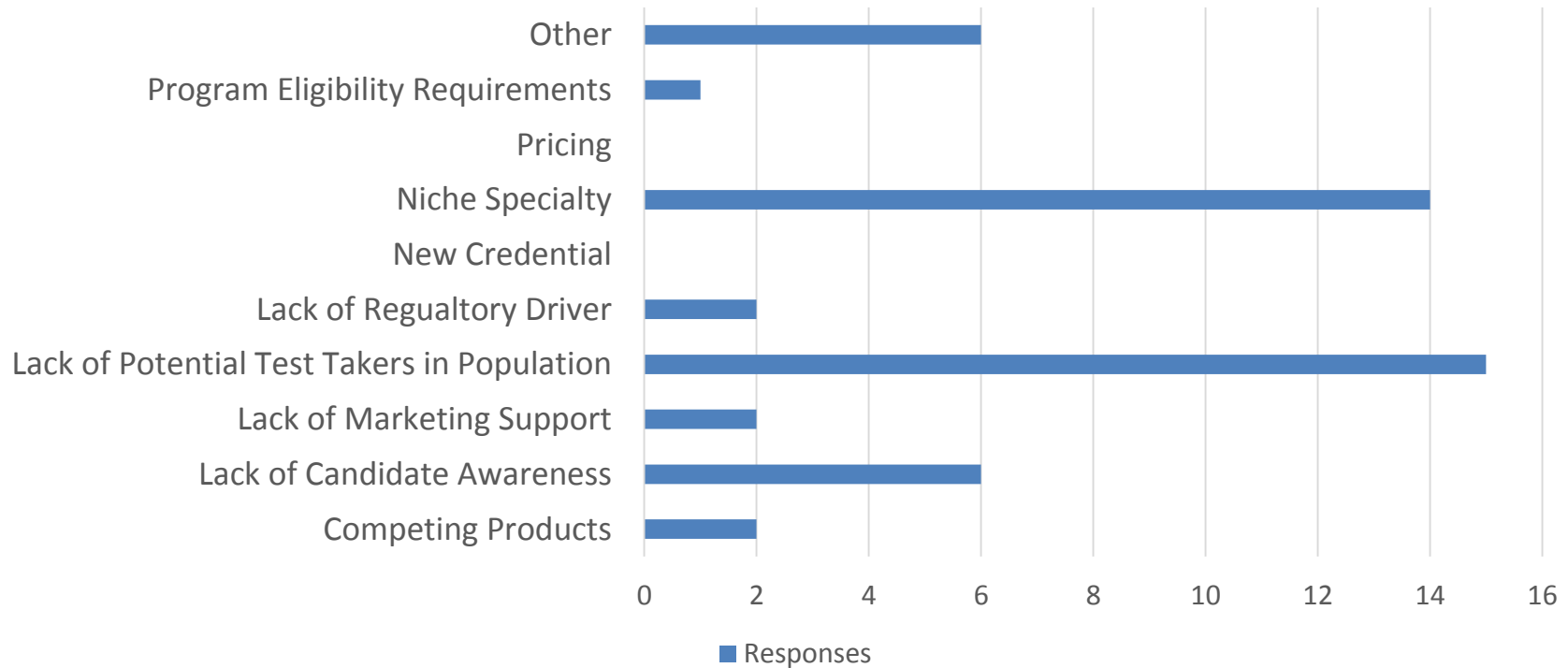
- What are the annual volumes of the smallest low volume title and the largest low volume title?

# of Candidates	Smallest Volume	Largest Volume
<25	24	7
25-50	20	3
51-100	5	13
101-150	4	8
151-250	2	3
251-500	2	4
>500	2	21

Survey: What do you think is the main cause for your exam(s) to have low volumes?

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Causes for Exams to be of Low Volume



Challenges and Risks

- What are the risks inherent to low volume exam programs?
 - Confidence
 - Reliability
 - Quality
 - Security
 - Lack of Accreditation
 - Financial



Let's talk about low
volume exams...

Using the list on the next
slide, what are the top 3
challenges in exam
development for low
volume?

5 minutes

Survey Questions and Responses

Rank order the areas in which you face the biggest challenges running a low volume exam from greatest to least.

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- Accreditation Issues
- Administration/Test Delivery
- Executive buy-in/Sponsorship
- Financial Performance
- Marketing
- Psychometrics
- Program Management
- Recertification
- SME Management/Volunteers
- Scoring
- Security
- Test Development/Maintenance
- Other (list)

Rank order the areas in which you face the biggest challenges running a low volume exam from greatest to least.

Top Challenge

- Financial Performance
- Budget issues

Second

- Test Development/Maintenance
- SMEs/Volunteers

Third

- Psychometrics
- Followed closely by Marketing

■ Lowest Challenge was Security

- Scoring and Accreditation issues also showed up as low challenges.

Let's talk about low
volume exams...

How have you overcome
the major challenges?
5 minutes

Survey: How has your organization overcome your #1 challenge?

- Many stated that they have not overcome the challenges.
- Trying to manage challenges:
 - Manage costs
 - profit/loss analysis to determine feasibility of continuing the exam or break-even point.
 - Marketing of the credential (also a challenge).
 - Use of revenue from higher volume exams or other ventures.
 - Expand geographic specific exams to larger markets, i.e., regions or national.

Let's talk about low
volume exams...

What deliverables would
you like to see?

5 minutes

Survey: What would you like to see in the way of information, tools, or help on low volume exams?

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- Cost effective programs
- Security risks
- Marketing/VoC
- Psychometric guidelines/metrics
- Managing programs
- Delivery

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Next Steps

Comments and Insight from the Low Volume Subcommittee

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- Adequately define “Low Volume” and build consensus to support the definition.
- Understand and document the following for Low Volume Exams:
 - Types of analyses that can be used with low N exams.
 - Inferences and limitations that frame those inferences.
 - Risks due to small volume.
- Accessibility/ability to use tools such as CBT, IBT, IRT, etc.

Where to from here?

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- Respond to the need for guidance to those managing low volume exams.
- Provide a framework in which to provide information and understand the inferences and confidence surrounding the data,
- Publish white paper as a start and view the document as dynamic and something to be reviewed and updated.
- Input, experiences, ideas and examples are welcome!

Thank you for participating!

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Contact Information

■ Dawn Gibas, PhD, ASA/SSSA

- Chair, ATP Certification and Licensure Division
- dgibas@sciencesocieties.org

■ Manny Straehle, PhD, GISF, AERE

- manny@aerexperts.com

■ Andy Dwyer, PhD, Am. Bd. Of Pediatrics

- Chair, ATP Low Volume Exam Subcommittee
- adwyer@abpeds.org



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