

We Gotta A Score to Settle! The Intersection of Technology and Score Study Skills

MUSICIANS

I have 20+ years in the performing arts and 10 years in education. I learned the components of score study individually as and undergraduate but never had a focused curriculum on the concept as a whole.

For this project, I upheld one driving question to keep the research honest.



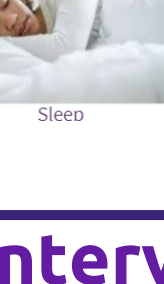
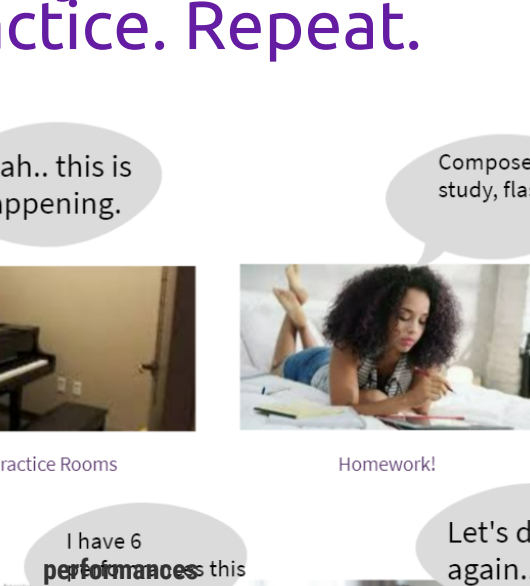
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... music history, music theory, applied studio study, and keyboard skills... checkpoints to be a comprehensive musician.

• Kevin O'Carroll

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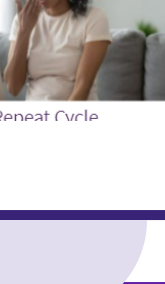
How do I create mobile engaging content for score studying skills?



What skills builders are needed?



How do we involve teachers in the design?

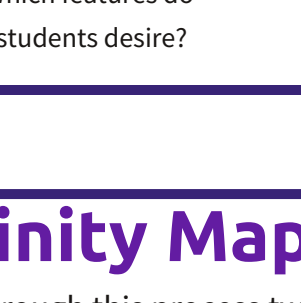


How should we engage students?

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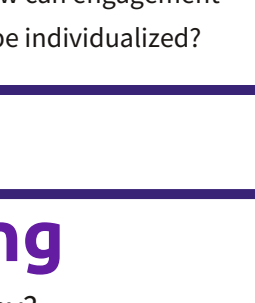
Practice. Cry. Practice. Eat. Practice, Study, Practice. Cry some more. Practice. Repeat.

10pm... Marching Band sectionals



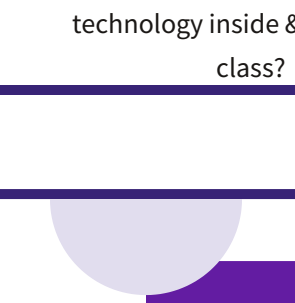
10pm... Marching Band sectionals

Yeah... this is happening.



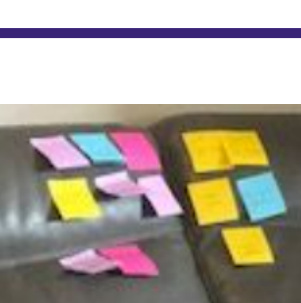
Practice Rooms

Compose, study, flashcards



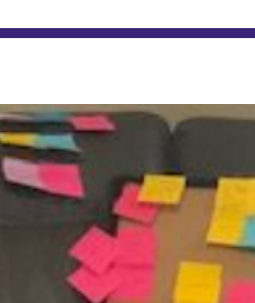
Homework!

ZZZZZZZZ



Sleep

I have 6 performances this week.



Debut/recital 11pm

Let's do it again...

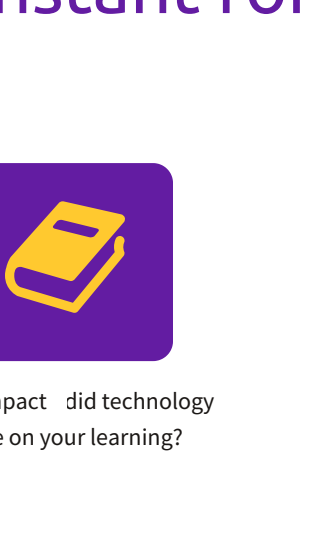


Debut/recital 11pm

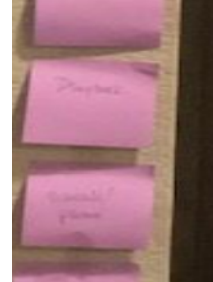
User Interviews

Results were organized in these categories

- Top features
- Teacher's technological use and guidance
- Desired features
- Technological impact on learning
- Voice desires for "easy" to navigate interface



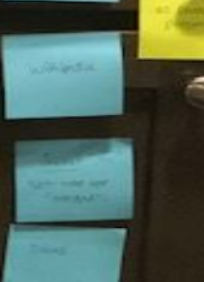
Goals



Which features do students desire?



How can engagement be individualized?

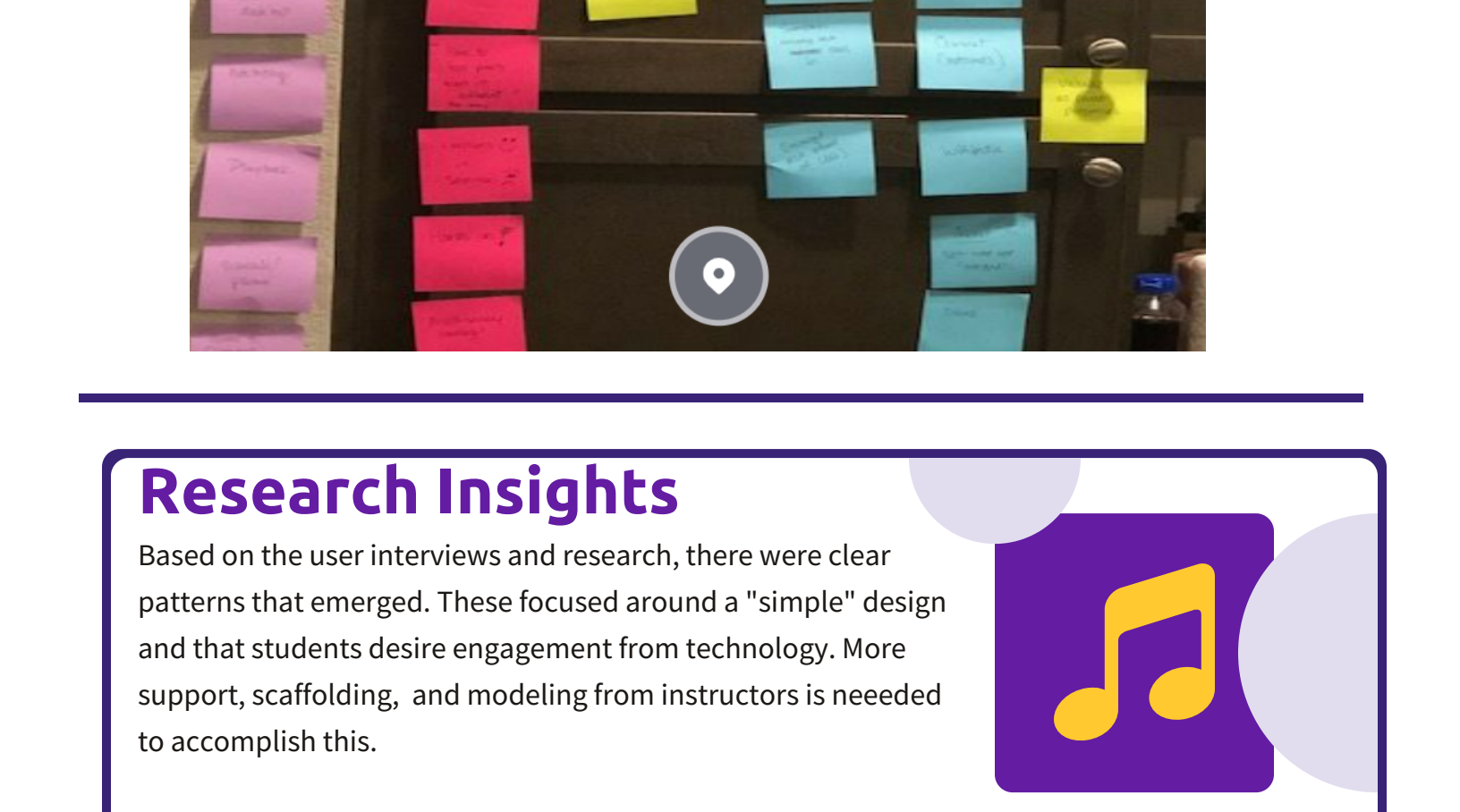
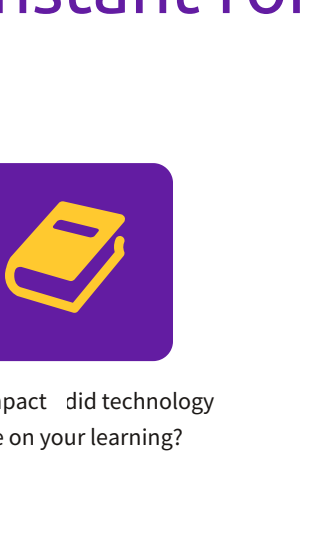


How do teachers support technology inside & outside of class?

Affinity Mapping

I went through this process twice. Why?

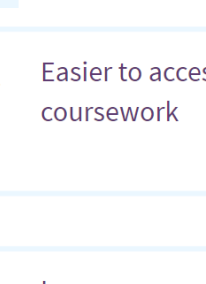
I didn't have immediate access to my target demographic of music majors. The first interviews focused specifically on "study guide" features. With my music major users, I got more insight into the specific skill-building activities musicians desired.



These questions remained constant for both interview rounds.



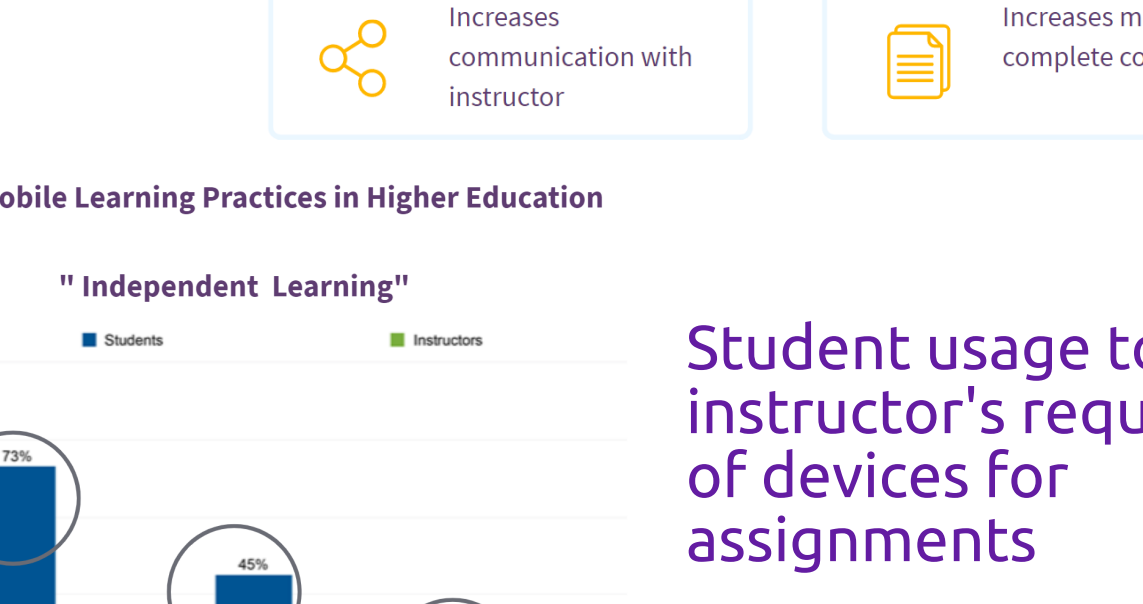
What features do you expect to have from a study app?



What comes to mind when you think of a study guide/score study?



What impact did technology have on your learning?



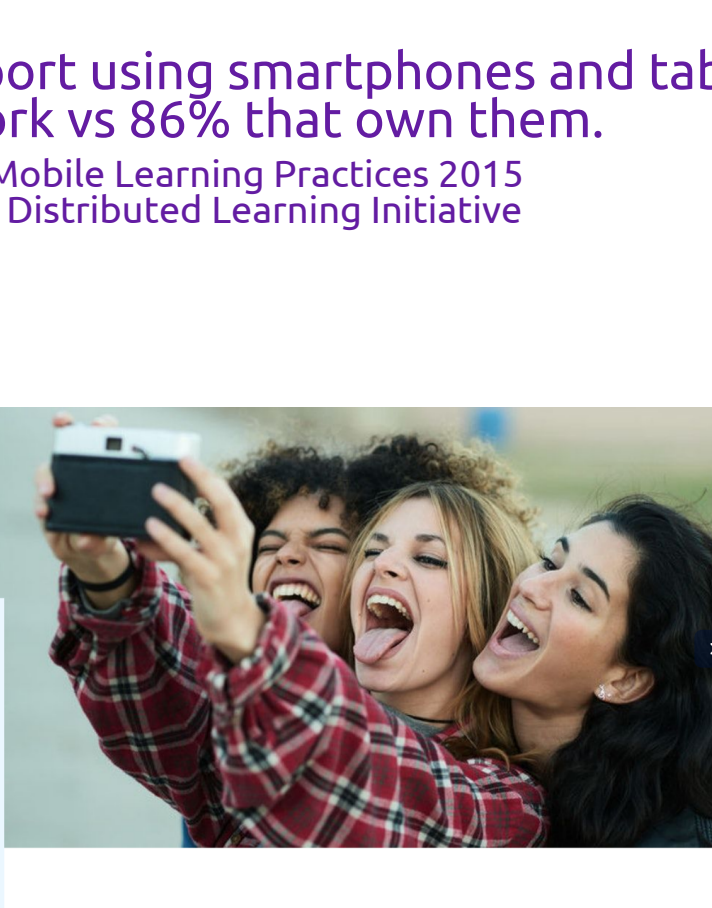
Research Insights

Based on the user interviews and research, there were clear patterns that emerged. These focused around a "simple" design and that students desire engagement from technology. More support, scaffolding, and modeling from instructors is needed to accomplish this.



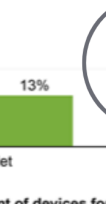
Key Takeaway

Students see value, but need more guidance to implement it.



Benefits

These are the benefits student's stated.



Easier to access coursework



Increases knowledge in field of study



Increases peer communication



Improved quality of work



Increases communication with instructor



Increases motivation to complete course work.

Student Mobile Learning Practices in Higher Education

"Independent Learning"

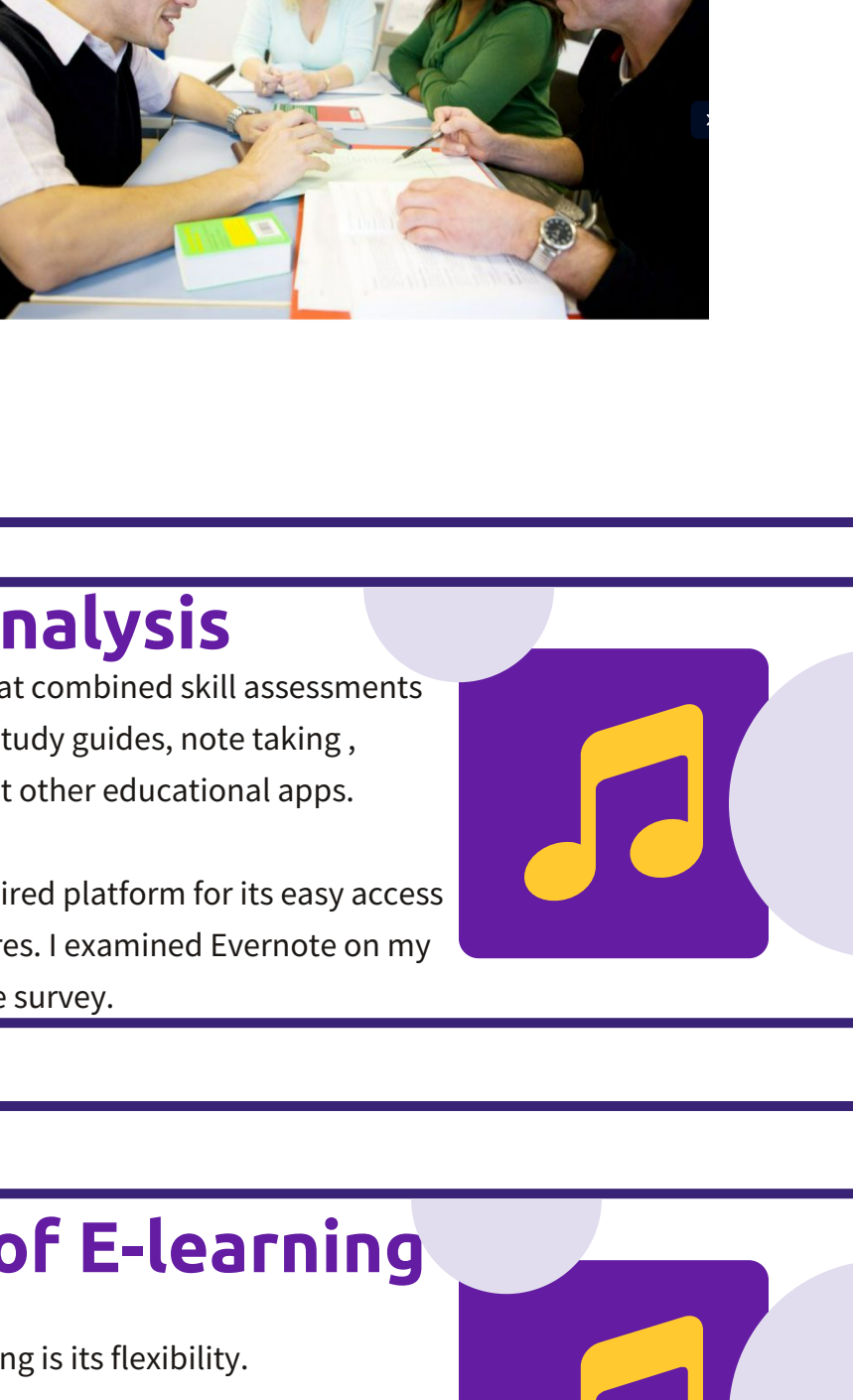


Figure 6. Student usage to instructor requirement of devices for assignments (N = 1,181)

Student usage to the instructor's requirement of devices for assignments

Key Takeaway

Owning a device has NO correlation with proficiency.



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...50% report using smartphones and tablets for school work vs 86% that own them.

-Student Mobile Learning Practices 2015 Advanced Distributed Learning Initiative

Domino Effect

Superficial Learning

"... take pictures with mobile device, but rarely for meaningful learning experiences."

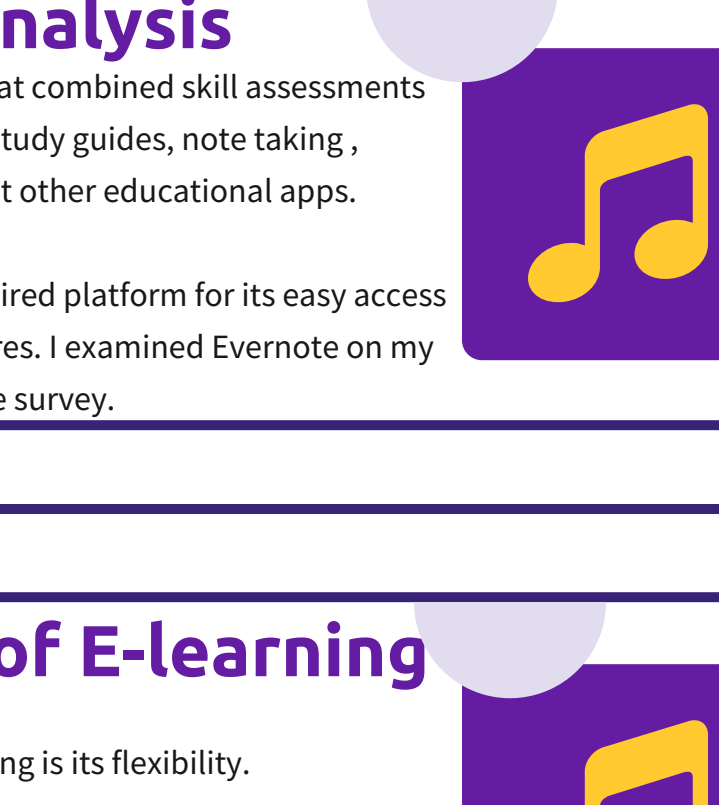


App usage for education is steadily increasing.



Key Takeaway

Pedagogical support is critical!



Competitive Analysis

There were no educational apps that combined skill assessments and curriculum with study tools. (study guides, note taking , flashcards) all in one. So, I looked at other educational apps.

Quizlet was the most used and desired platform for its easy access to information and flashcard features. I examined Evernote on my own as no users mentioned it in the survey.



Opportunities of E-learning

The biggest opportunity of e-learning is its flexibility.

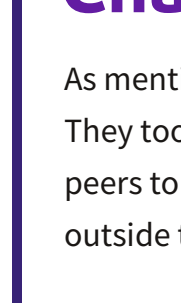


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...leverage mobile teaching to adopt knowledge and skills through education while learner's mobility is independent of time and locale.

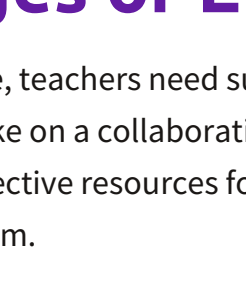
-Student Mobile Learning Practices 2015 Advanced Distributed Learning Initiative

Diverse Content



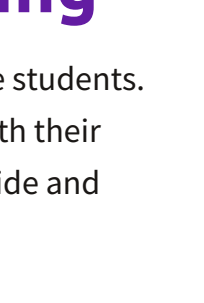
Diverse content supports learning style and individual experiences

Information Access



Real-time updates and platform integration of information

Learning Ownership



Study guide & note taking features organize knowledge

Engagement



Instructor and system feedback on performance via analytics

Challenges of E-learning

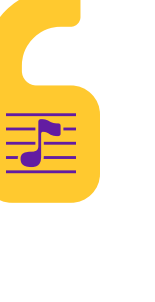
As mentioned above, teachers need support just like students. They too need to take on a collaborative mindset with their peers to provide effective resources for students inside and outside the classroom.



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Instructional designers and specialists can offer instructors pedagogical support by walking beside them as they outline their learning goals and teaching strategies.

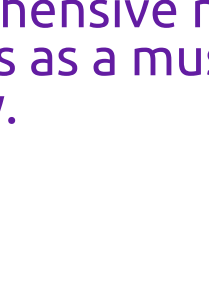
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Low funding for tech and training



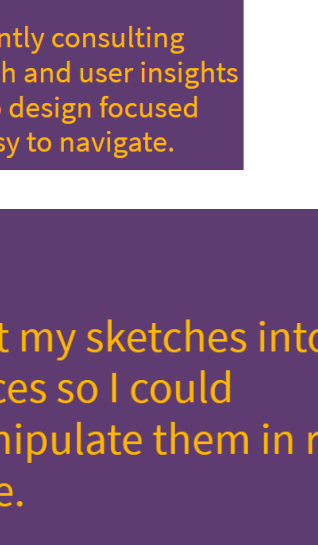
Teacher mindsets "...to each their own."



Usability in content adaptation

Prototype, Wire Frame, User

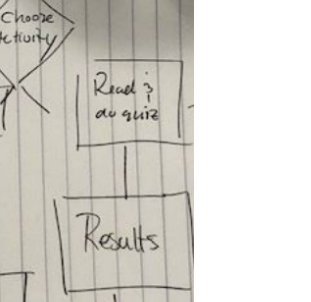
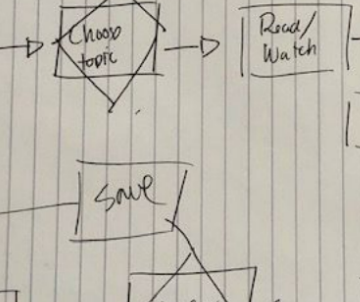
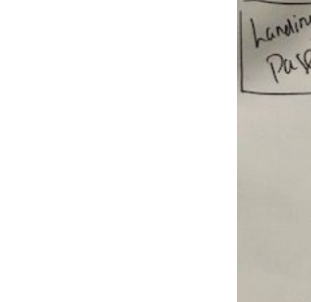
The motto here was "simplicity, simplicity, simplicity". I wanted the app to be accessible in terms of finding and synthesizing information in a way that builds upon features for any future designs.



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Music majors need a comprehensive resource to build their fundamental skills as a musician in an accessible and engaging way.

-Rahny Day



Sketched pages multiple times over to visualize the best options.

Constantly consulting research and user insights to keep design focused and easy to navigate.

1. Log In

4. Embed quiz/feedback

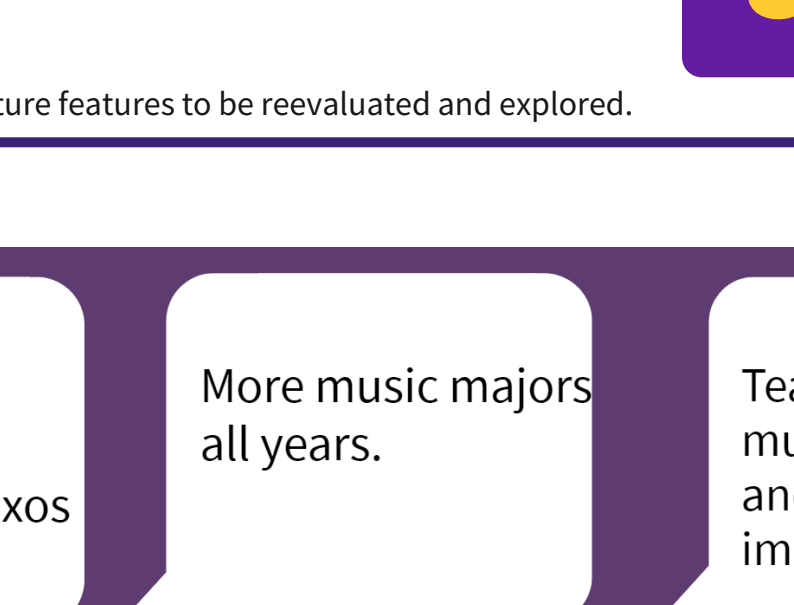
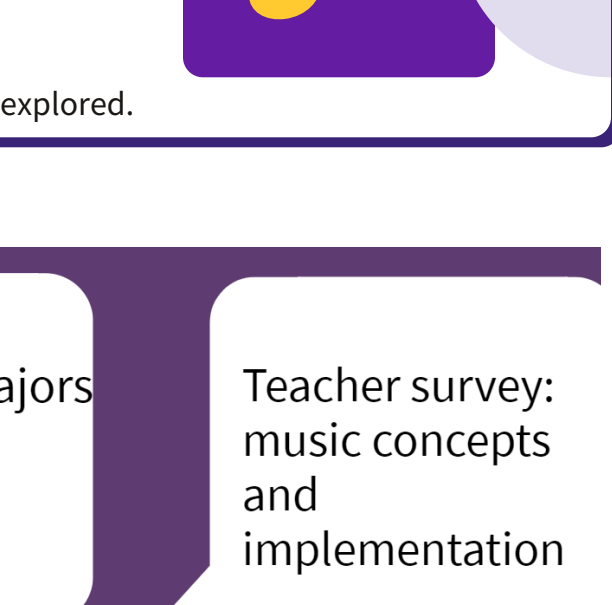
2. Choose Topic

5. Notetaker/ Study Guide

3. Choose Activity

6. Choose Method /archive

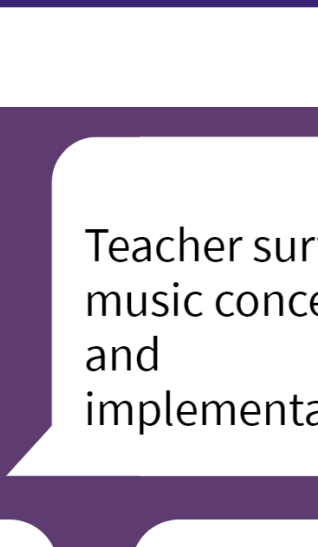
I cut my sketches into pieces so I could manipulate them in real time.



The Future ScoriT

The curriculum for music majors is incredibly demanding and always changing. Digitizing content is changing the landscape of technology, but it must be done with the utmost consideration for learning, design, and behavioral theories to do students justice.

Below are some future features to be reevaluated and explored.



Garage Band, Sibileus Integration, Naxos

More music majors all years.

Teacher survey: music concepts and implementation

Aural Skills/ Keyboard

Anthology database

IPA/ Diction German, Fren Italian