



**Problem Statement:** Currently there are only two drones on the market that may be used to teach students how to fly and code drones, and that meet the following requirements below. However, these drones are not being used to dramatically improve the learning experience and therefore outcomes for students or to increase the effectiveness of teachers to engage their students in exciting ways and that may actually ease the load of the teachers.

**Challenge:** Design a drone that improves the classroom experience and learning outcomes. The product should improve both students' and teacher's classroom experience, be safe and easy to use, and fit within the product constraints. Drones are a hot technology with an ever increasing application for real world use. As a team create an education focused and affordable drone to safely teach the design, function & application of drones to inspire other students about this exciting new technology and it's application to add educational value and increase learning outcomes.

#### Objectives:

- Design a fun, exciting to operate innovative drone device to interact with the teacher and students to imagine what future classroom tools should look like to bring learning to the next level.
- Give your innovative drone a cool name.
- Build in technology that dramatically enhances the curriculum, & stimulates and improves learning in the traditional classroom
- Capture all data from the sensors and send it wirelessly to personal mobile devices inside the classroom
- The drone you create must also meet or exceed current safety, stability and durability objectives and requirements.
- Calculate weight requirements of the drone and any accessory components to assure flight and control of the drone

#### Outcomes:

- Demonstrate what an "experience will be like as if you are the customer"
- Identify a specific consumer market in which your product would gain most traction and viability
- Develop a marketing plan which describes product features, advantages and benefits (FAB's) and specific marketing tactics to drive sales
- Calculate the cost and lifespan of all materials or components required over a typical use period
- Show proof, via video recording, that the drone will fly unhindered by the design and/or the additional protection to withstand impact insult.
- Gather feedback and insight from potential students and teachers about what features would lead to a purchase and use



### **Business Plan Requirements:**

- Identify the primary target customer/student/user profile and create a based product design which allows the student to enhance their learning environment in a way that would be supported and encouraged by the teacher in their classroom.
- A basic physical prototype to demonstrate look, fit, feel and visual appeal and would support typical use
- A product name, a product logo and packaging design
- Tell a real-life story to illustrate the FABS for the student and teacher customer use
- Competitive analysis: features, benefits, and advantages and how your product is better than the competition
- Pricing plan including cost of goods (COGs) and marketing
- Tell how you will make money on the product and the data collection
- A marketing and sales promotion strategy and name specific channels to reach the paying customer
- Customer input and feedback to show you have listened to the voice of the customer (VOC)
- Name companies that would make strong partners and describe how they will add value

### **Constraints:**

- A price point of no more than \$110.
- The product **MUST clearly demonstrate an exciting way to enhance learning for students and has teacher support to create in order to help ensure adoption.**
- Be sure that your product design matches the use and customer for whom it is intended



## A message from Rob – CEO, Founder, Drobots

**Hi Camp BizSmart World Shakers: I am so delighted that Drobots and I get to play a role in your entrepreneurial journey! Being an entrepreneur is *about the journey*.**

Drobots was founded with the vision to promote and inspire lifelong learners and instill a strong sense of curiosity, confidence and teamwork. Due to the exponential growth of the drone industry, kids and teens may now explore, learn and evolve along with the applications of today and the discoveries of tomorrow.

As we move forward into the future of classrooms new tools will be used to improve the classroom experience. Currently, there are many new and innovative products that are totally changing the way students learn and teachers educate. VR goggles are being used to bring students into a 3D hands-on virtual experience. Smart whiteboards allow teachers to record the notes they make and students to download their notes instantly. There are even smart desk chairs that can automatically adjust posture based on the student sitting in it! These new tools are exciting, innovative, and improve both teacher's and student's classroom experience. But, the classroom experience will continue to change and improve and there are many problems still to solve. What tools will we use in the future? One possibility is drones.

Drones are small flying robots that are equipped with powerful computers and an endless possibility of attachable features and functions. These flying robots are currently used for many tasks, including; aerial photography, delivering materials, measuring and recording dimensions, teaching kids to code, and much more. These tools present a great potential to be utilized in the classroom. Your challenge is to create product innovations that demonstrate how drone-robots might be used to enhance and deepen the educational learning experience.



### *Meet Rob – why he is excited about Drones for learning . . .*

Rob is the Founder & CEO of Summer Camp Advisory Team and Drobots Company. And has over 20 years of industry experience. Rob with his team created Drobots to develop and deliver the highest quality, most inspiring, and inventive drone and virtual reality technology experiences to the next generation of visionaries and disruptors.

*“We transition students – from being passive consumers of technology – into tomorrow’s technology creators and innovators who have developed self-confidence, strength of character, and a positive attitude.”*

*“Camp BizSmart students – we can’t wait to see how you will use UAV’s to add value to your educational learning environments in a hands-on, fun way. Be sure your product addresses educational learning objectives and teachers’ acceptance, to ensure adoption into schools and use by teachers.”*

About Drobots: [drobot video](#)