



Challenge Coin Incentive System for the STEAM-TEAMS Program

2025 STEM Champion, Past Section Chair, Webmaster

Region 5 Educational Activities Chair (2024-2025)



STEAM-TEAMS Ambassador For OutReach = S.T.A.R.
(prototype)

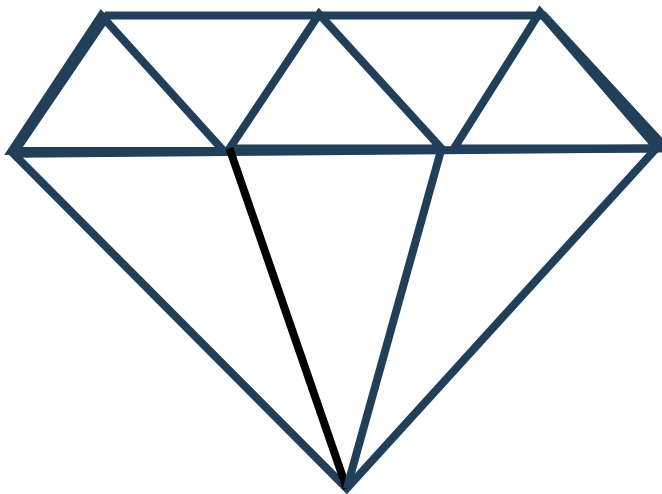


Front

S.T.A.R. Mentors
Entry



Back



ENGINEERING



- **MANY FACETS:** Like a diamond's cuts, engineering branches into countless specialties that together shine brilliantly.
- **PRECISION:** Just as diamonds are cut with extreme accuracy, engineering demands exact calculations and designs
- **DURABILITY:** Diamonds endure pressure—engineering solutions are built to last against time, stress, and challenges
- **VALUE:** Diamonds are prized treasures; engineering creates priceless innovations



ENGINEERING IS LIKE A DIAMOND

A fusion of brilliance, strength, and purpose.

THE 4Cs of a DIAMOND (AND ENGINEERING):

- Cut** → Precision in design and execution
- Clarity** → Clear problem-solving and communication
- Color** → Diversity of ideas, disciplines, and innovation
- Carat** → The weight of responsibility and impact

THE 6Cs of the KEEN Framework (Engineering Mindset):

- Curiosity** → Ask why. Explore how things work
- Connections** Link knowledge across disciplines
- Creating Value** Design with purpose and benefit in mind
- Collaboration** Team up to solve complex challenges
- Communication** Share ideas clearly and effectively
- Character** – Lead with integrity and resilience

STEAM-TEAMS Ambassador For Outreach = S.T.A.R

LRIP Phase 1



Front



Back

S.T.A.R. Participant
Entry

FRONT



BACK



S.T.A.R. Participant -Entry

Diamond S.T.A.R. Leader/Mentor



Diamond 2 S.T.A.R. Leader/Mentor

Diamond 3 S.T.A.R. Leader/Mentor

Diamond 4 S.T.A.R. Leader/Mentor





State of the Pikes Peak Section: 16 Feb 2023

Dr. John Santiago

Chair & Webmaster

Awesome Team of Engineering Leaders & Support



APPRECIATION TO DR. DON WARRICK



16 February 2023
Certificate of Appreciation

to

DR. DON WARRICK



**COACH JOHN WOODEN'S
PYRAMID OF SUCCESS**

"Success is peace of mind which is a direct result of self-satisfaction in knowing you made the effort to become the best of which you are capable."



*Curiosity
Connections
Creating Value
Communication
Collaboration
Character*

IEEE PIKES PEAK SECTION

Appreciation To Our Section Volunteers



In grateful appreciation to **Dr. John Reinert** for Outstanding Leadership as Section Treasurer during 2016 - 2022 and provided valuable insight on past Section activities in planning future events.



Appreciation To Our Section Volunteers



16 February 2023

Certificate of Appreciation to GENE FREEMAN




IEEE Pike's Peak Section

COACH JOHN WOODEN'S
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"Success is peace of mind which is a direct result of self-satisfaction in knowing you made the effort to become the best of which you are capable."

Curiosity
Connections
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Character



INDUSTRIOUSNESS
"Success travels in the company of very hard work. There is no trick, no easy way."

FRIENDSHIP
"Strive to build a team filled with camaraderie and respect; comrade-in-arms."

LOYALTY
"Be true to yourself. Be true to those you lead."

COOPERATION
"Have almost no concern for what's right rather than who's right."

ENTHUSIASM
"Your energy and enjoyment, drive and dedication will stimulate and greatly inspire others."

SELF-CONTROL
"Control of your organization begins with control of yourself. Be disciplined."

ALERTNESS
"Constantly be aware. And observing. Always seek to improve yourself and the team."

INITIATIVE
"Make a decision! Failure to act is often the biggest failure of all."

INTENTNESS
"Stay the course. When thwarted try Again; harder, smarter. Persevere relentlessly!"

CONDITION
"Ability may get you to the top, but character keeps you there — mental, moral, and physical."

SKILL
"What a leader learns after you've learned it at counts most of all."

TEAM SPIRIT
"The star of the team is the team. We supercede 'me'."

POISE
"Be yourself. Don't be thrown off by events whether good or bad."

CONFIDENCE
"The strongest steel is well-founded self-belief. It is earned...not given!"

COMPETITIVE GREATNESS
"Perform at your best when your best is required. Your best is required each day."

In grateful appreciation to **Gene Freeman** for Outstanding Leadership as Computer Society Chain during 2019-2022 as well as serving as a Section Liaison Officer to the Oral History Project at IEEE.

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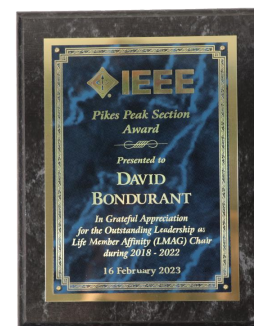
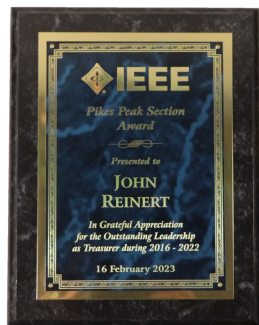
Dr John Reinert
Treasurer

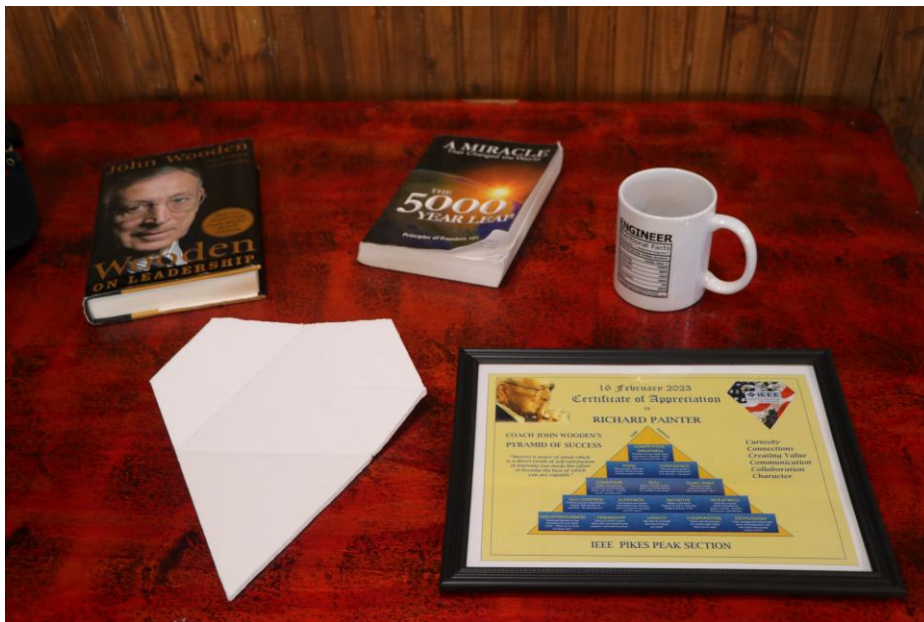


Gene Freeman
Chair, Computer Society



David Bondurant
Chair, Life Member
Affinity Group





Some Items Awarded in Grateful Appreciation to Our Volunteers and books discussed During 16 Feb 2023



Early Celebration of Engineering Week
 The Creation of the United States from
 an Engineering Educator's Perspective
 – Dr. Dr John Santiago



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Backup Slides of Prototype ideas



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STEAM-TEAMS Ambassador For Outreach



Diamond S.T.A.R. Leader or Mentor

STEAM-TEAMS Ambassador For Outreach



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STEAM-TEAMS Ambassador For Outreach



Diamond 3 S.T.A.R. Leader or Mentor

STEAM-TEAMS Ambassador For Outreach



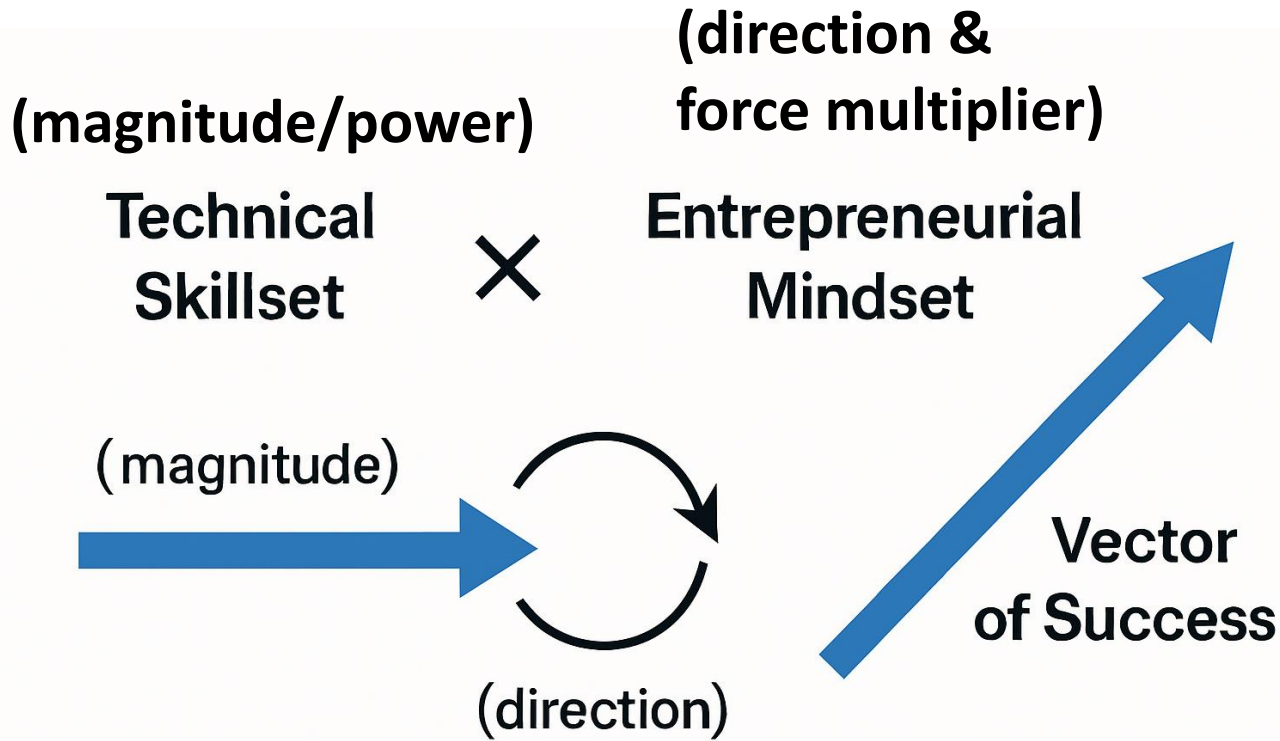
Diamond 4 S.T.A.R. Participant



IEEE

PIKES
PEAK
SECTION





Entrepreneurial Mindset (6Cs) is a Force Multiplier to Your Powerful Skillset

ENGINEERING



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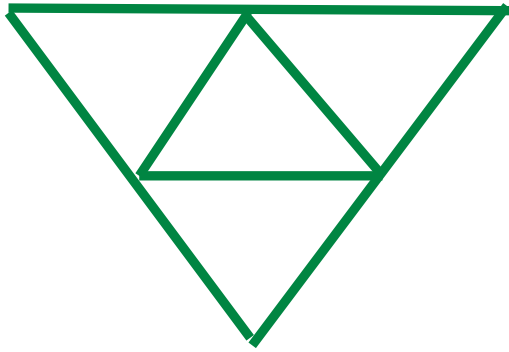
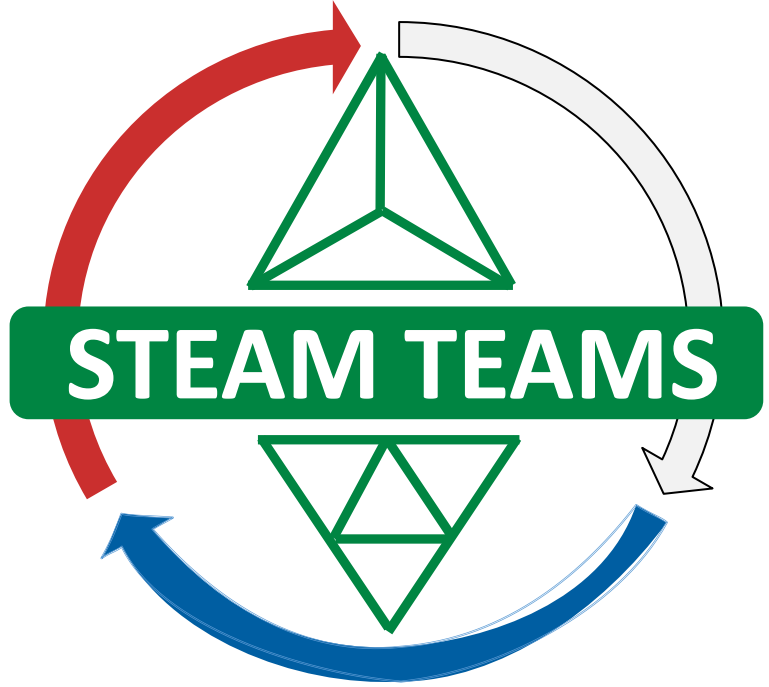
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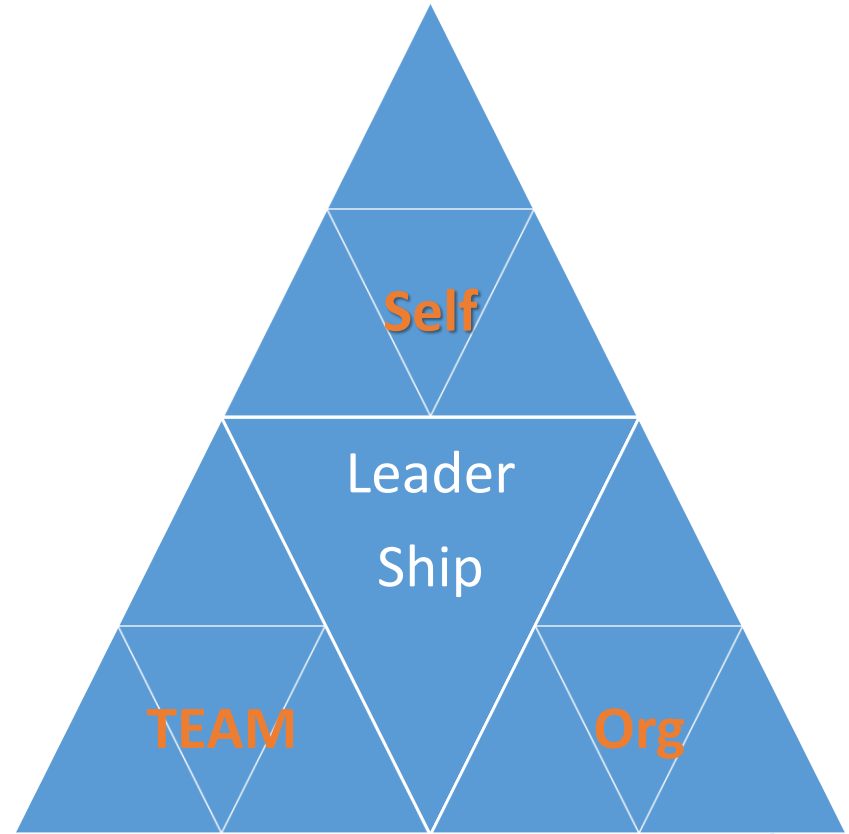
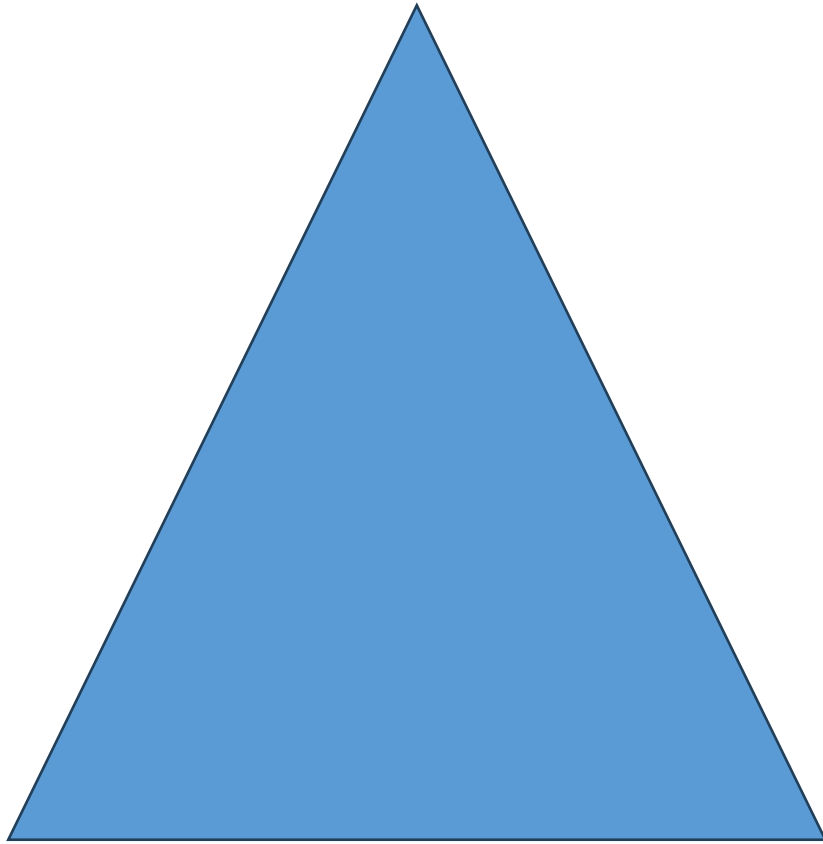
STEAM TEAMS



What are COOL Rooms?

- ▶ **C = Collaboration**
- ▶ **O = Outreach**
- ▶ **O = Operations**
- ▶ **L = Logistics**





**NOT YOUR TYPICAL
SCIENCE FAIR:
EXPERIENCE
COOL SCIENCE
WITH IEEE**



STEAM-TEAMS MOBILE

A STEAM Community Outreach Concept

Developing an IEEE Pikes Peak Section (PPS) STEAM-TEAMS RV Lab

Key Strengths

- **High Visibility + Wow Factor**
 - Large exterior TV as a “wow” moment at parks, school lots. Demos showing AI-assisted lessons, Shows student-generated multimedia content
- **Plug-and-Play Outreach**
 - Retractable awning provides sheltered outdoor classroom for teaching workshops
- **Multigenerational Engagement**
 - Comfortable learning space for Parents, Students, and Local Officials
 - Career Days
 - Parent-Student Nights
 - IEEE demo events or/Festivals

* **PPS = Pikes Peak Section**



Innovative Extensions

- **Wi-Fi Hotspot + AI Booth**
Using Starlink or 5G for AI-driven tutoring sessions
- **Green Screen Video Zone**
Kids can create STEM mini-videos
- **Green Screen Video Zone**
Kids can create STEM mini-videos inside the RV
- **Solar Panels**
Add sustainability to “Green STEAM Mobile”

Self → Team → Organization Leadership



1. SELF-LEADERSHIP



Industriousness - Friendship Loyalty
Cooperation Enthusiasm

2. TEAM LEADERSHIP



Initiative
Team Spirit
Condition
Confidence

3. ORGANIZATIONAL LEADERSHIP



PyramidX-OS

Entrepreneurial Mindset
KEEN 6Cs
Virtuous & Principled Leadership
Systems Thinking
Ethical Technology

LEADERSHIP JOURNEY

- **Volunteers Needed for IEEE STEAM Demos**
- **Informal Partnership between FACSC and IEEE**
- **Just a heads-up**
- **Great Food and Fun to celebrate the Philippines Independence Day**
- **Find out the Special Relationship between the Philippines and the U.S.**



Filipino American Community
of Southern Colorado
FACSC

Araw ng
KALAYAAN
PHILIPPINE'S INDEPENDENCE DAY

**FOUNTAIN CREEK REGIONAL PARK
2010 DUCKWOOD ROAD FOUNTAIN, CO**

Join us in celebration of
HISTORY | CULTURE | CUISINE | HERITAGE

June 15th, Sunday
10am-2pm



(magnitude/power)

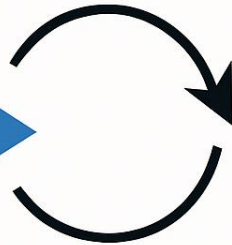
**Technical
Skillset**

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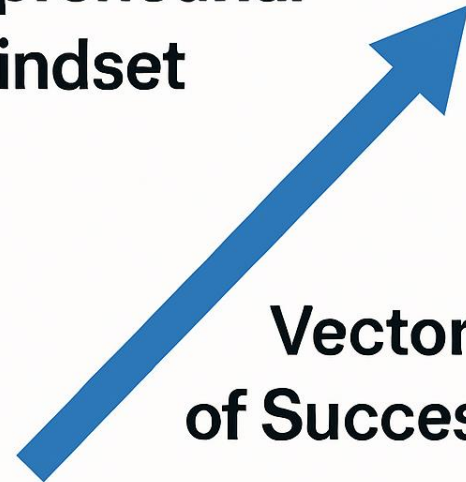
(direction)

**Entrepreneurial
Mindset**

(magnitude)



(direction)



**Vector
of Success**

***Entrepreneurial Mindset (6Cs) is a Force
Multiplier to Your Powerful Skillset***

How KEEN Creates Engaged Learners

KEEN Focus	Engagement Mechanism	Outcome
Curiosity	Inquiry-based learning, problem framing	Ownership of learning
Connections	Interdisciplinary projects, societal context	Systems thinking
Creating Value	Customer discovery, user empathy	Innovation with impact
Communication	Peer feedback, storytelling , pitching	Confidence & clarity
Collaboration	Team charters, agile roles	Team cohesion
Character	Reflection, ethical dilemmas via John Wooden's Pyramid of Success	Purpose-driven engineers

STEAM-TEAMS MOBILE

Conceptual 'What-If' an IEEE PPS*

STEAM-TEAMS RV Lab

Key Strengths

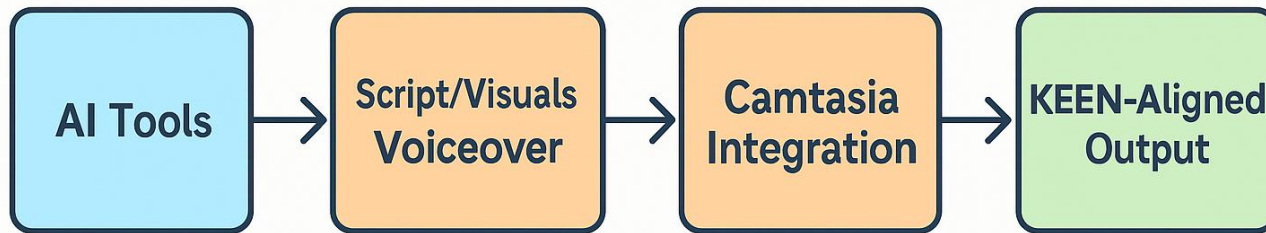
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KEEN Storytelling Journey for Middle School Students

The Red Tandem Journey Map: Sage & Valor

