

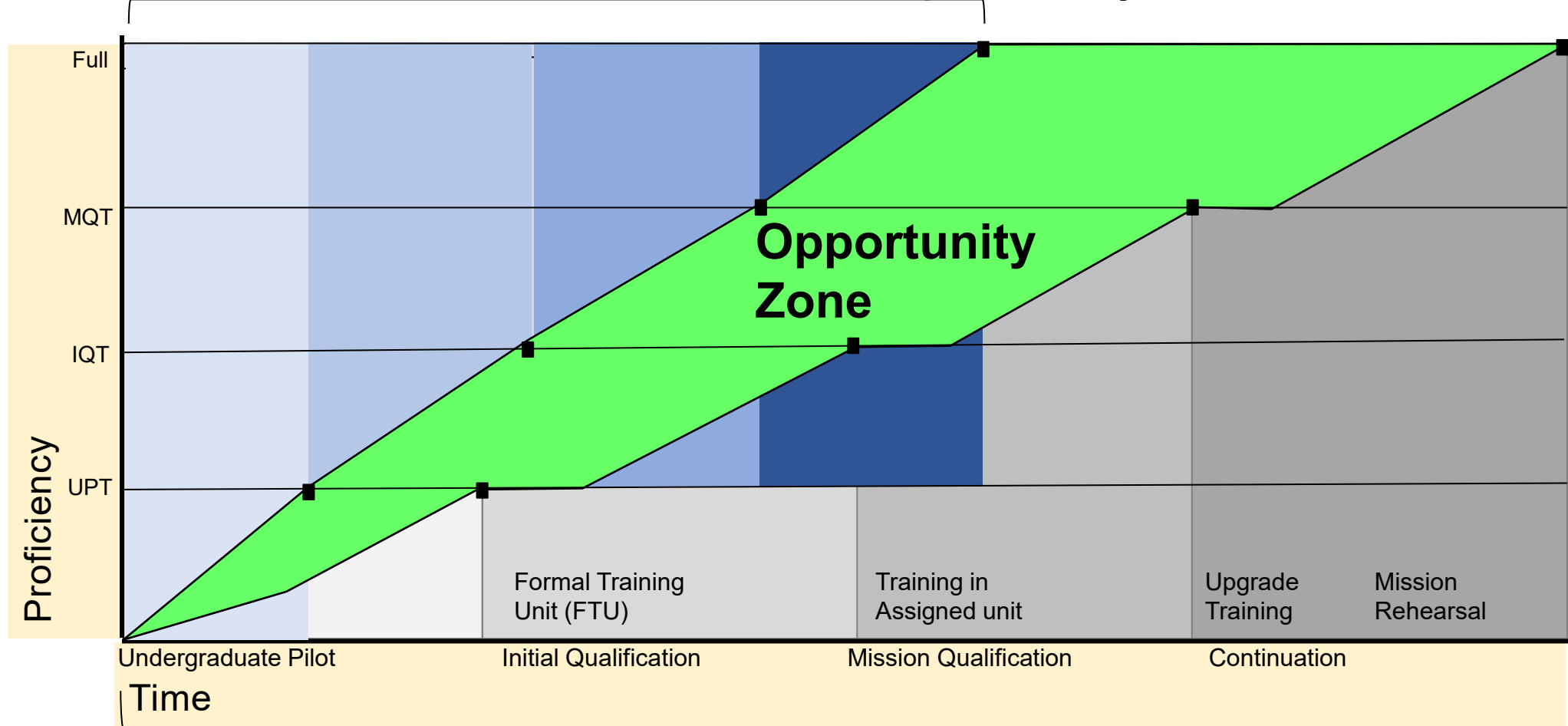
# **Air Force Simulators Innovation The Innovation Match Game**

TSIS, Orlando FL

16 June 2021

# The Goal: Improving Aircrew Production

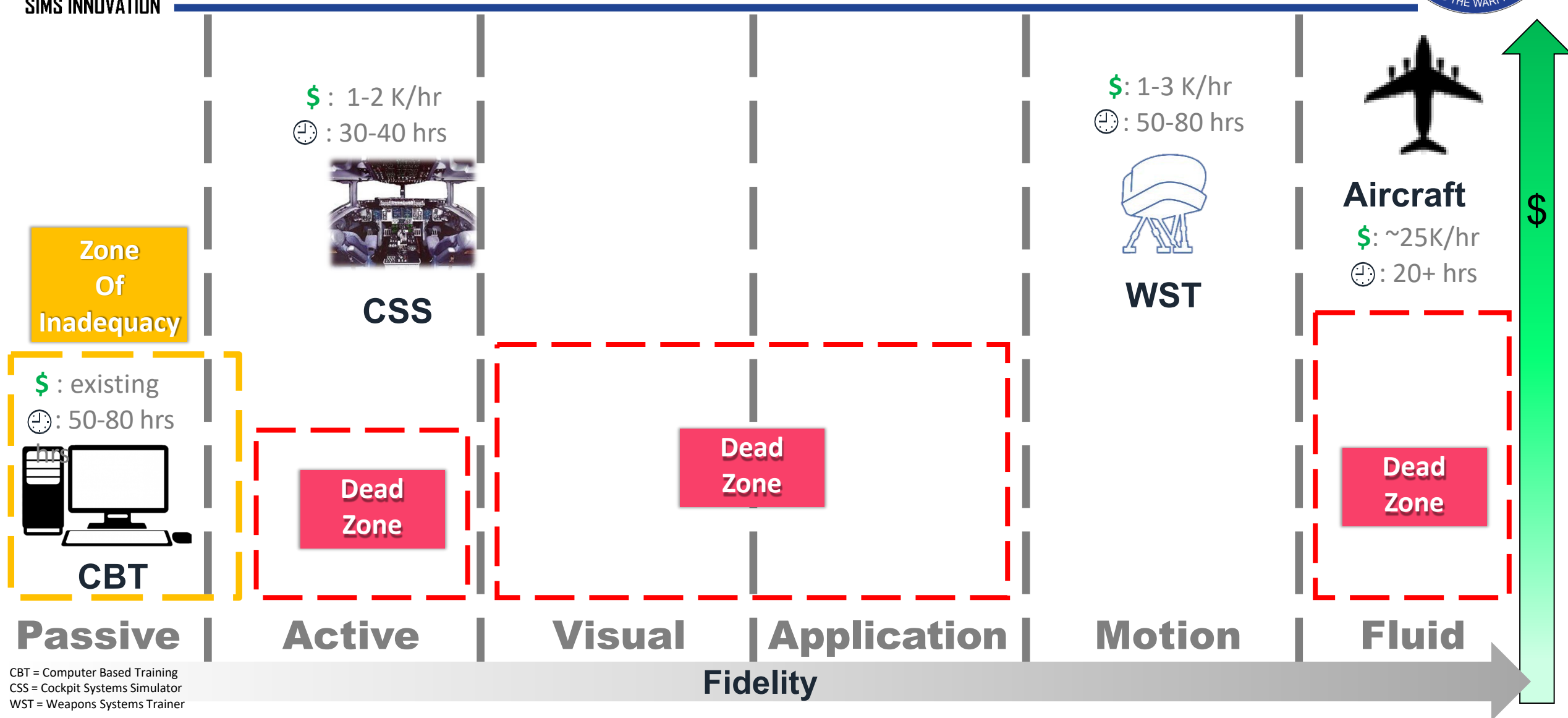
Goal State – cut time, the same levels of proficiency



Traditional Pilot Training - many years to full proficiency



# LEGACY SPECTRUM OF DEVICES





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# NEW SPECTRUM OF DEVICES

Data-Driven Learning Management System



CSS

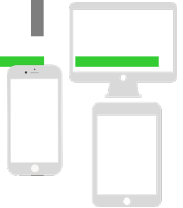


WST



Aircraft

\$



DBT



Opportunity Zones

PID



ITD



ITD

PID



Fluid

Passive

Active

Visual

Application

Motion

Fluid

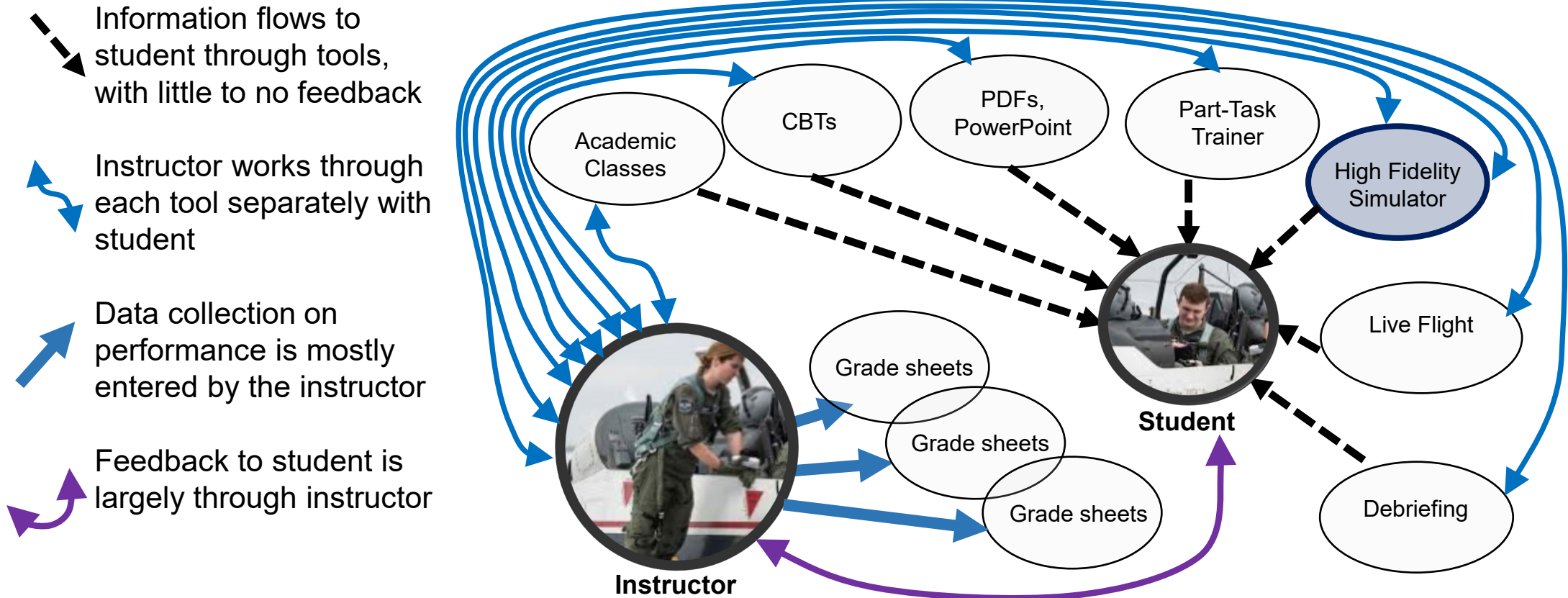
Fidelity

DBT = Device Based Training  
CSS = Cockpit Systems Simulator  
ITD = Immersive Training Device  
PID = Personal Immersive Device  
WST = Weapons Systems Trainer  
VR = Virtual Reality  
MR = Mixed Reality



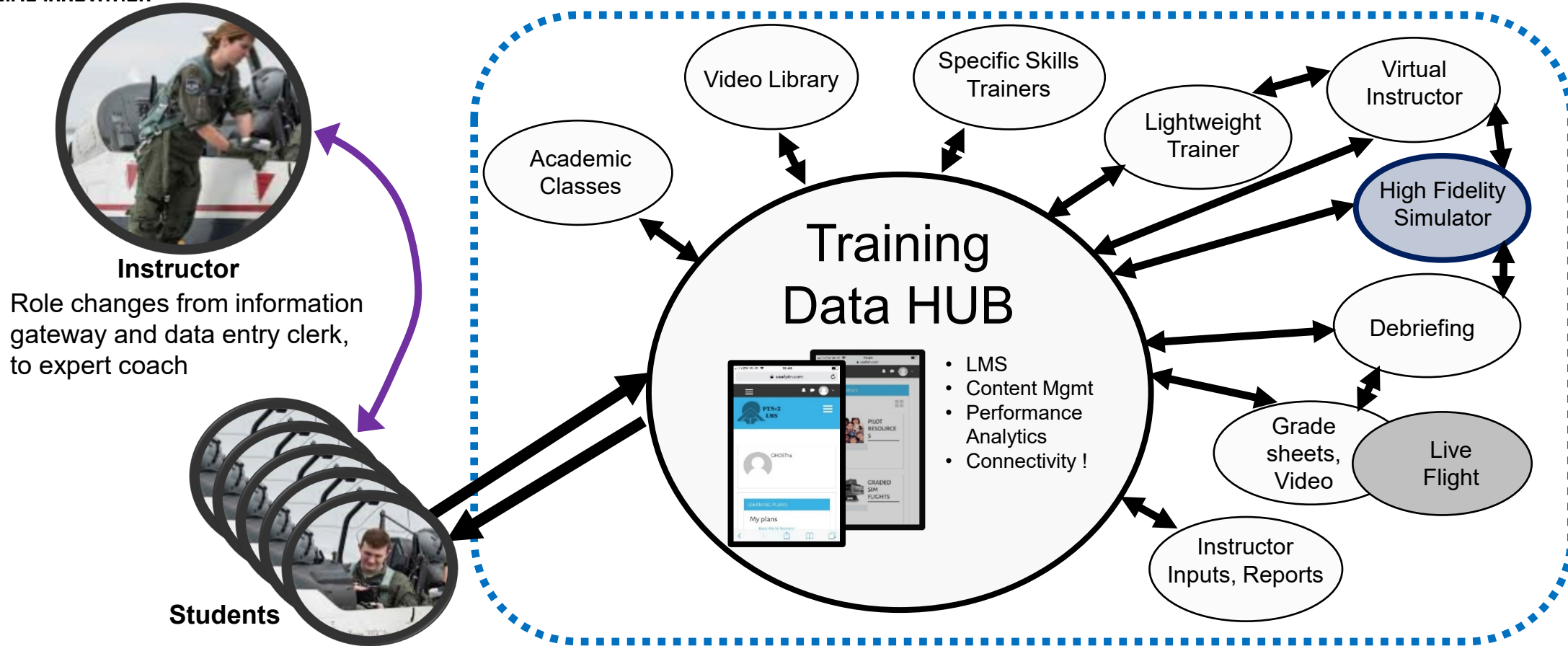
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# Typical Training Instructor/Student Interaction



**This manually intensive for instructors to manage, & does not scale**

# Future Vision of Training Systems



**Future is Data Centric, with networked tools that assist Instructors, and provides students with self-executed training options**



# Sims Innovation Update



- Ten Pitch Day 2020 SBIR Phase II projects
- Six Pitch Day 2019 SBIR Phase II projects, at or near completion
- Two Successful transitions to Phase III contracts, more in progress
- Challenge projects
  - With AFWERX and ACC – Accelerating Pilots to Combat Ready Aviators
  - With AFWERX/STRIKEWERX & GSC - Mixed Reality Air Refueling Challenge
  - With RCO – B-21 Raider Training Systems Innovation Challenge
- So, what's next?



# I/ITSEC Special Event – Innovation Match Game



- Goal is to transition from ideas prototype to deployment
- Match Innovation technology to use cases in a game show format
  - Submissions from vendors and use cases will be gathered prior to event
  - Vendor technologies available to view on Expo Floor during I/ITSEC
- Benefits
  - Showcases training technologies ready for transition
  - Targets successful SBIR Phase II tech, but not limited to SBIRs
  - Match vendors with end users ready to deploy ideas
  - Provides expertise from Sims Innovation toward getting on contract



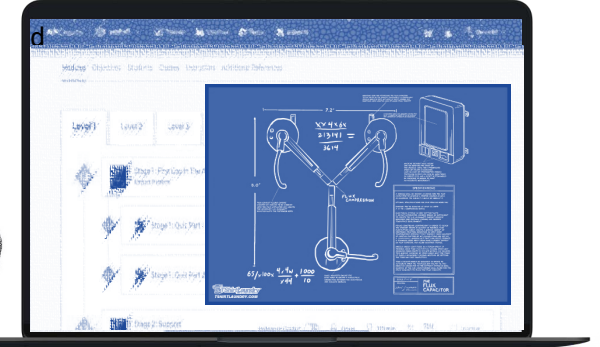
# Playing Innovation Match Game



#2



#1



#3



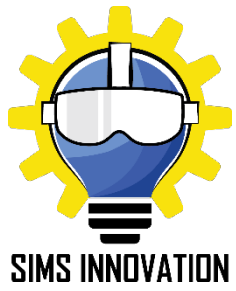
1. Aircrew Training personnel describe the challenge
2. Present three different prototypes
3. Audience Votes !
4. Reveal the choice for transition project



# Innovation Match Game – How To Participate



- Requirements for Training Unit submissions
  - Identified training need/gap
  - Willingness to participate in prototype transition
  - Advocate for sponsorship/funding within their organization
  - Unit submissions will open in July <https://www.afcmc.af.mil/simulators/>
- Requirements for vendor submissions
  - Successful previous DoD prototype implementation (SBIR or otherwise)
  - Willingness to pitch at I/ITSEC Event
  - Vendor submissions will open in August <https://www.afcmc.af.mil/simulators/>
- Note! No contracts will be awarded at I/ITSEC as part of this event
  - Timeline for each project is dependent on budgets and organizational need



**SIMS INNOVATION**

# **I/ITSEC 2021 Innovation Match Game**