

FROM WEST COAST TO GOLD COAST: TEACHING A CAPSTONE ENTREPRENEURSHIP COURSE IN GHANA BASED ON THE LEAN LAUNCHPAD

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Abstract

The authors co-taught a variation on the NSF I-Corps Lean LaunchPad Curriculum at Ashesi University in Ghana as an entrepreneurship capstone course. The course content was a good match for the university's mission: Ashesi University College is an undergraduate institution focused on educating the next generation of entrepreneurial, ethical leaders in Africa, and West Africa has many underserved markets and unmet needs that present entrepreneurship opportunities. Students were final year undergraduates with majors in Business Administration or Management Information Systems. The teaching team consisted of an Ashesi faculty member and a visiting faculty member from the US. The question we address is "Can the Lean LaunchPad class be adapted successfully to Ashesi and West Africa?" The paper discusses changes to the curriculum for the local context, implementation, and concludes with suggestions for further adaptations. The authors found that Lean LaunchPad worked well for introducing students to entrepreneurship and evolving a business concept, but found a need for better upfront opportunity analysis, a stronger focus on value proposition and customers prior to creation of a business model canvas, and a greater emphasis on understanding business costs and revenues. We believe some of the lessons learned apply both to using the Lean LaunchPad curriculum in emerging markets as well as for general use in teaching entrepreneurship.

Implementing Lean LaunchPad at Ashesi

The authors adapted the Lean LaunchPad Curriculum (Blank and Engel 2014) for an Entrepreneurship Capstone course at Ashesi University College, a private college in Ghana, to final year undergraduate Business Administration and Management Information Systems students. The yearlong course, started in September 2014, was co-taught by the authors of this paper: an adjunct faculty member at a US University, and a full-time faculty member of the Ghanaian institution.

Background on Ashesi, Faculty, and the Curriculum

Ashesi University College began classes in Ghana in 2002 with a mission to educate a new generation of ethical, entrepreneurial, and innovative leaders for Africa. The four-year undergraduate curriculum contains a liberal arts core emphasizing writing, mathematical reasoning, and critical thinking. All students complete a four-semester leadership seminar focused on ethics, leadership, and community service. The university augments this core with



in-depth majors in Business Administration, Computer Science, and Management Information Systems (a hybrid of the two). The university has grown in twelve years to over 600 students on a residential campus. Ashesi University is itself an entrepreneurial endeavor; like Lean LaunchPad, it has roots that trace back to the University of California, Berkeley, where its founder, Patrick Awuah, developed the initial business Ashesi plan while getting his MBA.

Ashesi integrates a set of learning goals into the four-year curriculum. Each course must in some way foster ethics and civil engagement; critical thinking and quantitative reasoning; leadership and teamwork; innovation and action; curiosity and skill; and technological competence. The Lean LaunchPad curriculum was adapted by the authors to fit those goals explicitly, particularly by adding writing assignments that fostered critical thinking, and by adding more cost analysis that engaged quantitative reasoning skills. Taking the course is an alternative to writing a thesis or doing an applied project with a faculty advisor. Fifty-eight students, representing about 50% of the Ashesi class of 2015, enrolled in the Entrepreneurship Capstone course. We met for a three-hour weekly classroom session and a 90-minute weekly discussion session.

In prior years, the course had a traditional business plan focus, with case studies of entrepreneurship and the development of a business plan. The faculty and administration of Ashesi felt that the curriculum needed additional rigor, to be taught by regular faculty, and have a new spirit. Mr. Warren's visit and Dr. Agyepong's assignment provided an opportunity to adopt the Lean LaunchPad.

The Lean LaunchPad curriculum was developed by Steve Blank and evolved from his customer development approach first popularized in his book (Blank 2013). The theoretical foundation focuses on developing a business hypothesis using the Business Model Canvas (Osterwalder

and Pigneur 2010), and then testing each element of the canvas, primarily through customer interviews. The pedagogy focuses on using online lectures, readings (Blank and Dorf 2012), and in-class critique of student teams to evolve a business concept, one square of the canvas at a time. The Lean LaunchPad software (<https://launchpadcentral.com/>) is designed to augment the critique of each team's business model canvas and the recording of customer interviews. The course and variations on the curriculum have been taught at many institutions in the US, including Stanford, University of California, and Northwestern University.

The Ashesi course was team-taught by two instructors: Dr. Sena Agyepong and Mr. Todd Warren. Dr. Agyepong is the Assistant Professor of Entrepreneurship, Real Estate Development, and Business Negotiations at Ashesi University, having taught there since 2009. She has a PhD in construction management from KNUST in Ghana and was assigned as a new, permanent faculty member to bring a new spirit to entrepreneurship. Mr. Warren has, since 2010, co-taught NUvention Web, a software entrepreneurship class at Northwestern University, which for the last several years has incorporated the Lean LaunchPad curriculum. As chairman of the board of trustees for the Ashesi University Foundation, Mr. Warren has a strong understanding of Ashesi as an institution, but limited local experience of Ashesi students or prospects for businesses in Ghana.

Curriculum Used

As a baseline, we started with the one semester course defined by Appendix B in the Lean LaunchPad teacher's guide (Blank and Engel 2014)¹. We modified this curriculum to address deficiencies Mr. Warren had found when using it at Northwestern, to better align it to Ashesi's curriculum goals, and to adapt it for the Ghanaian/African context.

¹ Note: we used the 4th edition, a 6th edition exists as of this writing.

In teaching the Lean LaunchPad curriculum at Northwestern University, Mr. Warren had made the following changes that were adopted at Ashesi:

- The class delayed the creation of a Business Model Canvas until after an initial set of customer segments and a “problem/solution/scenario” were created to guide the value proposition. What Mr. Warren had observed was that students are overwhelmed by the scope of the canvas and are tempted to skimp on the first essential task: to properly define the core business problem they hope to address. A key aspect of the Business Model Canvas is to guide the creation of a Minimum Viable Product and to identify a population or segment for interviews and customer development, but we wanted to ensure that students first took time in the early ideation stage.
- Critique sessions were augmented with lectures that reinforced topics in the Udacity videos on “How to Build a Startup: The Lean LaunchPad” (<https://www.udacity.com/course/ep245>). Udacity is a for-profit educational organization offering massive open online courses (MOOCs). In Mr. Warren’s experience, students had difficulty putting the abstract concepts from the text and videos into context and applying them to their projects. The interactive lectures also helped break the monotony of a critique of twelve teams. While critiques remained a central piece of the curriculum, we included them in only seven of the ten weeks of project teamwork, sometimes substituting sessions where student teams worked to implement an aspect of the lecture into their project.
- Pop quizzes were introduced for the reading and videos. This provided an added incentive for students to complete the outside readings and to view the lectures.
- At least one third of the time each week, principally in the discussion section, was devoted to teams working together with the teaching team providing ad-hoc

mentoring. The mentoring was often driven by a faculty review of each team’s status in the LaunchPad Central software.

For the Ashesi context, we made some additional changes. First, unlike the Stanford, Berkeley, and Northwestern classes, the Ashesi class was not selective and did not have a team formation and application step in advance of the class. Team formation occurred in the class. Because the model curriculum spans ten weeks and the Ashesi semester is sixteen weeks, we added a section up front to help with ideation, understanding the Business Model Canvas, and team formation. We also wanted students to examine business opportunities in Africa, and had them analyze emerging businesses on the continent.

To do this, students performed a series of group assignments around specific businesses. On the first day, we started with an introduction to the Business Model Canvas, then shared a video of an entrepreneur’s journey². We looked at Koko King, a scalable quick breakfast concept that uniquely targets Ghana. Students broke into randomly assigned teams to develop the business model canvas for Koko King, and turned it in at the conclusion of class. In the second week, student teams prepared three more assignments before beginning work on their own business. Two assignments involved analyzing and presenting the business models and a positioning statement/elevator pitch (Moore 1991) for other start-ups. The faculty assigned the business examples for the first exercise. These included global businesses with unique or disruptive business models that would challenge students to think differently (for example: Uber, Airbnb, and Rocket Internet) as well as emerging African, Ghanaian, and Ashesi alumni businesses (for example: Omega Schools, Burro, and Heel the World). The second case was a company

² This was the ‘back up’ plan actually. We had an entrepreneur speaker who canceled at the last minute—not uncommon anywhere in the world!

chosen by the students from the smallstarter.com website, which profiles entrepreneurs in Africa. The final early assignment focused on doing a more general opportunity analysis in a sector chosen by the team—for example sports, waste management, or music. The briefs on industry sectors focused on defining the value chain, segmentation, growth prospects, and business opportunities with the goal of aiding ideation. We also assigned readings focused on entrepreneurship in Ghana, using *Kuenyehia on Entrepreneurship* (Kuenyehia 2012).

After these three assignments, we formed teams during class time. Students prepared an elevator pitch for an idea they wanted to pursue, then presented that idea in front of the class. An Open Space Technology (Owen 2008) style selection process was used to organize teams. The teaching team worked iteratively until twelve balanced teams of four to five students were created around an initial concept. Since students were Business Administration or MIS majors, we did not use the “hacker, hustler, product picker” taxonomy discussed in the teacher’s guide (Blank and Engel 2014). We did, however, have each team produce a team charter outlining roles and responsibilities.

We also added some specific written assignments to align with Ashesi’s learning goals. Teams produced both a mid-term and final paper discussing their business and current assumptions around the business model. The paper was targeted to a general investor audience, and not necessarily someone deeply steeped in the Business Model Canvas jargon. Pedagogically, we used writing to foster better critical thinking (Bean 2011). We added two other brief written assignments to address weaknesses we saw across students’ work. First, teams were asked to prepare a brief that described their value proposition and proposed their Minimum Viable Product strategy in more detail. Second, based on feedback from outside

mentors and advisors, we required teams to prepare a written brief analyzing potential revenue and costs, discussed in more detail below.

Class Experience and Results

Twelve teams of four to five students went through the class process. Teams were formed at two levels. First, following the industrial sector taxonomy used by the Ministry of Finance and Economic Planning (MoFEP) of Ghana in the development of its budget statements, students selected their industry of interest in terms of agricultural, industry, or services. After this, sub-groups were formed based on what specific sub-sector they were interested in: for example, food processing under the agricultural sector. Students then conducted research on what business opportunities exist in their selected sub-sector, and discussed this within their sub-industrial groups. The intention of this first stage of team formation was for the students to understand the industrial sector, and help them do a good analysis of what business opportunities existed. This in our opinion was a failed effort, as the research was conducted, but the output was not used, and did not aid the student ideation process much.

The second level of team formulation had students pitch business ideas that they had come up with from the industry research assignment, and within their environments. During the open pitch session, students wrote out their ideas, posted them on the walls in the lecture hall, and pitched them to their peers. We had about fifteen business ideas, and students were asked to join the ideas of their interest or recruit class members to join various idea teams. This exercise was very easy to do as, unknown to us, some of the students had already formed teams. It was thus easy to recruit additional team members to make up the required numbers, and for students who did not belong to any teams to choose their preferred ideas to join. This, in our opinion, was very effective and will be

built upon for future team formulation exercises within the class.

Here is a summary of the teams' initial and final concepts after pivots:

TEAM #	INITIAL CONCEPT	FINAL CONCEPT	COMMENTS
1	A spa offering Ghanaian specialty treatments.	A mobile spa focused on massage in-home.	The mobile spa model addressed the large capital requirements of leasing a spa space.
2	A culinary school for young professionals.	A system to help caterers develop and manage an online presence to attract and engage customers.	A significant pivot in the second half of the course. No deep need was found for the culinary school; but interviews with caterers uncovered a need that better matched the student's resources and capital.
3	Locally made sports apparel for primary and secondary schools.	Locally designed and manufactured sports bras focused on young professional women.	Interviews showed that the school value chain would be tough to crack. Interviews with the revised target customer uncovered an unexploited channel (gyms) and specific entry product category (sports bras) that could meet unique local needs.
4	An app that would enable weekly online delivery of food for busy professionals	Soup delivery focused on young urban professionals in the Accra business core.	Pivot was from an app to an actual service and specific product that met the capital availability and delivery requirements of the local environment, as well as the identification of a very specific initial market.
5	An add-on to external water tanks ("Poly-Tanks") for households to determine water level more accurately than by thumping on the tank, and without climbing to the roof or other tank locations.	A water monitoring and delivery service that ensures businesses won't run out of water.	Pivot was in process at end of the semester. The team changed its target segment to businesses, and found that the device required leasing or a new business model to be viable. At semester end, the team was exploring a service to guarantee water availability.
6	Bakery restaurant.	Housekeeping service.	This team pivoted very early from a bakery to a housekeeping service for middle and upper class families, staffed by training underemployed individuals.

TEAM #	INITIAL CONCEPT	FINAL CONCEPT	COMMENTS
7	Market place for idea exchange between African diaspora and local African projects.	Crowdfunding service for educational projects in Ghana.	Concept needed further refinement and testing. Partners were engaged to enable local mobile currency and SMS donations. Intermediate pivots included looking at crowdfunding only for scholarships.
8	Pizza delivery for rural college campuses.	Pizza and wing delivery for rural college campuses.	This business was in pilot stage at the beginning of class, and the team explored replication it to other campuses beyond Ashesi. Wings had better cost characteristics than pizza in the local market.
9	Soccer academy for high potential soccer players.	Video site to connect high potential soccer players and soccer scouts looking to acquire talent.	Team found a gap in the traditional scouting system for soccer talent, and with their advisor began developing a solution to extend the reach of scouts in West Africa.
10	Plastic waste collection from households for recycling.	Device for compacting waste in trash cans, sold to households and businesses.	Economics didn't work for the recycling business. Customer development determined that local waste collectors were unreliable and bins were overflowing. Team is sourcing a device to help customers compact trash to prevent unsightly, unsanitary overflow.
11	Online site for download of 'Trap' style music targeting Ghanaians.	Integrated event promotion and music site for 'Trap' style music.	Founding student was a club DJ, and pivoted from a site focused on music downloads to one focused on local event promotion and sales of merchandise.
12	Individual packaging of cut and cleaned vegetables for commercial kitchens	Pre-made frozen West African dishes (fried yam and kelewele) targeted at students and young professionals.	Local environment made it difficult to guarantee freshness in the first concept, and no strong need in commercial kitchens. Strong need for convenience and local cuisine among target audience drove pivot.

In mid-term evaluations, students were very positive on the critique model with its emphasis on feedback, the practicality of the class, and the “cool” textbook. On the negative side, there was a feeling that the course was too much work and too densely packed with information. Students also felt that the interview model, given Ashesi’s location, was quite time consuming.

We knew that interviews would be difficult given the school’s location, 45 to 90 minutes from the urban core. However, students rose to the occasion. Every team completed between 70 and 120 interviews by the end of the semester (see Figure 1). However, we found that students tended to have an interview spurt right before the deadlines, rather than consistently interviewing each week. Next time we will assess interviews with a weekly goal, rather than a periodic goal.

Often the market was the emerging middle class of Ghana, and students were persistent in knocking on doors in the various gated communities in Accra to gather information. This however meant having them leave campus at least once a week, which took a toll on their resources: time and money. A recommendation was made to the university at the end of the semester to provide the students with a relatively flexible time table to allow them to go out for these meetings, and provide some financial support as well.

An overall concern was that the Lean LaunchPad model required students to narrow their topic area rapidly, and in some cases prematurely, before zeroing in on a real customer problem. When we teach the course again, we would like students to spend more time exploring various project alternatives, and looking at a larger “opportunity map” of

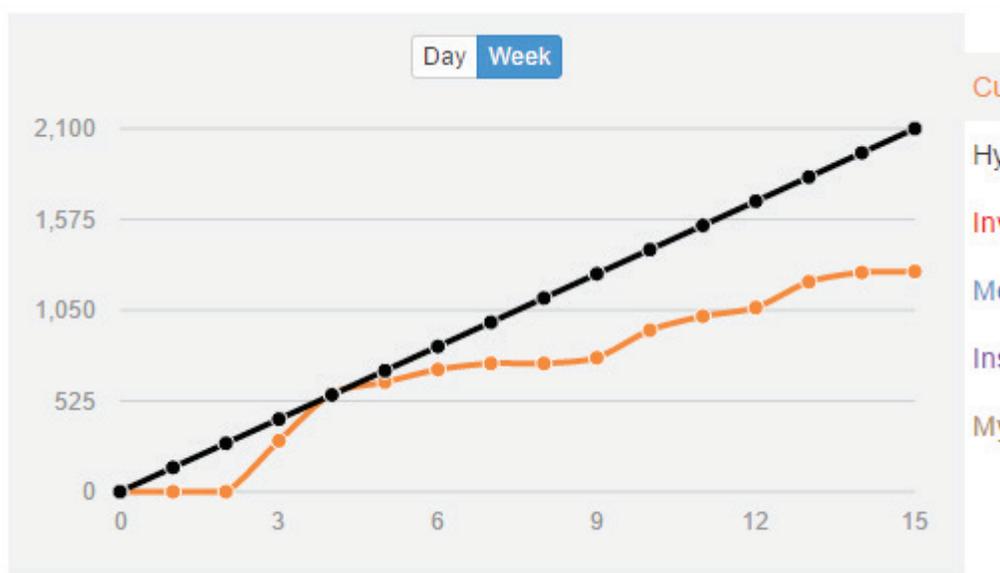


Figure 1. Cumulative interviews (duration in weeks – horizontal axis, and cumulative number of interviews – vertical axis) Source: Class launchpadcentral.com portal

When the first semester of the course ended, the class had completed 1,287 interviews, or slightly more than one hundred per team on average. Students seemed willing to engage and interview their target customer segment.

potential market segments. While students were required to come up with a second idea after initial team formation, this secondary idea was not seriously explored by most teams.

Students presented at midterm and final sessions to an outside advisory board. Feedback from our local advisors at the



midterm was that team financial models were unrealistic or naïve. Based on this, we created a written assignment, drawn from *The Startup-Owner's Manual*, which combined the creation of a two-year cash flow model with quantifying some of the costs around customer acquisition. This exercise helped force some pivots in cases where capital requirements or customer acquisition dynamics were unrealistic. Issues of capital play a greater role at Ashesi than in the Northwestern NUvention Web course. The Ashesi students mostly focused on business opportunities outside of the software sphere, which were more capital intensive. Also, the limited availability of venture capital in Ghana means that businesses will most likely require bootstrap funding or support from family and friends. This revenue and cost material is in the Lean LaunchPad teacher's guide, but should be moved earlier in the curriculum when teaching in an emerging market—making sure students do an early “back of the envelope” capital and variable cost for their business.

An important aspect of the Lean LaunchPad model is engagement of industry advisors to mentor teams and to give feedback. Here Dr. Agyepong's connections in Ghana proved useful. We were able to match teams with advisors who gave them important feedback and introductions. We were only partially successful in having advisors attend midterm and final presentations. The rural campus, difficult Accra traffic, and bad roads were an impediment; perhaps in the future we will hold the presentations in the city.

We had technical and cultural issues with the use of the launchpadcentral.com software (LPC) in the “flipped” classroom. On the technical side, the campus has a shared 50Mbps connection for all 600 students. Ghana also has electricity supply issues, meaning the internet could be slow or down at any point. The slow internet made LPC a general frustration for students, and made it unworkable for presentations and in-class

assessments. On the cultural side, Ashesi generally has a no laptops policy during class, so peer evaluation using a laptop was counter-cultural. However, in contrast to Mr. Warren's experience with Northwestern students, the Ashesi values and culture greatly reduced the need to require online peer evaluations. Students at Ashesi are used to a participatory model where they critique their peers, and engagement was always high. Often this would present a time management challenge as students really wanted to get a word in during the other teams' presentations!

Finally, the Ashesi class reinforced an observation Mr. Warren had in prior classes. Specifically, teams that had an epiphany and pivot often finished with superior concepts to those teams that performed well in the first half of the course but did not pivot significantly. We are unsure why. One theory is that teams which go through a radical pivot are re-energized: more motivated to perform deeper interviews on new potential segments, and more willing to experiment with different value propositions, while those that go through only subtle pivots often become complacent. We saw this in comparing teams like “soup” (team 4 in the chart above) vs. the “cooking school to catering web business” (team 2).

Changes for Next Year Based on this Initial Course

In general, we view using Lean LaunchPad as a good approach for teaching entrepreneurship at Ashesi. Based on our experience, we will make the following changes:

1. Delay team formation until mid-term. In a yearlong capstone, there is no need to rush to a narrowed down idea. Since this is a student's first introduction to entrepreneurship, we prefer to start with an emphasis on the entrepreneur's journey and the process of entrepreneurial effectuation (Sarasvathy 2001), as well as more rigorous opportunity mapping. This

should lead to stronger starting ideas for teams.

2. Focus on a broader selection of ideas before implementing. In the phase before an idea is built out for the canvas, student teams will develop more initial business ideas and rank them on several factors—market size, ability to empathize with the segment, capital requirements, the experiences and resources of the team—to drive discussion and a more thoughtful decision about the selected business concept.
3. Present more cases and interact with both social and “regular” entrepreneurs up front. The cases studies using the Business Model Canvas were good at driving discussion and building mastery of the canvas as a tool. The canvas also helped introduce alternative business models. Many students were interested in social entrepreneurship (for-profit companies aimed at alleviating social ills), and presenting some cases in this area would be helpful. Bringing in advisory board members, alums, and other entrepreneurs to present more models for the class to analyze before concept selection could also contribute to stronger ideas.
4. Have students define a process flow for their business. We found despite the canvas and additional work on problem definition and value proposition, students still were not clear on the specifics of the value proposition and its implications for their firm—the journey of the customer through their business. For this, just like understanding the day in the life of a customer, we think it’s necessary for students to map out using a simple flow chart how the customer will experience their business: What key activities, costs, and resources are necessary to create the value proposition and connect with the customer? This would drive clarity of the value proposition, as well as surface unrealistic or uneconomic businesses earlier in the process. We do not feel that newer Osterwalder tools, like the value proposition map go far enough, and more work is needed to build tools for students in this area (Osterwalder et al. 2015).
5. Have students do a basic “back of the envelope” cost and revenue analysis early in the process. Venture capital is scarce in Ghana, as in most emerging markets. Businesses will be bootstrapped from personal savings and family investments, and students need a realistic understanding of capital needs and revenue potential. The tools to do this are somewhat buried in the Lean LaunchPad teacher’s guide, but will be used earlier in future courses.
6. Delay canvas creation until value proposition, customer segment, and customer journey are clear. The canvas can be overwhelming, and students in our experience often missed the forest for the trees—an argument about the partnership portion of the canvas is not appropriate when the value proposition is unclear, the customer segment is not large enough, or the basic variable costs of the proposition are uneconomic. In practice, students in the Ashesi class would often divide and conquer, working on different portions of the canvas, such that the whole was not coherent when they set out to write their midterm or final papers. Having teams work out the core elements first, before moving to the canvas, would result in stronger business concepts.

Conclusion

Team teaching the course with someone familiar with the curriculum and someone familiar with the local environment (Ashesi and Ghana) was key to our success. We found that the Lean LaunchPad methodology translated well to the Ashesi environment and

to the needs of West Africa. The focus on customer development, pushing students to get out of the building and engage directly with potential customers, worked well in an environment where conditions change rapidly. It was valuable for students to experience entrepreneurship as a discovery-based process, with an emphasis on hypothesis development and customer testing, in a “build, measure, learn” cycle. Our students often would ask permission to pivot, concerned that they were moving off a linear path. We wanted them to understand that iteration is valuable—the real world is often not a straight line! This alone makes the methodology a good experience in preparing them for life beyond campus. We are unsure what to make of the acceleration of teams that pivot acutely. Perhaps pushing harder in critique sessions to improve even “good” concepts, or pushing for more reflection or alternatives along the way, can keep the energy and creativity going in projects that are evolving but not accelerating.

The canvas was a great tool in the beginning for helping students to analyze existing businesses up front. However, we think the curriculum over-emphasizes the canvas. Teams are better off focusing on customer segments (and their market size) as well as the value proposition (and its cost structure) before moving to the full canvas.

When applying this method to a developing economy we found that revenue, cost, and investment capital opportunities are different from those in the United States. There is no real venture capital ecosystem in Ghana and West Africa, meaning most venture financing is through bootstrapping as well as family and friends. More of the most compelling Ghanaian opportunities are capital intensive, and this means many of the cost drivers of a business are going to be around canvas elements like key resources and activities, rather than mainly customer acquisition costs, as is the case with software businesses.

The pedagogy of critique, team interaction, and a flipped classroom fit well in the Ashesi context. With the changes outlined in this paper, Ashesi will use the Lean LaunchPad curriculum again in the 2016-2017 school year.

Appendix A: Course Outline Week by Week

WEEK	CLASS DATE	PART 1	PART 2
1	04/09/2014	<p>Course introduction</p> <p>Entrepreneur speaker</p> <p>Introduction to and elements of entrepreneurship:</p> <p>Who is an entrepreneur</p> <p>How do they find ideas</p> <p>What are the elements they need to think through</p> <p>Basic background on the Business Model Canvas and an example</p>	<p>Break into industry sector teams of five</p> <p>Work in teams to develop the business model canvas of the enterprise that presented, turn in at the end of class</p> <p>Work on developing an overview of opportunities and trends in the sector for discussion session</p>
2	11/09/2014	<p>Analyze and write summaries on businesses on smallstarter.com to cover:</p> <p>Brief about business</p> <p>Business model</p> <p>Customer segment characteristics</p> <p>Value to the customer</p>	<p>Team formation</p>
3	18/09/2014	<p>Teams present their ideas for general feedback on soundness</p> <p>Each team present two ideas</p> <p>Presentations should address: the business hypothesis, customer segment, value the business will add to customers, and business stakeholders</p>	<p>Business model hypothesis</p> <p>Define customer segment</p> <p>Go out and test: customer interview</p>
4	25/09/2014	<p>Market research</p> <p>Purpose</p> <p>Methods</p> <p>Market type</p> <p>Competition</p> <p>Persona definition</p>	<p>The Business Model Canvas critique</p> <p>Attempt the canvas on current idea</p> <p>Discuss the canvas as has been developed. Each team will present for critique</p>
5	2/10/2014	<p>The value proposition</p> <p>Assess needs/problems of various market segments</p> <p>Propose solutions to needs/ problems identified</p> <p>Identify ways in which the solution has added value</p> <p>Find other creative ways of adding value to modify product/ service</p>	<p>Team meetings on Minimum Viable Product definition</p>

FROM WEST COAST TO GOLD COAST

WEEK	CLASS DATE	PART 1	PART 2
6	9/10/2014	Guests: discuss MVP decisions of their businesses	Customer relationships Identifying customer expectation Integrating with business model Evaluating cost of relationship Channels of reaching customers Selecting channels Testing channels Assessing channel efficiency Assignment: customer acquisition tactics and budget for discussion section
7	16/10/2014	Midpoint concept evaluations Show prototype of product/service Submit a draft document Overview Sections in canvas Competitors and strategy Appendix	
8	23/10/2014	Feedback sessions with instructors	Feedback sessions with instructors
9	30/10/2014	Mid - Semester Break	
10	6/11/2014	Business model critique session Focus should be on what has been changed after the mid-point evaluations	
11	13/11/2014	Revenue models Resources Cost decisions Partners	Industry guest speakers to share their experiences as entrepreneurs - venture capitalists
12	20/11/2014	Business model critique Focus on revenue models, cost, resources etc.	Business model critique Focus on revenue models, cost, resources etc.
13	27/11/2014	Lessons learned presentations	
14	4/12/2014	Final concept presentations	

Appendix B: Assessment and Grade Distribution for the Class

	ASSESSMENT	DETAILED SCORES	TOTAL SCORE	WEIGHT
1	Online and in class participation and attendance	10+10+10	30	6
2	Interviews in LPC	20+20+20+20	80	16
3	Case reviews and industry sector research	20+20+10	50	10
4	Idea hypothesis and canvas updates	25+25+25+25	100	20
5	Mid-point concept evaluation	100	100	20
6	Weekly team blog posts	20	20	4
7	Final concept presentations	100	100	20
8	Lessons learned presentation	20	20	4
			500	100

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