Predicting Student GPA

A Rapid Insight Deep Dive

May 3, 2023

Rapid Insight

Meet Your Presenters

James Cousins

Senior Strategic Leader,
Data and Analytics

Lily Brennan

Strategic Leader,
Data and Analytics

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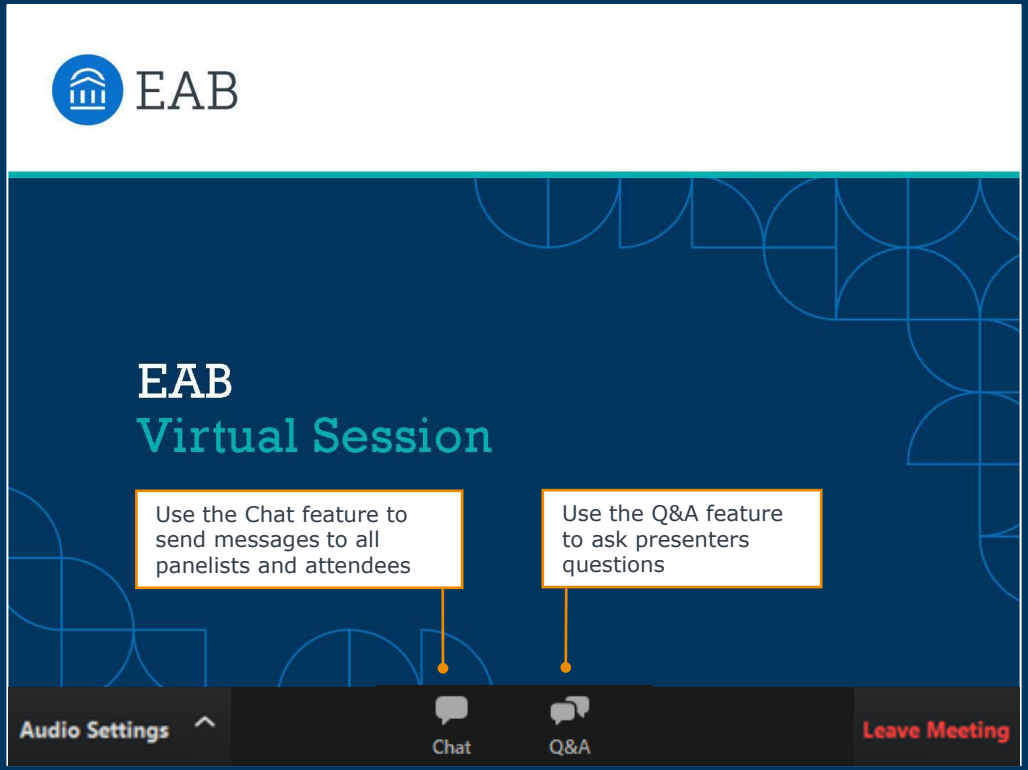
Submit a Question or Comment



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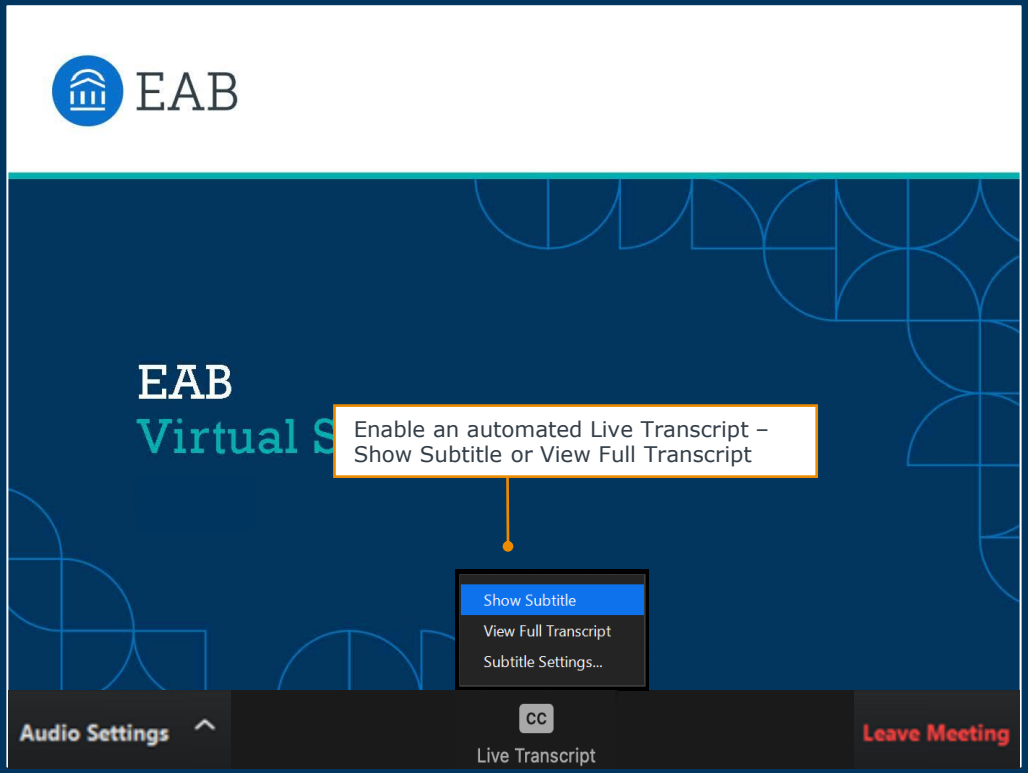
Turn on Captions



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Quick Poll

How comfortable are you with using Predict to create predictive models?

A. Very comfortable

B. Comfortable

C. Somewhat comfortable

D. Uncomfortable

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Let's Chat!

For those of you using Predict comfortably, what outcomes are you targeting?

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1. **Tools Needed**
2. Why Predict Student GPA
3. Framework for Analysis
4. Live Demonstration
5. Audience Q & A

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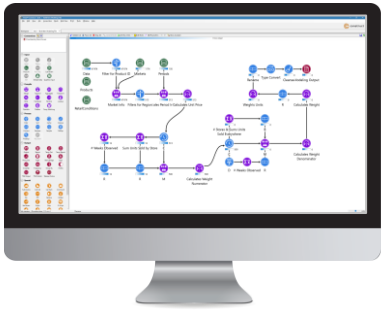
Rapid Insight Modules Used in Today's Discussion

Who Could Have "Predicted"?

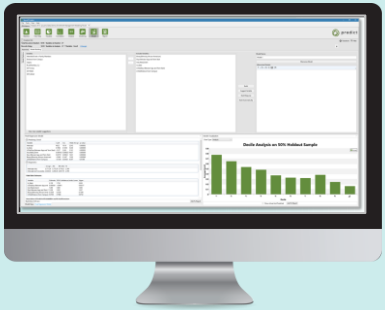
Construct



Optional, but helpful when gathering alternative indicators of student success:

- Term to Term
- Year to Year
- First Semester GPA
- Academic Probation

Predict



Necessary for the topics described in today's session.

- Facilitates statistical exploration and predictive model building

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Data Fields to Consider Including in Your Model

*bolded value is necessary to create model

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GPA Modeling Provides Early Insights

Timing, Insight, and Possibilities

GPA Can Be Assessed *Early*

Traditional retention modeling flags an outcome approximately one year out. GPA modeling shortens that time frame to one semester.

An Alternate Look at a Critical Outcome

GPA modeling works best as a supplement to traditional modeling. Having an estimate for long term success *and* a short-term indicator empowers your student success team.

A Foundation for Further Analysis

A student's *actual* GPA can be compared against their expected GPA to show who *underperformed* or *overperformed* allowing you to analyze positive and negative student experiences.

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Strategically Act on the Data

Opportunities to Better Support Students and Evaluate Intervention Efforts

Overperformers

Students who overperform against their expected GPA may have positive practices or experiences you can learn from and encourage others to apply in the future.

Expected Performers

Most students are likely to receive the approximate GPA you predicted. Since intervention efforts are meant to help improve that outcome, this is a chance to assess the effectiveness of your outreach.

Underperformers

Underperformers aren't necessarily "poor performers." Students may have remained in good academic standing but performed below expectations. This result provides opportunities to address experiential challenges.

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Process of Using a GPA Predictive Model

Steps to Build, Use, and Evaluate Your Model

1 Gather Data

- Identify sources and tables
- 3 years is a good rule of thumb
- Cast a wide net- you can narrow down later

2 Prep Data

- Merge/Append tables where needed
- Explore and account for data nuances
- Calculate new fields as possible predictors
- Calculate your outcome

3 Build Model

- Include interested stakeholders
- Explain or learn how variables impact outcome
- Test model

4 Score Students

- Apply model to incoming and/or returning students to create an expected GPA
- Review results to ensure accuracy

5 Reach Out

- Support students predicted to receive an unsatisfactory GPA
- Consider triaging your outreach so more intensive measures can occur without excessive cost

6 Assess

- Did the outreach seem to help?
- Was the model on target?

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Live Demonstration

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Submit a Question Using the Q&A Button

James Cousins

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Lily Brennan

Strategic Leader, Data and Analytics

Additional Questions?

Email **RI-Support@eab.com** with technical questions and **RapidInsight@eab.com** for all other inquiries.

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Join Our Retention Modeling Cohort

Cohort Sessions

1

Assembling the Data and Building the First Model

July 12 | 1:00-2:30PM ET

Begin with raw data and leave with a predictive model. Attendees will receive a heavily supported data preparation process and user-friendly walkthrough of predictive modeling.

Pre-work required

2

Scoring Your Incoming Students and Building the Second Model

Sept. 26 | 1:00-2:00PM ET

Score incoming students and build another model. Attendees will receive some strategies for using the scores and collectively the cohort will brainstorm some more. Bring your colleagues from student success for the first half.

Pre-work required

3

Scoring Your Returning Students and Looking Forward

January 10 | 1:00-2:00PM ET

Apply the model that you built using "first semester" data and refine your understanding of students' challenges. Explore the variety of alternate student success outcomes you can predict using similar methods in the future. Strategic leaders will establish individual check-ins with attendees.

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Next Steps and Closing Polls

Next Steps

- ❑ Register for the upcoming Rapid Insight Retention Modeling Cohort. *(encourage your colleagues to attend, too!)*

Reach out to your Strategic Leader or rapidinsight@eab.com with any questions.

Polls

1. How was today's session?
   a) Excellent
   b) Good
   c) Fair
   d) Poor
2. How comfortable are you now with using Predict to create predictive models?
   a) Very comfortable
   b) Comfortable
   c) Somewhat comfortable
   d) Uncomfortable
3. Would you like to be registered for the Retention Modeling Cohort?
   a) Yes
   b) No

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Ways to Reach Us

Monthly Office Hours

Thursday, May 18th
1:00-1:30 PM EST
Register Online

Email

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