



2021 LEAD Capstone Poster Session

Flipping the Ophthalmology
Resident Classroom: Implementing
a New Model for Program Didactics

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Abstract

- The “flipped classroom” is a model of teaching in which the learner completes pre-work ahead of class (e.g. reviewing articles, slides, instructional videos), and uses in-class time to participate in active, problem-based learning activities
- Evidence shows this approach is both preferred by learners and more effective at enhancing student performance compared with traditional teaching methods
- While the model has been broadly incorporated into undergraduate medical education curricula, and in residency training programs elsewhere, it has not been widely adopted by the ophthalmology residency at UTSW



Objectives

- Integrate a monthly “flipped” session into the ophthalmology residency’s didactic curriculum
- Improve faculty and resident satisfaction with didactic curriculum
- Improve resident performance on yearly in-service exam (OKAP administered by AAO)



Background Information

- Medical education recognizes the value of problem-based learning, and use of teaching models that emphasize this has increased (Hurtubise et al 2015)
- Compared with traditional lectures, the flipped classroom model is often preferred by learners and leads better exam performance (Hew and Lo 2018)
- This model has been used successfully within ophthalmology both for medical student and resident education (Alabiad et al 2020; Cabrera et al 2019)



Specific Aims

- Provide ophthalmology faculty development on how to create and lead a flipped classroom session
- Identify faculty leads from each sub-specialty service (e.g. cornea, retina, plastics) to create flipped lessons on high-yield topics
- Integrate a monthly flipped session into the ophthalmology residency's didactic curriculum
- Gauge resident and faculty satisfaction with didactic curriculum before and after implementation
- Compare resident performance on yearly in-service exam before and after implementation



Project Plan

Faculty:

- Gauge satisfaction with current model
- Model a “flipped” lesson
- Provide support for development of sub-specialty sessions

Residents:

- Gauge satisfaction with current model
- Setting expectations for flipped classroom
- Offering protected time to adequately prepare

Implement Flipped Sessions

Assess Outcome:

- Faculty and resident satisfaction
- Resident performance on OKAPs



Application of What You Learned at LEAD

- Assessing and responding to stakeholder interests
- Effectively communicating a vision to faculty and residents to develop buy-in
- Working with a variety of personalities (DISC types) and showing how each can exploit their strengths to create an effective flipped classroom
- Using transformational leadership to create and sustain a positive change in the residency learning environment



Proposed Budget

- No funds are necessary
- Faculty development and support will be provided by the ophthalmology education department
- Tools for “flipped classroom” lesson development are available for free online through the AUPO Program Director Toolkit, and member websites (Moran CORE)
- Protected educational time for these sessions is already blocked (1st/3rd Friday), but will need to be shared with Retinal Imaging conference
- Faculty and Assistant Instructors leading the session will be asked to block off one half-day per year



Innovation and Significance

- Brings our department's didactic curriculum into alignment with current best practices
- Emphasizes collaborative problem-solving and encourages open discussion and debate in a safe environment
- Better prepares residents to confront complex clinical questions



References

Alabiad CR, Moore KJ, Green DP, Kofoed M, Mechaber AJ, Karp CL. The Flipped Classroom: An Innovative Approach to Medical Education in Ophthalmology. *J Acad Ophthalmology*, 2020; 12(2): e96-e103.

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Hew KF, Lo CK. Flipped classroom improves student learning in health professions education: a meta-analysis. *BMC Medical Education*, 2018; 18:38.

Hurtubise L, Hall E, Sheridan L, Han H. The flipped classroom in medical education: engaging students to build competency. *J Med Educ Curr Develop*, 2015; 2:35-43.