

Business Plan
Bulb Learning, Inc.



Prepared by Appomattox County High School
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[certification sheet]

Biography

Bulb Learning, Inc. was founded in October of 2016 by two co-founders. The business was founded as part of the Virginia Department of Education Student Lead Ideation Challenge. This challenge encouraged students to create innovative solutions within the education market to better prepare students for graduation and the world of work.

The concept behind Bulb's gamified learning platform came about when the founders reflected on their own careers within K12 public education. They thought that much could be done to improve curriculum tools for primary and secondary education to better prepare students for life beyond standardized tests.

Throughout the process of founding an Education Technology company, the Bulb Learning team members have adapted their roles to fit demand. Geoff Zdziebloski, a previous start-up founder with a successful exit in a different EdTech venture, has taken the role of the CEO. Nick Walton, a dual enrollment student, has used his skills in organization and management of funding. William Huffman, a programmer and A+ certified computer technician, has led the development of the gamified learning platform. The team has also approached key industry stakeholders and leaders within the Virginia Department of Education, including the Secretary of Education, Dr. Dietra Trent.

Executive Summary

Bulb Learning, Inc. is an education technology company based in Appomattox, Virginia. The company will offer a software product which assists educators within the classroom by providing a web based, gamified learning platform. This platform will better prepare students by immersing them into real life scenarios in which to apply knowledge gained from the class.

The software will create a personalized and adaptive learning experience where students can explore different competencies which aligns with the Virginia Standards of Learning. Bulb Learning will also provide teachers with comprehensive tools to identify students who are performing well and students who are consistently performing poorly, which helps to differentiate to and help at-risk learners.

To develop and deploy the software, Bulb Learning will use prize money, which has been awarded through the Virginia Department of Education as well as founder contributions. This money will go towards the development of the game platform, as curriculum development will be handled in house. Bulb Learning will begin to pitch the platform to early adopting schools within the Commonwealth of Virginia to gain valuable traction metrics, which could result in purchase orders or direct investment from other funding sources.

Geoff Zdziebloski

- Visionary/Architect, Idea generation, market fit.
- Web master, SEO, analytics, site hosting.
- Graphic artist, color coordination, logos, icons, etc.
- CSS designer. Usability, accessibility, layout, look-n-feel.
- Spokesperson. Outward promotion, product description, trade shows.

William Huffman

- Software development, agile, user stories.
- Integrations, API, SIS, Clever Partner Developer.
- FERPA Infrastructure, encryption, SSL.

Nick Walton

- Manager. Coordinates all team member activities.
- Tester. User interface / User experience.
- Graphic Artist. Color coordination, logos, icons, image libraries, etc.

Noah Williams

- Client side support, client-user training, customer relations.
- lead generator, sales, delivery

Company Description

Bulb Learning, Inc. is a C-Corp registered in Virginia focusing in predictive analytics for education technology. The company's mission is to improve education with modern tools, and to improve accessibility to technology to all schools, regardless of location, composition, or size.

The company prescribes to a business development school of thought called the Lean Startup method. This methodology involves reducing the resources needed to get to revenue by increasing the amount of labor you put in. For that reason, Bulb Learning will be handling the development of the minimally viable product internally. By developing the product without outside help, the company reduce the fees incurred and focus the funds in other areas.

In the fall of 2016, Bulb Learning entered the Student Lead Ideation Challenge, and the team's research into pedagogy and curriculum development began. During this time, the Bulb team conducted a series of problem and solution interviews with classroom educators, school administrators, division administrators, and students. These interviews helped the team to ideate and envision a platform that could be beneficial to students and education leadership alike.

In January of 2017, the team began creating several mockup curriculum pieces, which could eventually be used as game storyboards. These mockups included solutions for history and math classes typically taken in middle school, and provide content which aligns with the corresponding Stand of Learning requirements.

In February and March of 2017, the team continued to research the education technology market and how to enter the space with emerging technology. This research connected the team with several stakeholders in the field, including education leadership within the commonwealth and across the United States.

To be a successful company, Bulb Learning will need to create a product that will provide significant value to students, teachers, and school administrators. The hardest part of creating this product will be the development of the technology behind the gamified learning platform. Once the platform is developed, and in use by paying customers, Bulb Learning will be a successful company.

The goal of Bulb Learning is to create an education environment that is beneficial to students. According to the government research provided by the United States Department of Education, over one million students drop out of high school each year. That is the problem that the Bulb Learning team wishes to solve. Bulb Learning will market directly to school

administrators and curriculum developers to prove the value and long term benefits of using Bulb’s gamified learning platform.

Company Ownership

The Bulb Learning team chose to incorporate as a C-Corporation to protect individual liability. The entity structure is also more attractive to investors and venture capital than an LLC or S-Corp.

The company filed official Articles of Incorporation and Bylaws with the Virginia Corporations Commission on March 1, 2017. Bulb Learning filed for an Appomattox County Business License on the same date. The founders plan on filing a trademark on the use of Bulb Learning’s name and other brand assets. Other safeguards will be put in place to safeguard intellectual property owned by the company.

Bulb Learning operates on a dynamic equity basis, where equity is decided based on the contributions of the holder. All shares are on a 24-month vesting schedule with a cliff. Current there are only three shareholders in Bulb Learning, Inc. so the capitalization table is quite simple.

Name	Shares
Geoff Zdziebloski	3,334
Nick Walton	3,333
William Huffman	3,333

Voting rights for founding members will be split and quadrupled, where one share equals four votes, upon dilution from an additional partner or investor, as to prevent unwanted or irresponsible board decisions from passing.

Bulb Learning plans to strengthen community relations by being corporately responsible. The company has established an education grant where a percentage of profits will be distributed to underfunded schools for technology within the classroom to aid student success.

Product Description

Bulb Learning will initially offer a software product based on the Virginia Standards of Learning, which will help students comprehend and retain information through gameplay. This product will be based on the Unity video game development platform for scalability and deployment purposes.

The game development process will involve several unique steps, some of which differ from the development of traditional, non-academic games. The game development process is as follows:

- 1. Identification of a subject area.**

The Bulb team will identify a particular subject area and analyze the state standards released by the Virginia Department of Education.

- 2. Storyboard of the gameplay.**

The Bulb team will take the state released standards and integrate them into a storyline, which fits with other games on the platform. This development cycle allows for plot continuity and increased engagement from learners.

- 3. Graphic design and initial user experience.**

The storyboard will then be taken by the graphic designers and turned into visual representations of the final product. Here, characters, scenery, buildings, and essential plot elements are designed. Due to the overlapping nature of the games, many design elements can be used multiple times without retooling.

- 4. Programming of the gameplay on Unity**

Here, the graphic design elements will be implemented into the framework, which will be programmed on top of the Unity platform. Unity allows for seamless development of 3d games.

- 5. Platform Integration & Initial Release.**

After being tested internally, the games will be added to the platform and sent out to a select test group of schools. These schools will be directed to provide feedback and reviews on the usability of the games.

- 6. Release to the general userbase.**

Once tested and approved by initial schools, the game will be released into the general curriculum pool.

As a company, Bulb’s founders recognize that they operate in an emerging market dominated by multinational, publicly traded, education monoliths. In order to differentiate from the competition, Bulb plans to appeal directly to the target market, students and educators in the classroom. Bulb’s unique value lies in the fact that the platform is unique, engaging, and relatively easy to adopt.

- **Graphic Design**

One major competitive advantage is that the gamified learning platform will be designed similar to mass market video games, contrary to how many education focused games are built. The game will use isometric based scenes in a flat design style, comparable to the Minecraft universe.



Game map example, showing isometric and flat design styles.

- **Competitive Learning**

Competition has been shown to be a major motivating factor in regard to student achievement. With the adoption of games like Kahoot, students are becoming more comfortable with and more engaged by competitive environments. This type of game will also promote learner agency, where students will help other students, thus creating interpersonal and intrapersonal skills.

- **Engaging Plot and Characters**

The best way to learn history is to live through it, and the best way to learn in general is to experience it in action. That’s why the Bulb platform will be built on top of storylines that are appealing to students at their grade level. As the platform grows, machine learning will begin to differentiate the storyline to the student’s individual learning preference.

SWOT Analysis

Strengths:

- Knowledge of the current position of education technology curriculum tools.
- Founders' age and connection with leaders in the education leadership and commercial spaces.
- Network of seasoned education technology founders, school administrators, teachers, and entrepreneurs serving as advisor and mentors.
- Agile and lean approach to building this company.

Weaknesses:

- Lack of knowledge regarding advanced game system development.
- Lack of track record within the education space.
- No brand recognition when compared to other education companies.

Opportunities:

- Entrance into an emerging market with a great likelihood of growth.
- Relatively low cost of entry into the market, allowing for minimal risk.
- Lack of competition currently in this market segment of gamified learning.

Threats:

- Established education technology firms, which could create related products before Bulb has mass market appeal or protection of intellectual property.
- Lack of experience in dealing with education policy and law including FERPA, which could restrict the collection of data regarding a student's education.

Market Analysis

As a company, Bulb Learning believes that a gamified, web based curriculum tool is needed in K12 education. A tool like this would allow educators to better deliver content to students and ensure their success by offering detailed analytics on their performance.

In early 2017, the Bulb team met with a panel of four district level administrators. The panel consisted of curriculum developers for all levels of K12 in Appomattox County Public Schools. This panel provided valuable insight that allows the Bulb team to adjust the form and function of the platform. The panel also gave advice on the sale of the software, allowing the company to adjust the business model.

Curriculum tools involving technology are very popular in modern K12 environments. Many school divisions are now researching the best ways to utilize the hardware assets that the school has available. Bulb's sector of the Ed-tech market totaled \$8.38 billion in the 2014-15 academic year, the most recent statistic available from the *Education Technology Industry Network*.

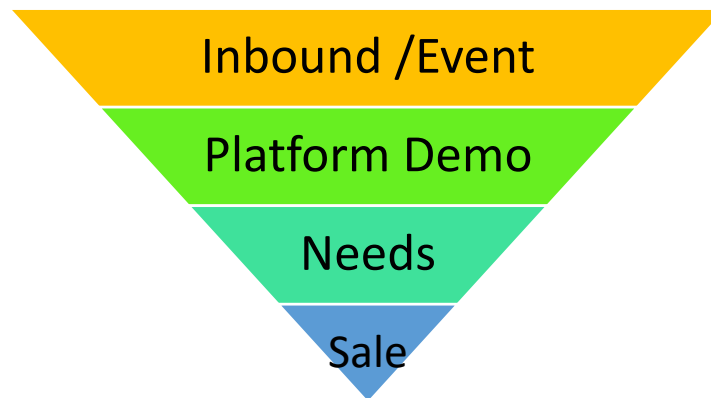
The EdTech industry is growing at a rate of 11.9% per year. This high growth rate lowers the barrier to entry for Bulb Learning. The company plans to expand within the Commonwealth of Virginia using the Standards of Learning. The platform could be paid for by schools using several different state and federally sponsored funding opportunities including the Project Graduation Grant and Title I funding.

Once Bulb Learning is cashflow positive, expansion to other states using Common Core will begin. There are nearly 50 million public school students in the United States. With a 10% institution use rate, Bulb's annual revenue would near \$15,000,000.

Marketing Plan

Bulb Learning will not need a commercial store front as it offers commercial, enterprise software products. Sales will mainly be handled through company sales representatives. The company is currently in the process of creating digital branding assets including social media accounts, a finalized logo, and a website to improve online visibility.

Much of Bulb's marketing will come in the form of networking, which takes place at tradeshows or other industry events. The Bulb team will strategically choose events that will draw a crowd of school and division level administrators. The product will be priced within many school's discretionary budgets, to remove the procurement process. This will remove the pricing barrier to entry and simplify Bulb's sales and adoption cycles.



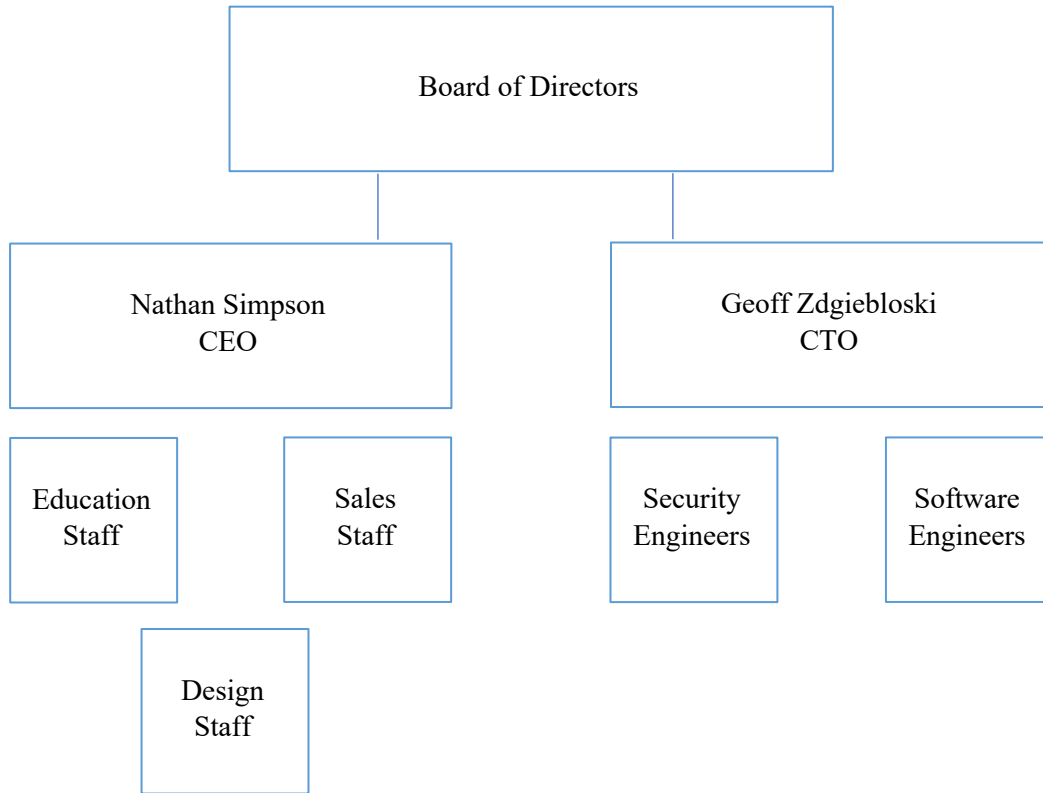
Stage One: Inbound / Event. In this stage, leads from tradeshows, webinars, blog posts, inbound marketing, etc. are converted into qualified prospects.

Stage Two: Platform Demo. Here, these qualified prospects are walked through a demo where they will be shown the full value of the Bulb platform.

Stage Three: Needs Analysis. Demo participants who see Bulb as a good fit for their school will then work with Bulb staff to come up with a project scope and implementation timeline.

Stage Four: Contract Sale. After the timeline is established, the software implementation will go under contract including a bill of sale.

Management and Operations Plan



Due to the nature of a C-Corp, Bulb Learning is required to have a board of directors and corporate officers. The company's Board of Directors currently consists of the two founders, Nathan Simpson and Geoff Zdziebloski. The two founders each hold three seats, respectively. Nathan Simpson is the President of the Corporation and Chairman of the board.

When the company gains revenue the Bulb team will inevitably grow to include staff initially in education & curriculum, sales, experience design, software development, and software security. These fresh staff members will be directed by the founder who corresponds to their position in the chart above.

Financials

Bulb Learning utilizes several different forms of Accounting. The company has adopted a financial best practices model which includes tracking expenses, archiving receipts, and limiting access to funds. Bulb uses Microsoft Excel and Access to track payables, receivables, and liquid assets.

Item	Amount
Graphic Design Tools and design sets	\$500
Virtual Private Server	\$240 (Annual)
Unity Membership	\$348 (Annual)
Licensing and Compliance	\$500
Initial Sales and Marketing Materials	\$550
Software Developer Consulting Time	\$1,750
TOTAL	\$3,888

The financial projections featured below outline conservative forecasts of financial performance.

1st Year 12-month cash flow

	Jun	Jul	Aug	Sep	Oct	Nov
Cash on Hand (Beginning)	\$22000	\$42000	\$39000	\$24000	\$22000	\$20000
Cash Paid Out	4500	23000	15000	2000	2000	2000
	Dec	Jan	Feb	Mar	Apr	May
Cash on Hand (Beginning)	\$18000	\$16000	\$14000	\$12000	\$10000	\$8000
Cash Paid Out	2000	2000	2000	2000	2000	2000

The above table shows our first four months of operations as revenue yielding from early adopters, and the later eight months as cashflow negative. October 2017-April 2018, the company will run on funds collected through the first sales cycle, at a burn rate of \$2,000 per month. The company, to this point, has been funded through founder contributions and grants.

1st Year income statement

Revenues

Software Sales	\$60,000
Recurring License Support	0.00
TOTAL	\$60,000

Expenses

Software Development	\$30,000
Software Hosting and Security	\$2,500
Corporate Compliance / Legal	\$4,000
Marketing / Sales / Events	\$13,000
Consumables and Other Accounts Payable	\$4,500
TOTAL	\$54,000
Net Income	\$6,000

Initially, all revenue will come from first year, discounted contracts to early adopting schools. The bulk of costs will come from the actual development of the software.

Appendix One: Design Samples



HIGH BUILDING

SKY SCRAPPER #1

SKY SCRAPPER #2

SKY SCRAPPER #3

SKY SCRAPPER #4

Appendix 2: SOL Standards Example

- CE.11 The student will demonstrate knowledge of how economic decisions are made in the marketplace by
- applying the concepts of scarcity, resources, choice, opportunity cost, price, incentives, supply and demand, production, and consumption;
 - comparing the differences among traditional, free market, command, and mixed economies;
 - describing the characteristics of the United States economy, including limited government, private property, profit, and competition.
- CE.12 The student will demonstrate knowledge of the structure and operation of the United States economy by
- describing the types of business organizations and the role of entrepreneurship;
 - explaining the circular flow that shows how consumers (households), businesses (producers), and markets interact;
 - explaining how financial institutions channel funds from savers to borrowers;
 - examining the relationship of Virginia and the United States to the global economy, with emphasis on the impact of technological innovations.
- CE.13 The student will demonstrate knowledge of the role of government in the United States economy by
- examining competition in the marketplace;
 - explaining how government provides certain goods and services;
 - describing the impact of taxation, including an understanding of the reasons for the 16th Amendment, spending, and borrowing;
 - explaining how the Federal Reserve System acts as the nation's central bank;
 - describing the protection of consumer rights and property rights;
 - recognizing that government creates currency and coins and that there are additional forms of money.
- CE.14 The student will demonstrate knowledge of personal finance and career opportunities by
- identifying talents, interests, and aspirations that influence career choice;
 - identifying attitudes and behaviors that strengthen the individual work ethic and promote career success;
 - identifying abilities, skills, and education and the changing supply and demand for them in the economy;
 - examining the impact of technological change and globalization on career opportunities;
 - describing the importance of education to lifelong personal finances;
 - examining the financial responsibilities of citizenship, including evaluating common forms of credit, savings, investments, purchases, contractual agreements, warranties, and guarantees.