

Implementation Lessons Learned



Federal Aviation
Administration



Main points

- Need focus on trim understanding, awareness, and use
- Have to control instructor mutations
- Need the RIGHT attitude

Outline

- Top 10 lessons learned in 2016
- Top 10 lessons learned in 2018
- What we have learned in the last year?
- Some math
- Some psychology

Top 10 lessons learning in 2016

Summary of lessons learned in 2016

#10 – “Stall warning has a definition; not ‘AIRSPEED LOW’”

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- # 2 – “The stall recovery template applies to all altitudes”
- # 1 – “Reducing angle of attack is the most important action” ¹⁴

Top 10 (I mean 17) lessons learning in 2018

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- # 1 – “The simulator is where we get everyone’s attention” 25

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- # -6 – “Seeing too much push too often”

What have we learned in the last year?

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- #11 – Struggles with defining proficiency, namely in ‘return to desired flightpath’₄₆

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- # 6 – Pilots need to understand and experience feel system changes at some point

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- # 5 – “Reduce AOA” (i.e., the guidance) still wins over “unload” or “push”
- # 4 – Some pilots now saying “yes” when asked “do you want to see anything else”

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- # 4 – Some pilots now saying “yes” when asked “do you want to see anything else”
- # 3 – See the most pilot difficulties in the unreliable airspeed scenarios

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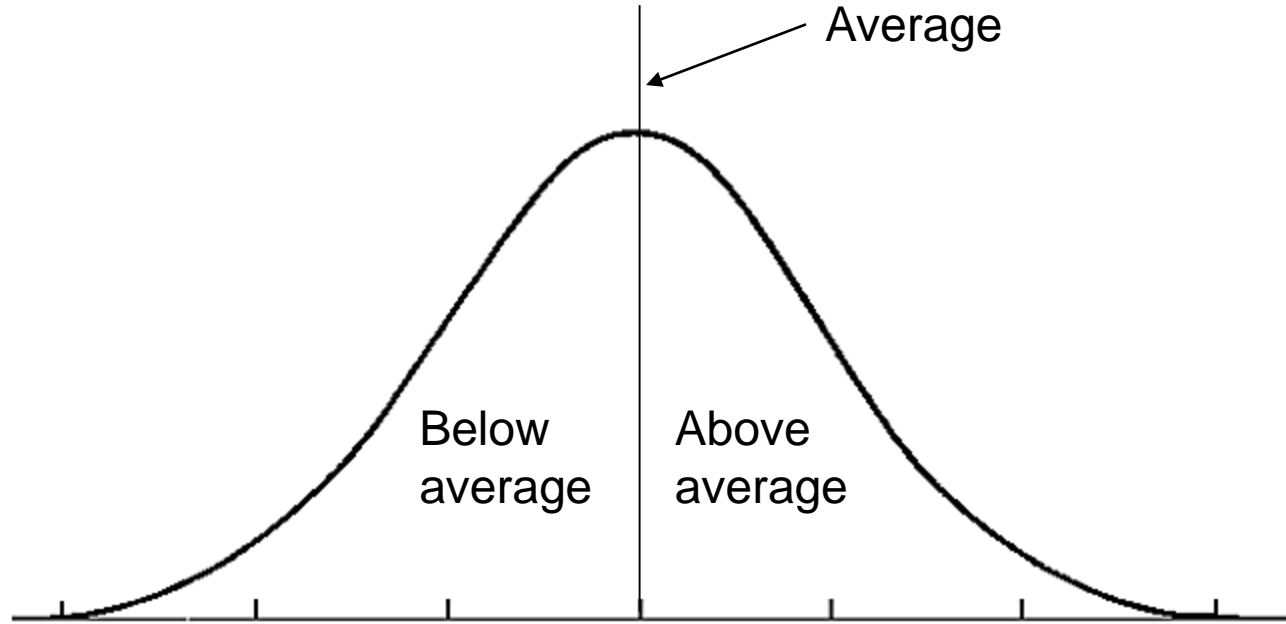
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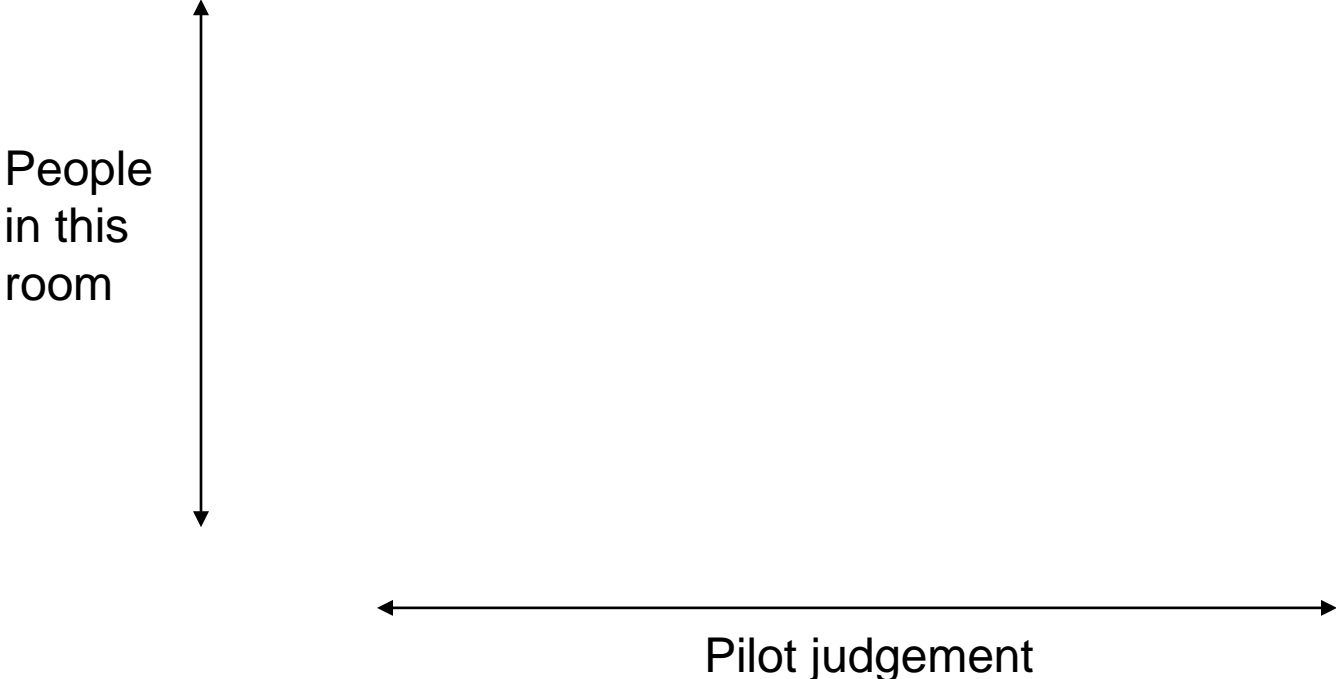
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- # 2 – Trim understanding, awareness, and use needs more focus
- # 1 – Have to control instructor mutations
 - Not noticing getting outside simulator envelope
 - Not diagnosing significant errors (e.g., rolling pullouts, steps out of order)
 - Not understanding the new instructor operating station
 - Not training to proficiency
 - Not understanding what proficiency is

Math: Central Limit Theorem

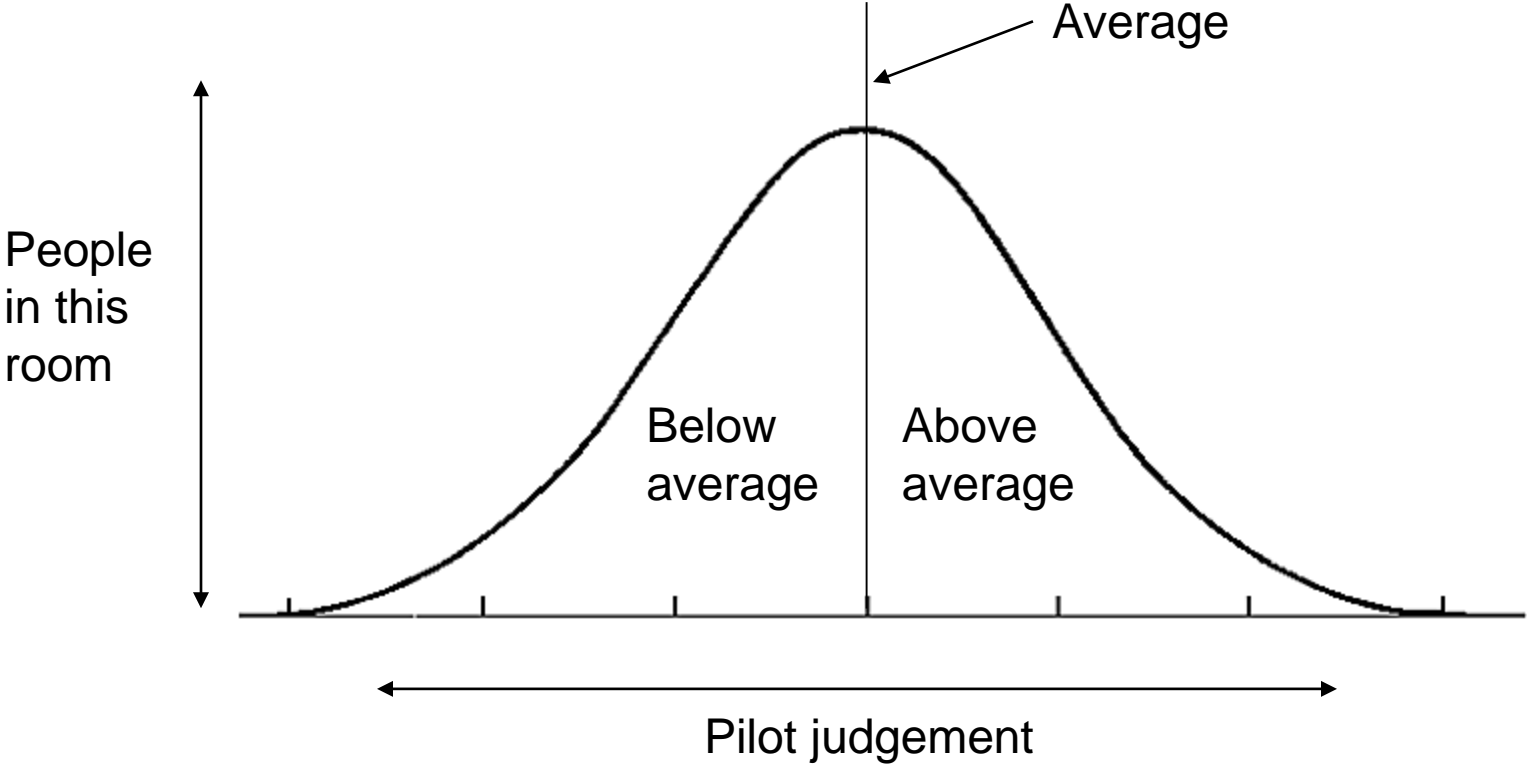
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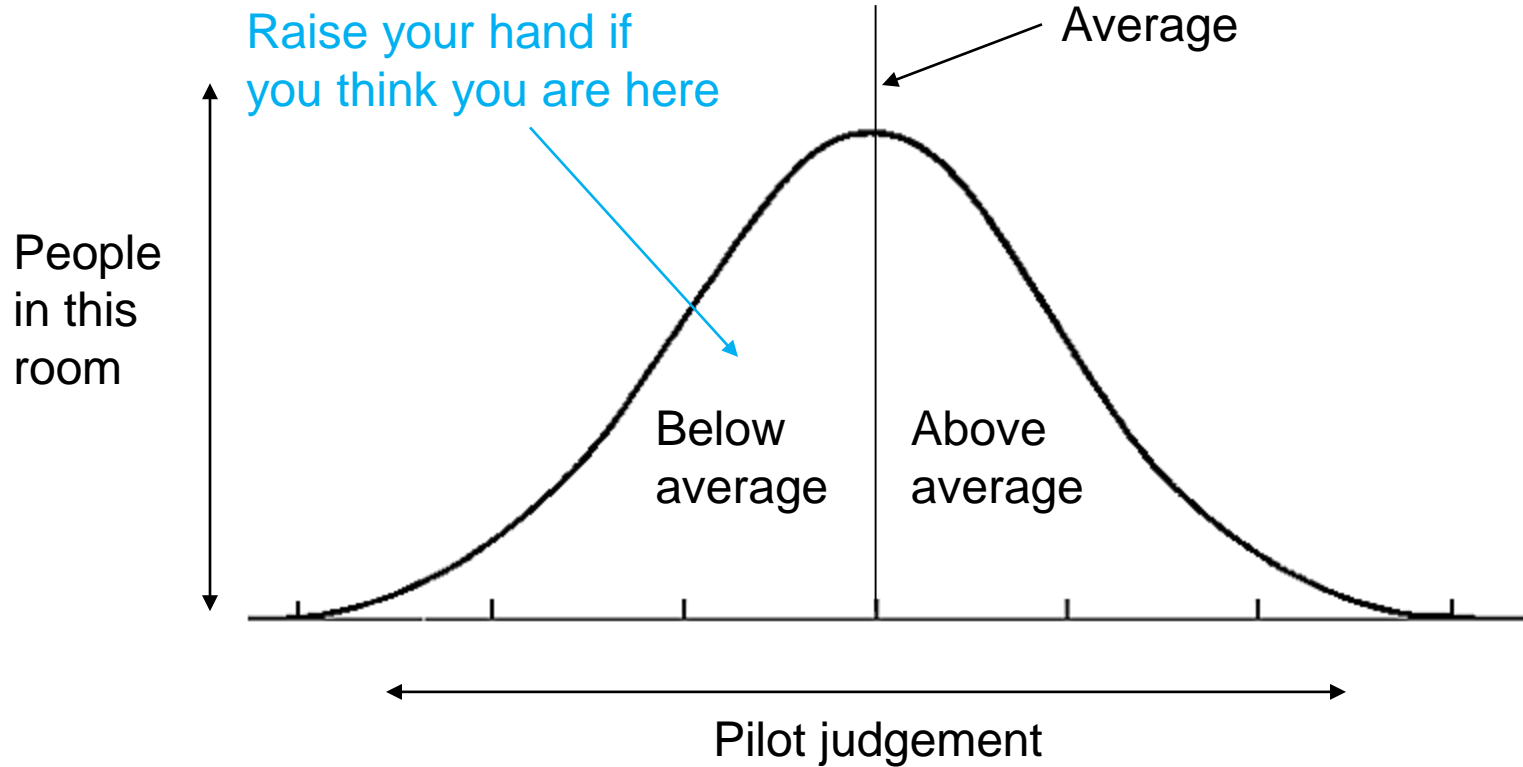
Psychology: Central Limit Theorem application



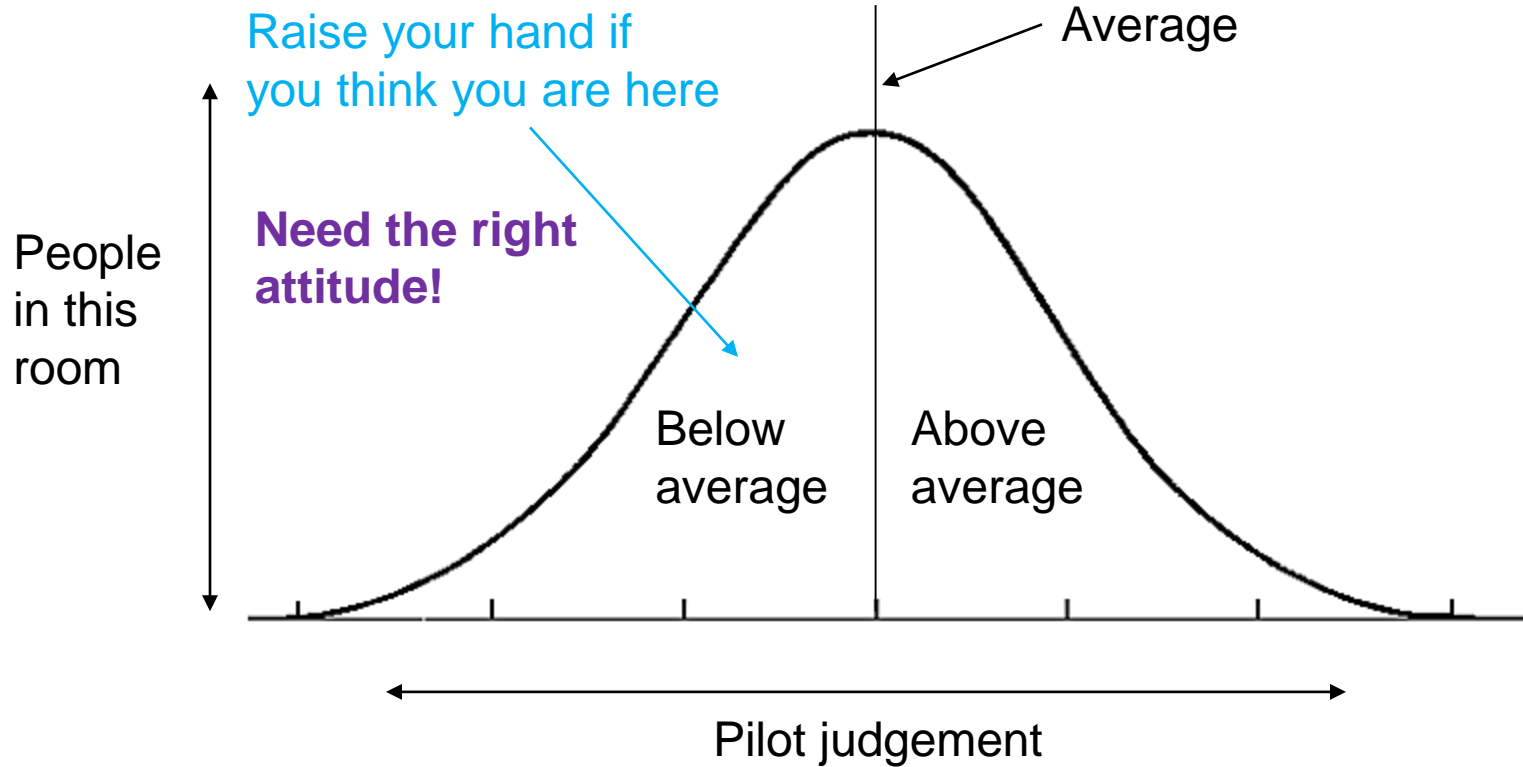
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Conclusions

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- Have to control instructor mutations
- Need the RIGHT attitude