ETX High School Idea Challenge:
Teacher Guidebook

Introduction

This guidebook equips teachers to teach the **Lean Canvas** framework to grades 9-12 students over 5 weeks, preparing them to develop innovative ventures. It also supports students entering the **ETX High School Idea Challenge**, a competition where teams create solutions to real-world problems, from local school improvements to global innovations. The challenge has two phases:

Phase 1: Teams submit a 60-90 second pitch video addressing the problem, current solutions, and why their idea is better. The pitch will be judged on this rubric.

Phase 2: Winners deliver an 8-minute (max) in-person pitch with Q&A to judges (local entrepreneurs, educators, community leaders), scored per the challenge rubric.

Not all students need to enter the challenge, but all will learn the Lean Canvas through the activities below. For challenge participants, exercises are tailored to produce competition deliverables.

Section 1: Teaching the Lean Canvas (5-Week Plan)

This section provides a 5-week plan (1-2 hours/week) to teach the Lean Canvas framework to all students. Each week focuses on specific canvas components, with activities that build skills in problem-solving and entrepreneurship.

Week 1: Introduction to Lean Canvas & Problem Identification

- **Goal**: Understand the Lean Canvas and identify problems.
- **Lean Canvas Focus**: Problem.
- **Activities**:
  - **Intro Video (20 min)**: Show What is Lean Canvas? (3 min). Discuss how it simplifies business planning (e.g., a Tyler coffee shop's model or a global app like a carbon tracker).
  - **Problem Brainstorm (30 min)**: Students list problems they've noticed (e.g., crowded school hallways, global water scarcity). Use a worksheet with prompts: "What frustrates people? Who faces this issue?" Example: "Students waste time in lunch lines" or "Plastic pollution harms oceans."
  - **Canvas Start (20 min)**: Introduce the Lean Canvas template (see Resources). Students draft the Problem section individually or in pairs.
- **Teacher Tip**: Encourage both local (e.g., school issues) and global (e.g., climate solutions) problems to spark creativity.

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Week 2: Customer Segments & Validation

- **Goal**: Define target customers and validate problems.
- **Lean Canvas Focus**: Customer Segments.
- **Activities**:
  - **Customer Mapping (30 min)**: Students identify who faces their problem (e.g., students for hallway crowding, coastal communities for pollution). Use prompts: "Who is most affected? Who pays for a solution?"
  - **Mini-Interviews (30 min)**: In class, students pair up to role-play interviews (one as customer, one as researcher) using the Interview Script (see Resources). Example: For a mental health app, ask, "What challenges do you face with stress?"
  - **Canvas Update (20 min)**: Students add Customer Segments to their Lean Canvas, noting specific groups (e.g., "Teens, school counselors").
- **Teacher Tip**: Model an interview to show how to ask open-ended questions.

Week 3: Solution & Unique Value Proposition

- **Goal**: Develop solutions and articulate why they're better.
- **Lean Canvas Focus**: Solution, Unique Value Proposition (UVP).
- **Activities**:
  - **Solution Brainstorm (30 min)**: Use SCAMPER (Substitute, Combine, Adapt, Modify, Put to another use, Eliminate, Reverse). Example: For hallway crowding, propose a schedule app; for pollution, a biodegradable packaging idea.
  - **UVP Discussion (20 min)**: Students define what makes their solution unique (e.g., "Fastest lunch line app" or "Eco-friendly packaging at low cost"). Discuss real-world UVPs (e.g., a local Tyler startup's edge).
  - **Canvas Update (20 min)**: Add Solution and UVP to the Lean Canvas.
- **Teacher Tip**: Highlight real-world examples (e.g., a global startup like SpaceX's reusable rockets) to inspire bold ideas.

Week 4: Channels, Revenue & Costs

- **Goal**: Plan how to reach customers and sustain the venture.
- **Lean Canvas Focus**: Channels, Revenue Streams, Cost Structure.
- **Activities**:
  - **Channels Exercise (30 min)**: Students list ways to reach customers (e.g., Instagram for a teen app, school events for a local solution). Example: A space cleanup tool might use tech conferences.

  - **Revenue/Costs Brainstorm (20 min)**: Discuss how the venture makes money (e.g., subscriptions, ads) and major costs (e.g., app development). Example: A hallway app might charge schools $50/month.
  - **Canvas Update (20 min)**: Add Channels, Revenue Streams, and Cost Structure to the Lean Canvas.
- **Teacher Tip**: Use simple examples (e.g., a lemonade stand's costs/revenue) to clarify.

Week 5: Metrics, Unfair Advantage & Wrap-Up

- **Goal**: Define success metrics and competitive edges, finalizing the Lean Canvas.
- **Lean Canvas Focus**: Key Metrics, Unfair Advantage.
- **Activities**:
  - **Metrics Discussion (20 min)**: Students identify measurable goals (e.g., "# of app downloads" for a mental health tool, "# of schools using hallway app"). Discuss real-world metrics (e.g., a Tyler business's sales targets).
  - **Unfair Advantage (20 min)**: Students note what gives their idea an edge (e.g., "Partnership with local schools" or "Unique AI algorithm"). Example: A space tool might leverage a student's NASA internship.
  - **Canvas Finalization (30 min)**: Students complete their Lean Canvas and reflect: "What did you learn about entrepreneurship?"
- **Teacher Tip**: Celebrate completed canvases with a class share-out or mini pitch (3 minute3 each).

Section 2: Supporting the ETX High School Idea Challenge

For students entering the challenge, the activities above translate into competition deliverables. Teams (1-3 students) use their Lean Canvas to create pitches. Below, each phase's deliverables are outlined, with tips to adapt class exercises.

Phase 1: Pitch Video (60-90 Seconds, Due Week 4)

- **Deliverable**: A 60-90 second video addressing:
  - **Problem**: What issue are you solving? (e.g., "Long lunch lines waste student time" or "Global plastic pollution harms marine life").
  - **Current Solutions**: What exists now, and why is it lacking? (e.g., "No app streamlines lunch lines" or "Current recycling is inefficient").
  - **Why Your Idea is Better**: Highlight the UVP (e.g., "Our app cuts wait time by 50%" or "Our biodegradable material is 30% cheaper").
- **Activities**:

  - **Video Script (30 min, Week 4)**: Use the Pitch Deck Template (see Resources) to draft a script covering Problem, Current Solutions, and UVP. Example: 20 seconds per section, recorded on phones or school cameras.
  - **Practice & Feedback (20 min)**: Teams rehearse and share drafts with peers, using the Feedback Form (see Resources) to refine.
  - **Recording (homework)**: Teams finalize and submit videos via [insert submission platform].
- **Teacher Tip**: Ensure videos are concise. Practice timing to stay under 90 seconds. Use Canva or Google Slides for visuals if needed.

Phase 2: In-Person Pitch (8 Minutes Max, Week 5)

- **Deliverable**: An 8-minute (max) live pitch with Q&A, covering the full Lean Canvas (Problem, Solution, UVP, Customer Segments, Channels, Revenue/Costs, Metrics, Unfair Advantage). See the rubric (see Resources) for scoring.
- **Activities**:
  - **Pitch Development (30 min, Week 5)**: Teams expand their Phase 1 video into a full pitch using the Pitch Deck Template (7 slides). Practice in class, focusing on clear delivery and Q&A prep (e.g., "How will you fund this?").
  - **Peer Feedback (20 min)**: Teams present to another team, using the rubric for feedback.
  - **Final Rehearsal (20 min)**: Run a dress rehearsal with the whole class. Coordinate with organizers for the event (e.g., Google Slides setup).
  - **Reflection (20 min)**: Post-pitch, teams complete the Reflection Journal (see Resources): "What worked? What would you change?"
- **Teacher Tip**: Encourage confident delivery and Q&A practice. Highlight local (e.g., Tyler startup) or global (e.g., Tesla's pitch style) examples.

Tips for Success

- **Time Management**: Use 10-15 minute weekly check-ins to track progress, especially for challenge teams.
- **Encourage Variety**: Inspire local (e.g., better school recycling) and global (e.g., AI-driven health tools) ideas.
- **Feedback**: Use the rubric to guide practice pitches, focusing on Lean Canvas clarity.
- **Motivation**: Recognize milestones (e.g., "Best Video Idea" certificates) to keep teams engaged.
- **Community Connection**: Invite Tyler business owners or industry experts for feedback or as guest speakers.

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Resource List

- **Lean Canvas Template**: Download
- **Interview Script**: Sample questions for customer validation (see below).
- **Pitch Deck Template (Phase 2)**: Download (7 slides: full Lean Canvas).
- **Challenge Rubric**: Scoring guide for Phase 2 pitches (Download).
- **Online Tools**:
  - **Canva**: Free for slides/prototypes (canva.com).
  - **Trello**: Free for project management (trello.com).
- **Local Resources**:
  - Contact the Chamber of Commerce for mentors.
  - Invite a member of the ETX Launchpad
  - Example: Invite a local app developer to discuss pitching tech ideas.

Sample Interview Script

- What issues do you face with [e.g., school efficiency, global pollution]?
- What solutions do you currently use?
- What would make a better solution?

Getting Support

- **Challenge Organizers**: Contact Brandon Reynolds (breynolds@uttyler.edu) for questions or logistics.

Thank you for empowering your students to master the Lean Canvas and compete in the ETX High School Idea Challenge!