UniTaught
Find a tutor. Be a tutor.

Old Dominion University
CS410 - Team Gold
Spring 2019
March 19, 2019
Presentation Overview

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University Students and Tutoring

- University students study at no specific time of the day.
- Some studies even suggest that more students study at night as opposed to daytime.

Distribution of university students’ study times
The Private Tutoring Market

- Private tutoring is a growing industry.
- However, there is no centralized network for tutors.
- Most tutor-hosting websites offer online options, and some offer in-person options.
University Students & Tutoring

- **Student-to-student interactions are effective;** tutees learn more cognitively through bonds with their peers.

- **PAL is a peer mediated instructional program where students tutor their peers.**

- **Peer Assisted Learning Programs (PAL) proves that students tutoring other students is effective.**

- **University students are willing to tutor** people what they know in their free time **if it is easy to find people to tutor.**
The Current State of ODU’s Tutoring Resources

- Tutoring resources are not centralized.
- Less than half of course-specific tutoring covers 300 Level and above.
- Tutoring centers are predominantly opened exclusively during the daytime.
- Not enough tutors working in tutoring centers.
- Many ODU students qualify to tutor, yet they don’t work for ODU as tutors.
- There are many students on campus willing to tutor, they are not being utilized, and students need the help.
Problem Statement

- **Tutoring services** available to ODU students are limited in scope, do not provide flexibility, and lack a centralized platform for promotion.
- **Students** willing to provide tutoring services lack a tool to promote those services.
Problem Characteristics

- Tutoring is only offered for about 5% of all available ODU courses.
- Tutoring services do not encompass all study times.
- Information available about ODU’s tutoring services is dispersed and not always accurate.
- Current information regarding when and where certain course-specific tutoring sessions is not always reliable.
- Students who find it necessary to seek tutoring outside of the university cannot be confident that the available services will be a good match for ODU-specific course material.
- ODU students do not have an adequate platform to advertise their tutoring services.
Current Process - Students Seeking Tutoring

ODU provides adequate tutoring resources

5% of ODU students seek tutoring services

95% of ODU students are seeking tutoring elsewhere

Course specific tutoring isn’t offered

Tutoring availability is limited

Tutoring information is contradictory

Online tutor-hosting platform

Social Media

Flyers

Many options

Student finds tutor

Do the student's and tutor's availability align?

Yes

Is the tutor local to ODU?

Yes

Does the tutor understand student's specific course?

Yes

Tutoring session is scheduled

No

Does the tutor offer online options?

Yes

Waiting for tutor appointment

No

Student pays and rates tutor

Session occurs

Yes

Student understands course material

No
Solution Statement

- UniTaught is an application-based service that unifies ODU students who are interested in tutoring with ODU students who desire course-specific tutoring in real-time.

- UniTaught provides an extension of ODU's current tutoring services so that students can receive help for all courses 24/7.
Solution Characteristics

- Only ODU students and tutoring center staff can use UniTaught.
- Information is updated frequently by ODU staff in real-time.
- Every tutor is required to provide verification.
- Implements a rating system for quality assurance.
- Qualified students can tutor in any class available at ODU.
- Tutors & tutees can make themselves available at any desired time.
- Notifications will be sent to connect participating tutors/tutees.
- Tutoring center Check-in’s & Check-out’s.
- Mechanism for payments is included within application.
UniTaught’s Solution

- Merge the solutions to both problems into one tool.
- Get rid of excessive options.
- Less is more

- Centralizes all ODU tutoring resources
- Bypasses decision obstacles
- Decreases waiting periods
- Consolidates information
- Enhances student interactions
- Increases ODU's tutoring reach
Solution Process Flow

- ODU student wants to offer private tutoring services
- ODU student seeks tutoring services
- ODU's tutoring resource information

- Send out notifications to potential tutees
- Send out notifications to local tutors

- Tutoring session is scheduled in real-time

- Minimal Waiting

- Tutoring session occurs
- Did the tutor charge?
  - No
    - Tutee rates tutor
  - Yes
    - Tutor receives payment

- Tutors get notified when potential tutees are available in the area.
- Tutees are notified when potential tutors are available in the area.
Major Functional Component Diagram

**UniTaught**

- **User Accounts**
  - Tutors & Tutees interact
  - Notifications

- **GUI**
  - Tutors & Tutees interact

- **Network**
  - Courses Completed
  - User Information
  - GPS coordinates

**End-Users**

- ODU Students:
  - Tutors
  - Tutees

**Client Devices**

- Smartphone
  - User Input
  - Device GPS Coordinates

- Academic Transcript
  - ODU Email

**myODU Portal**

- my.odu.edu

**Database Server**

- SQLite/Room/Firebase
  - User Information
  - Course Information

**Web Scraper**

- User Verification

**KEY**

- Hardware
- Software
- Data Sources

**Google Hangouts**

- Web Conferencing

**ODU Tutoring Information**

- ePortfolio Studio
- MSRC
- Language Learning Center
- Physics Learning Center
- MATH Lab
- Writing Center
- Online Services
What UniTaught Won’t Do

- Cannot guarantee there is a tutor for everyone online 24/7.
- Cannot prevent students from voluntarily violating the honor code.
- Will not interfere with current ODU tutoring resources; only improve advertisement to extend reach.
- Will not be a hosting platform for established tutoring businesses.
Customers

- ODU students seeking tutoring services
- ODU students interested in tutoring
- Old Dominion University student services
End Users

- **ODU Student body**
  - ODU students who desire ODU’s tutoring resources
  - ODU students who desire private tutoring resources
  - ODU private tutors who wish to advertise their services
  - ODU tutoring staff
Benefits to Customer Base

- Expands the scope of ODU's course-specific tutoring resources.
- Decreases availability conflicts.
- Tutors aren't waiting around for responses.
- Reduces frequency of cancellations by providing real-time scheduling.
- As tutoring increases, DFWI rates decrease. Students save GPA and money.
- Students won't have to go out of their way in search of tutoring services since they are contained conveniently in one place.
- Alleviates frustration in regards to contradictory information. Improves information consistency among ODU community.
## Competition

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More on ODU’s Trial of Tutor.com

- Trial run of tutor.com offers only 8 additional courses exclusively covered by tutor.com.
- 24/7 real-time scheduling, BUT tutors cannot be students.
- Helps to expand available tutoring resources, BUT doesn’t help make use of existing underutilized resources.
- Purely online-based.
- Doesn’t unify and engage ODU student body.
- Tutors are hired by tutor.com and not tutees.
- Trial ends on June 30, 2019. What’s next?
- By itself, tutor.com is not an efficient solution to the problem, but it can be considered yet another ODU resource which UniTaught will incorporate.
Why Is This Worth Doing?

- There is an unsatisfied demand for tutors at ODU.
- Relevancy: As the private tutoring market expands, the demand for private tutoring resources increases.
- ODU can benefit from a more centralized tutoring information resource.
- Students can benefit both intellectually and socially.
- DFWI - Drop/Failed/Withdraw/Incomplete ratings will improve with student understanding.
- Students won’t have to take classes multiple times.
In Summary

- High demand for tutors at ODU.
- Qualified students interested in tutoring are an untapped resource at ODU.
- Need for a more centralization of tutoring resources within the ODU environment.
- UniTaught makes this connection obvious.
References - ODU Resources

1. "Academics." Old Dominion University, 8 Jan. 2019. URL: www.odu.edu/academics
2. "Campus Tutoring." Old Dominion University, 19 Jan. 2019. URL: www.odu.edu/success/academic/tutoring#tab125=0
3. "Course-Specific Tutoring." Old Dominion University, March 2019. URL: www.odu.edu/success/academic/tutoring/course-specific
4. "Courses of Instruction." Old Dominion University, Feb. 2019. URL: catalog.odu.edu/courses/
References - Student Behaviors

1. Ciscell, Galen, et al. "Barriers to Accessing Tutoring Services Among Students Who Received a MidSemester Warning." ERIC, Pacific Lutheran University - Department of Sociology, 2016. URL: files.eric.ed.gov/fulltext/EJ1114513.pdf


References - Student Behaviors cont.


References - Competition

2. "Find a Local In-Home Tutor Today." HeyTutor, HeyTutor LLC. URL: heytutor.com/
Questions?
### Web Scraper Demo

- Processing the user’s academic transcript.

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