

Transforming Faculty Presentations: Tech-infused Pedagogy for Student Success

<https://esail.tamu.edu>

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TEXAS A&M UNIVERSITY
Engineering Studio for
Advanced Instruction & Learning



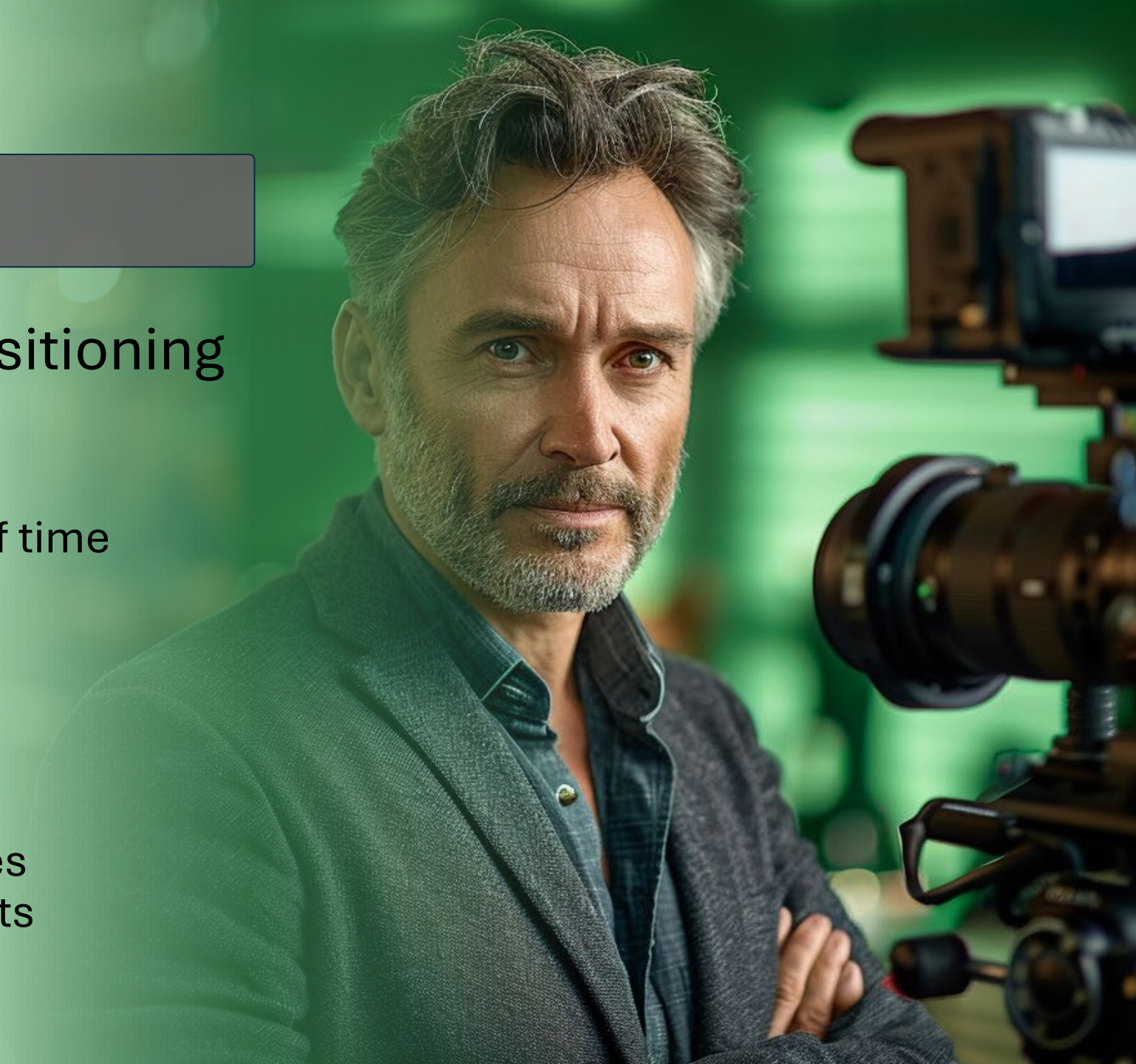
Professor's Responsibilities

- Research
- Grants
- Committees
- Admin Duties
- Teaching
 - F2F
 - Online
 - Learn
 - Modify course
 - Produce content



Transition Challenge

- The challenge of transitioning to online teaching
 - Plan:
 - All course ahead of time
 - Redesign:
 - Course structure
 - Assignments
 - Lectures
 - Produce:
 - Segmented lectures
 - Online assessments





Challenge

- How to expedite the process?
 - Breaking down complex topics
 - Integrating active learning elements
 - Adapting slides for online effectiveness

AI to the Rescue

- Polishing and perfecting materials with AI
- Enhancing,
 - not replacing the teaching essence



The Process

1 Use of existing lecture capture or impromptu studio presentations

2 Automation

4 SME and Designer reviews

5 Option for recording in studio or voice cloning

3 Automated workflow using Python

- Transforms video into audio then into text
- Polishes it for clarity and flow of ideas
- Breaks it into topics
- Topics are grouped into 10-minute segments
- Learning objects are produced
- Automation ends...

Multiply Faculty Efforts

- Collaborative process between designer and SME
- Recording options:
 - polished script and slides or
 - voice cloning





The Benefits for Production

- In the Studio
 - Focus remains on content delivery
 - Slides and transcript pre-generated
- In the LMS
 - Active learning components
 - Conclusions / Reflections
 - Activities
 - Discussion

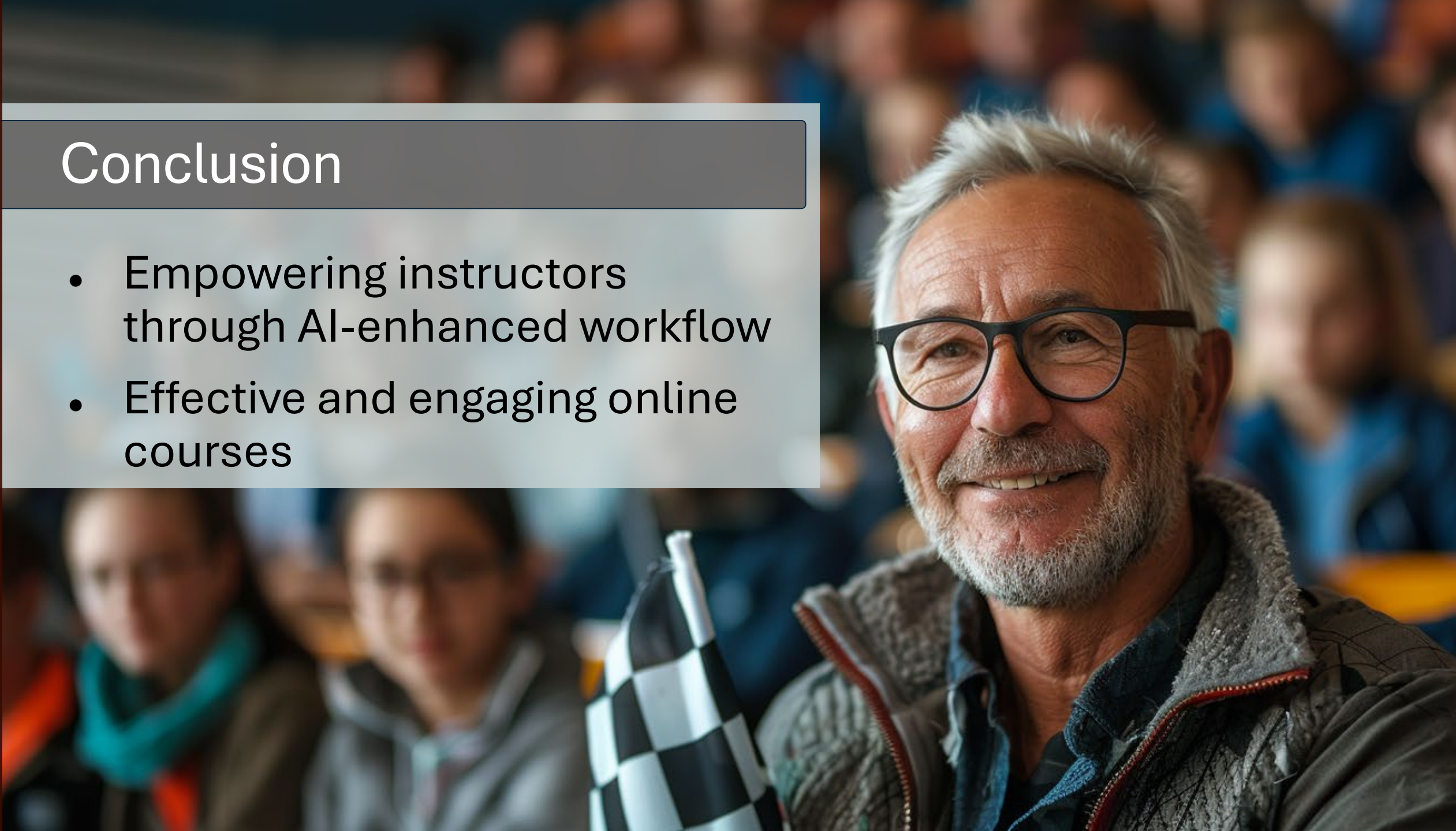
Result

- Production of polished, concise videos
- Creation of clear, learner-focused slides
- Adaptation into online learning format



Conclusion

- Empowering instructors through AI-enhanced workflow
- Effective and engaging online courses





Q&A

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