#### Part 1: "Elevator" Introduction

### Brief elevator pitch for your company

STEM Education has one of the largest areas of inequality in the classroom and one reason for this is due to the high cost of the required tool for these courses – a scientific and graphing calculator. These calculators cost over \$100 which makes learning too expensive for most and reinforces inequality in the classroom. GraphLock is an affordable app, that students can simply download, with all the functionality of the calculator they need, that is also safe and secure to be used in class and on exams due to its unique Lockdown Mode.

## Part 2: Market and Industry Analysis

## How large is your market? What market segments are you going after and why?

Our market is the Smart Education Software Market and Mobile Applications of \$16.6B per Markets and Markets Worldwide Market Forecast. We are targeting teachers both at the High School and College levels, as well as students from Junior High through College. We are targeting teachers as we know this is a pain point of theirs and their students and we want to use teachers as our advocates. For every one teacher, we get approximately 200 students every year.

### Is this market growing? How fast?

Global demand for Smart Education is rising rapidly. By 2017, software revenues will rise to \$37.2B and will be the biggest market in Smart Education. Digitization of education, increase in Smartphones and the rising popularity of mobile apps have continually influenced the traditional delivery of education.

**Who is in the market already? What is the nature of competition – direction, indirect, substitutes?** Texas Instruments is our largest competitor and accounts for 93% of the calculator market. They are direct competition as they are the most widely used calculator and are approved for testing. Desmos is our other largest competitor as an online calculator and application. They are also direct competition, however, Desmos is not approved to be used for testing and assessments.

#### Part 3: Go-to-Market Plan

Who are (will be) your customers? Describe your engagement / discussions with them to date. Have you validated their needs? Prove they are buying (or will buy) your product from you. Our customers are primarily teachers (schools) and students. We have direct sales through the app stores as well as bulk purchasing options for schools. This past year, we attended education, tech, math, and STEM Conferences around the country to do thousands of customer interviews and testing. The teachers and other users at these conferences could test out our MVP and give feedback up until our launch last month. We now have twenty pilots set up for Spring including High School classes as well as college classes with around two thousand students to continue to get data, testimonials, and feedback. We were also able to validate their needs at these conferences as well as utilizing Mallory's content knowledge as she is her own customer, being a Math Professor for over eight years.

**Describe how you win customers today. Describe your future customer acquisition strategy.** We win customers by giving them an affordable solution that is  $1/20^{th}$  of the price of the current option for the required tool for STEM Courses. Students can also simply download it on the device they already have and are familiar with. For teachers, there is a built-in classroom monitoring platform to reduce the number of digital distractions and keep students focused, which is something they battle daily. Our future customer acquisition strategy is to continue to exhibit and present at conferences, continue to spread the word through social media marketing, turn our pilots into paid customers throughout the schools and districts and attend STEM Festivals throughout the community.

How will you displace any incumbents/competitors? How are you better/different than your competitors? What's your channel/partnership strategy, if any? We displace incumbents/competitors by giving an alternative to an outdated and expensive piece of equipment that is affordable and solves a problem that students, parents, and teachers are currently having. Our Lockdown Mode is also unique, making it the only app specifically designed for classroom and testing purposes.

# Part 4: Technical Product Description and Plan

# Briefly describe your product or service.

GraphLock is a scientific and graphing calculator app with a unique Lockdown Mode. Lockdown Mode means during a set time a student cannot access calls, texts, the internet, or other apps – only the calculator. Therefore, it is designed specifically to be used in class and on exams and uphold testing integrity. GraphLock is an affordable solution to the current required tool for STEM courses.

**Technology Validation. (What evidence can you present that your product works as advertised? Future validation plans?)** We have a working product available to download on the Google Play and App Store that we can demonstrate and showcase. We also had a student use GraphLock on her Geometry Final Exam this past December in Tucson. Our future plans are to continue to validate the technology through our pilots.

## Describe the remaining product development risks and your plans to overcome them.

The major product development risks we face are related to funding. We have roadmap of our next features and products and are seeking funding for the development to include advanced features as well as expand to other educational areas.

Describe your product's advantages (features, for example) for end-users vs. substitute solutions (not just direct competitors). Our biggest advantage is our Lockdown Mode which is directly built into the app. The Lockdown Mode protects the user's privacy and data, while still upholding classroom and testing integrity. This is what sets us apart from the other calculator apps. This Lockdown Mode can also be taken to other educational classes and areas. Our other advantage is our cost and that the calculator was built by a teacher for teachers.

Describe your company's current intellectual property status and plans for the future. (Issued patents? Licensing agreements? Pending patent applications? Trade secrets?) We are currently Patent Pending with a utility patent and also have filed a Copyright on our Source Code.

Discussion of any non-IP barriers to entry for your market. Include what you have done to make it difficult for others to challenge you as well as what challenges you may face such as manufacturing arrangements, distribution contracts, partnerships, etc.? A key part of our business plan is to partner with other educational companies to help with distribution. We have risks of reaching a broader market if these partnerships do not come to fruition.

## Part 5: Risk vs. Talent Narrative

What risks has your team mitigated so far (business-related and technical as it relates to your business)? What are the next few major risk-reduction milestones? We have protected our IP as much as possible and have been traveling around the country to conferences positioning ourselves as the front runner in this space. We are first to market and are already developing key additional features and products to make release as we complete development. We hit a risk-reduction milestone by being first to market with our launch last month.

## Briefly list and describe your key team members.

Mallory Dyer – CEO/Co-Founder – Previously Professor of Mathematics at Central Arizona College where she won the 2015 National NISOD Award for Teaching Excellence.

Josh Dyer – COO/Co-Founder – Previously Financial Software Consultant and business/finance background.

Vijayant Kanwar – CTO – Computer Science Major with background in Software Engineering, also past student of Mallory's at CAC.

**Briefly describe any holes in your leadership team. What are your plans to address any recruiting needs in the next 18 mos.?** Key weaknesses are with sales/marketing. We have already started to process of making key hires in this area and filling out our advisory board to help fill the leadership gaps.

**Briefly list and describe your key advisors, and their contributions to date.** We are currently building out our formal Advisory Board. Currently our mentors are: Judy Robinett and John Livesay who have helped us with finding investors, our pitch deck, and our pitch. Our other mentor is Jase Squires who has helped us with legal counsel.