

**Project Proposal for Collabolearn:
A Revolutionary Skill Exchange Service**

Sarah Buckley, Adam Hock, Kyle Sellers

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2. Executive Summary

Collabolearn is a platform where people who want to learn a new skill can connect and learn together. It gauges user interest and skill, then connects people who have inverse interests and skills, helping them learn that skill without the need for spending money. For example, a calculus professor who wants to learn piano would be connected with a pianist who needs help with calculus homework. This mutually beneficial connection will eliminate the need to pay money to learn a new skill from another person.

Collabolearn is primarily targeted towards college students, who have the free time to pick up new skills but have a strict budget. Secondly, adults currently not working, whether due to retirement or unemployment, will also be a portion of the Collabolearn consumer base.

While some other skill exchange platforms function similarly, they fall short in two categories in which Collabolearn excels: a simple, lightweight user interface, and a true skill exchange which avoids the use of a pseudo-currency. While some of our competition does have some free-to-use features, part of Collabolearn's mission is to provide an entirely free skill exchange service.

Anyone interested in learning a new skill must either have to be willing to spend a lot of money to hire a tutor, or a lot of time and motivation to learn independently. Either of these factors could stop a potential student's desire to continue learning that skill they hope to master. Collabolearn won't just be a low-cost tutoring option, it will be a no-cost tutoring option. Collabolearners won't have to worry about missing a tutoring session because they don't have enough money, and our users won't have to worry about the frustration of learning something new on their own.

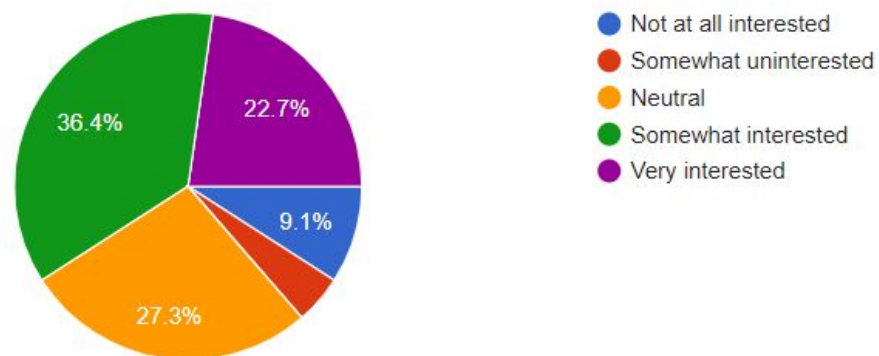
The mission of Collabolearn does not immediately imply a specific framework for software development, so we elected to explore diverse frameworks more thoroughly before committing to one. If we stick to that goal throughout the duration of this project, we will choose whichever framework we feel is optimal to make sure our website will fulfill the mission.

3. Customer Discovery

To gauge interest and find out what features our target audience would want in a Time Bank / Skill Exchange Service, we sent out an online survey to LSU students. In total, we received 22 answers to our survey. 86% of participants selected that they are at least “neutral” interest in our service, while 68% of that said they would be at least “somewhat interested”.

How interested would you be in a website that matched you with someone who knows a skill you want to know, who wants to know a skill you know?

22 responses



Some common features that that users wanted to see included:

- a good categorization of skill that makes for easy searching
- a verification and feedback system
- a clean and simple UI
- Communication between matched users

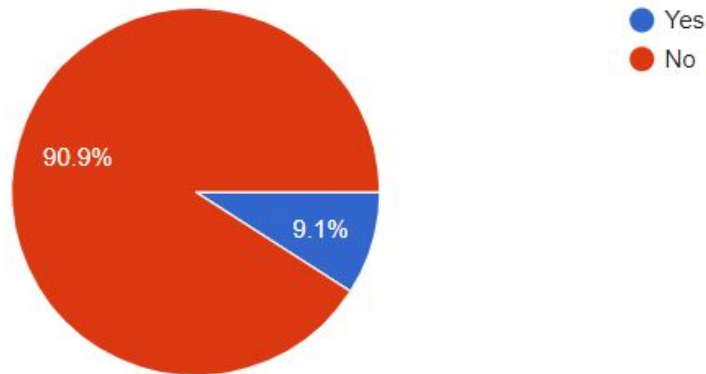
Some common concerns and deal breaking problems with a skill exchange service included:

- Scheduling issues
- Commitment issues
- Poor UI
- No options outside of face to face meetup
- Not enough skills available

91% of those interviewed said that they have never heard of a service like this before, showing that existing options are not reaching college students.

Do you know of a skill exchange service similar to the one described?

22 responses



Raw data is shown in the excel spreadsheet (Collabolearn Interest Survey (Responses).xlsx) .

4. Gap in the Market

Currently, the opportunity to learn a new skill is restricted to either hiring a tutor or instructor to teach the desired skill, or to use books or online resources to learn independently. Tutors and instructors tend to be expensive, and one needs a high amount of discipline to be self-taught. For the target market of Collabolearn - college students, people between jobs, and retired professionals - neither of these options is ideal. If a person would like multiple hours of instruction per week to learn a skill, this price point can add up quickly, and teaching oneself a new skill relies entirely on one's own willpower. If a prospective student were to hit a difficult point in learning a skill or miss a fundamental piece of knowledge in the learning process, overcoming such a roadblock can be very frustrating to continue without knowing what to do next. Some skill exchange services currently in the market do not offer adequate exchanges, are complicated to use, or implement a form of pseudo-currency - all of which serve to make the service less usable for the average person in our consumer base.

Collabolearn will fill this gap in the market by offering a simple service where knowledge is exchanged for knowledge. If one person wants to learn to play the piano and has a firm understanding of calculus, this person might be matched with a pianist who needs calculus tutoring. We will have a minimalistic design that focuses heavily on our core competences without a lot of bells and whistles, making the software easy to learn, understand, and use. Our software will be lightweight, encouraging consumers to access Collabolearn more often, without the high learning curve of a confusing and complicated user interface. Collabolearn will deviate from almost every other skill exchange service currently in the market by omitting the use of

pseudo-currency in our software. Simply transferring the cost in US Dollars to a cost in the pseudo-currency by our competitors negates the main purpose of a skill exchange service: to supply tutoring without the traditional monetary cost. Collabolearn will also focus heavily on keeping the exchanges based in knowledge, rather than exchanging knowledge for a good or service, as many other skill exchange services tend to do.

5. Implementation

To initially build Collabolearn's user base with our target audience, college representative from large universities in the United States will be hired for a short period. Their duties will include posting fliers and stickers around their campus as well as holding small tutoring seminars to advertise for Collabolearn. This initial user base will be crucial, as the effectiveness of our service scales with its size.

Collabolearn will generate revenue through advertisements on the website. As our service will have heavy upfront development, not a lot of resources should be needed for maintenance, so after initial development, Collabolearn should become profitable.

We will be using the agile and IID development methods to develop Collabolearn because we want to release a prototype quickly (10 weeks), we are a small development team, and we are not putting anyone's life, money, or comfort in danger with our software. However, we will differ from a standard agile development team because we will not be meeting with our customers on a weekly basis, but will ask for customer feedback at important development points.

6. The Problem

The main problems that our target consumer base faces when learning new skills is the lack of motivation and lack of money. Customers who want to teach themselves the skills they desire must be highly self-motivated. On the other hand, those same customers would be more motivated to learn a skill if they had proper tutoring from an instructor that could point out specific mistakes and give personally tailored advice. This mentorship makes learning easier, but the costs to hire a private tutor or instructor is too high.

Without the use of a skill exchange service, a person who wishes to learn a new skill is faced with two options: hire a tutor, or learn independently. For Collabolearn's target audience, neither of these options is conducive to gaining a firm knowledge of a random subject. The target audience, college students people between jobs, retired professionals, tend to not have the necessary funds or self-discipline to utilize either of these options. College students are typically paying tuition, rent, and utilities while only earning minimum wage, if that; students usually do not have the extra funds to spare to hire a tutor. Students are also bogged down by homework,

tests, assignments, and projects, and so the self-discipline to teach themselves a new skill can be difficult to muster. People between jobs have crucial knowledge of the current job market, but they may need a small boost to re-enter their field. Being between jobs, unemployed people have an excess of time, but possibly have skills that they can offer from previous experience. Retired professionals live off pension, a 401K, or social security, which are all woefully inadequate to begin with, so such people would not be in a position to hire a regular tutor to learn a skill. A retiree may be unwilling to expend the effort required to learn a new skill independently, when learning from a tutor negates much of the frustration and time wasted when they get stuck.

This large portion of adults are currently at a great disadvantage to gaining knowledge independently. Time and money constraints prevent students and retirees from gaining a potentially life-changing new skill or knowledge. College students could gain a resume-booster that propels them into successful careers previously unattainable; retired professionals may discover a new passion that was eclipsed by the day-to-day life of a full-time job. Some individual cases may be outliers - perhaps some college students earned scholarships and can afford tutoring, and retirees with a formidable amount of self-discipline do exist - but the majority of both college students and retirees experience these setbacks to learning. Fixing this problem will not only directly benefit the target consumers, but it will also benefit anyone who interacts with the consumers and from their newfound knowledge.

7. Barriers and Critical Risks

Barriers:

The main barrier that our website is going to face is the growth of our user base. As our user base increases, the service becomes more useful and diverse. On the upper end of the spectrum, this is beneficial, but when initially entering the market, this will be one of the biggest challenges our service faces. If too few users register as Collabolearners

Critical Risks:

The misuse of Collabolearn for meeting for malicious purposes can pose a sizeable risk for the reputation of our website. A Collabolearner could register with false information, then when connected with a legitimate Collabolearner, could set up a meeting to exchange tutoring services with the intent of crime.

Further, because we are asking Collabolearners to provide their personal information and location permissions, the implications of a data breach is serious. If the data we collect from Collabolearners becomes compromised, the users could face disastrous, dangerous consequences.

8. The Solution

Our solution to the problem stated above is to provide customers with a website where customers tutor each other as payment. This solution is motivational because self-taught customers can receive personally tailored guidance from other tutors. This solution is cost-efficient because customers don't have to pay for tutoring with money, but instead with knowledge of a skill they are already proficient in.

To address the barriers to market entry, part of the growth formula for Collabolearn is to provide incentives for users to invite their friends and family. This will increase the number of Collabolearners exponentially, making the small user-base barrier a non-issue.

To avoid the repercussions of falling victim to the critical risks of Collabolearn, part of the registration process for Collabolearn will include an identity verification, in the hopes of dissuading anyone with nefarious purposes from using the software to target a victim, with the risk of immediate legal repercussions. This will include security measures such as requiring a copy of a government-issued photo ID, linked social media accounts, and possibly a background check, as well as strongly suggesting recommendations from people in their community and other verified Collabolearners.

Due to the sensitive nature of the information we are asking our consumers to provide - such as contact information, location services, and possibly social media profiles - we will store collected data in a secure environment, as well as implement an appropriate OWASP protocol, so that the fear of mismanaged data will not prevent any user from using our software.

9. Industry Need

Every career field is growing exponentially harder to enter due to the mass of information available free and instantly to anyone who is motivated enough to learn a new skill on their own. Even now, employers seek credentials past a college degree, as entry-level positions require knowledge higher than entry-level. Collabolearn seeks to close this gap for college students and recent graduates by allowing young adults to learn a new skill without having to worry about how to pay for it. The job market will drastically widen for users who may not have the means to gain this knowledge otherwise.

Collabolearn will also provide a source of motivation for consumers who may not be disciplined enough to stick to a schedule otherwise. If someone tries to sit down and accomplish a task alone, often this task will be procrastinated and left to fall by the wayside. By connecting with a tutor, such a person should feel an appropriate amount of pressure and motivation to complete the task.

10. Market Analysis

Primary Market:

Collabolearn will cater mostly to college students. The National Center for Education Statistics states that as of fall of 2018, there are 19.9 million students enrolled in American colleges and universities, and is expected to grow by 600 thousand over the next 8 years. Customers in their college years have the knowledge of one or many skills that is sufficient to tutor beginners while also still wanting or needing to learn new skills themselves. Also, college students are the most likely to take the cheapest option when going about their daily lives. Compared against people who have a full-time job, college students typically have more free or flexible time, a key aspect of finding a mutually convenient meeting time for Collabolearn matches.

Secondary market:

Our secondary markets are other demographics of people who have a lot of time and desire to learn a new skill. These include those who are temporarily unemployed and are looking to pick up a skill to apply in the workplace, and retired people who have a lifetime of wisdom that they can share and are also looking for some way to fill their time.

11. Competition

Online skill exchange services and time banks, where time is the currency being exchanged for services, already exist, with Simbi, TimeRepublik, SwapaSkill, and TeamUpHere being our main competitors. These services implement features that we find inefficient and unnecessary, while not implementing or emphasizing other crucial aspects of a well developed exchange service or time bank.

The first major feature that our competitors implement that we find an issue is the use of a pseudo-currency. Simbi and TimeRepublik have users earn “Simbi” and “TimeCoins,” respectively, when they provide a service. This currency is later use to pay for other services. We find this an issue as it just adds a layer of abstraction over real currency, so users could just as easily buy and sell services with a government-recognized currency. Another large drawback to current solutions is they have a poor UI. SwapaSkill’s webpage looks very outdated, and TeamUpHere does not put pertinent information in easy to find areas.

The main advantage that Collabolearn will have over these solutions will be its simple and easy to navigate UI, as well as exclusive focus on service exchange, without the need for currency.

12. Marketing Strategy

To initially raise awareness for Collabolearn and to build a starting user base of our target audience, college representative from large universities in the United States will be recruited for a short period to promote the platform. Their duties will include posting fliers and stickers around their campus as well as holding small tutoring seminars to advertise for Collabolearn. This initial user base will be crucial, as the effectiveness of our service scales with its size.

After gaining our initial user base, the size and the probability that someone wants to learn your skill is offering a skill you want to learn is high enough to continually attract new users. We will also offer priority matching to those who frequently recommend their friends to the application.

To target the temporarily unemployed, specific advertising will be implemented in job search services, such as websites like Craigslist and Indeed.com, and information shared with career advisors. To reach our retired secondary market, printed advertisements in newspapers and magazines will be used, as these are more likely to reach this target audience.

13. Development Strategy

At the organization level, we are going to build our software using Incremental Iterative Development (IID). We will choose a few requirements with the highest priority to implement first, and then implement features during future iterations.

At the team level, our team's workflow will closely match the Team Software Process. Our team will conduct meetings to discuss progress at least once per week to discuss our progress with current requirements along with brainstorming ideas for future requirements. We will also test our code as we go instead of testing all of our code after the software is finished.

At the individual level, we will be modeling our process after the Personal Software Process. We will divide tasks evenly between the three of us depending on our core competencies.

All of the team members are familiar with C++, so incorporating this language into our software shouldn't be difficult. Both Sarah and Kyle have worked with web development languages, which is definitely needed in the development of our platform as it is accessed through a website. Kyle and Sarah have are also both familiar with mobile application development, so if Collabolearn evolves into an on-the-go service, this can be easily implemented. Knowledge of languages such as Java and Python are also shared between at least two out of the three of the team members. Individually, Kyle has experience with C#, Sarah has experience with information security, and Adam is currently a part time tutor, which will be helpful when thinking about what tutors would look for in an ideal skill exchange app.

15. Business Canvas

7. Key Partners <ul style="list-style-type: none">• Universities• Individual students• Tutoring aggregates	8. Key Activities <ul style="list-style-type: none">• Accurate skill-need matching• Secure contact	1. Value Proposition <ul style="list-style-type: none">• A more educated general public is beneficial for everyone• Further education will be more accessible	4. Customer Relationships <ul style="list-style-type: none">• Student-to-student• Advertiser-to-consumer	2. Customer segments <ul style="list-style-type: none">• College students• People between jobs• Retirees
	6. Key Resources <ul style="list-style-type: none">• Organized database• Large user base		3. Channels <ul style="list-style-type: none">• Web application• Mobile application	
9. Cost Structure <ul style="list-style-type: none">• Developer salary• URL hosting expenses• Advertisement expenses• Application hosting (e.g. Apple App Store)			5. Revenue Streams <ul style="list-style-type: none">• Advertisements• Donations• Crowdfunding• Sponsorship	

15. Sources

National Center for Education Statistics:

<https://nces.ed.gov/fastfacts/display.asp?id=372>

OWASP:

https://www.owasp.org/index.php/Main_Page