LSO

TEACHER'S GUIDE

1 Day / 6 Hours

You've got a whole day to work with your group? That's awesome! With the right approach, tools and guidance, students can achieve a ton and experience many a-ha moments in a one day window.

Workflow

Step 1: Set a Problem (60 minutes)

We should always start with a problem.

There are three ways to go about doing this.

1. You can create the problem using the left sidebar ⚠
2. Students can create the problem using the left sidebar ⚠
3. Recommended: Students can create the problem using the design thinking method accessible under Education and under the right sidebar in Create Idea.

Your best bet is to run a design sprint using the design thinking module.

The purpose of a design sprint is to help students identify a problem worth solving, 'work alone together' to identify a number of potential solutions and then vote on a solution to take forward.

Design thinking is powerful as it encourages participants to empathise with the user problem. It helps students avoid many common entrepreneurial pitfalls, such as:

- Jumping to conclusions with the first idea that comes to mind
- Falling in love with a solution instead of solving a problem
- Avoid group thinking by encouraging many ideas and giving everybody equal votes

The first hour should be used to identify a problem, *not* a solution.
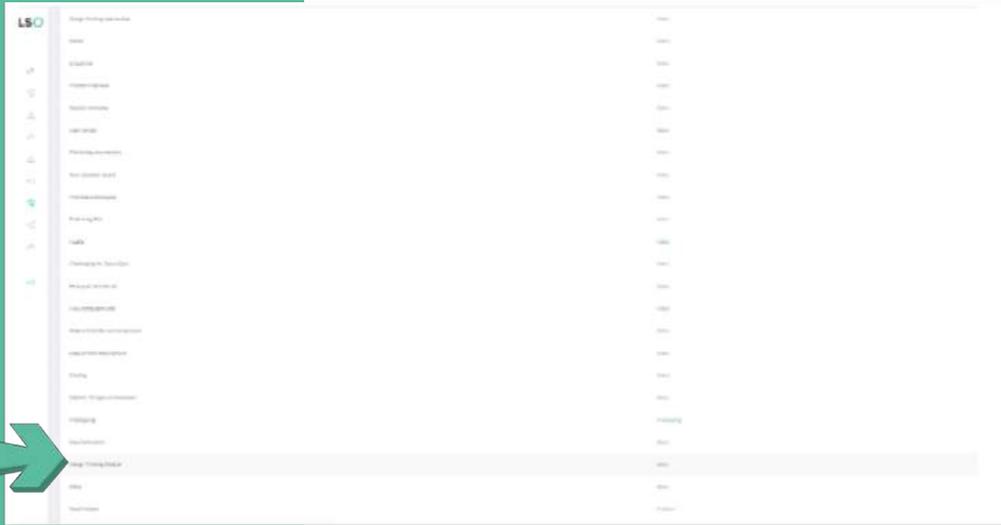
Access the Design Thinking Module in Education
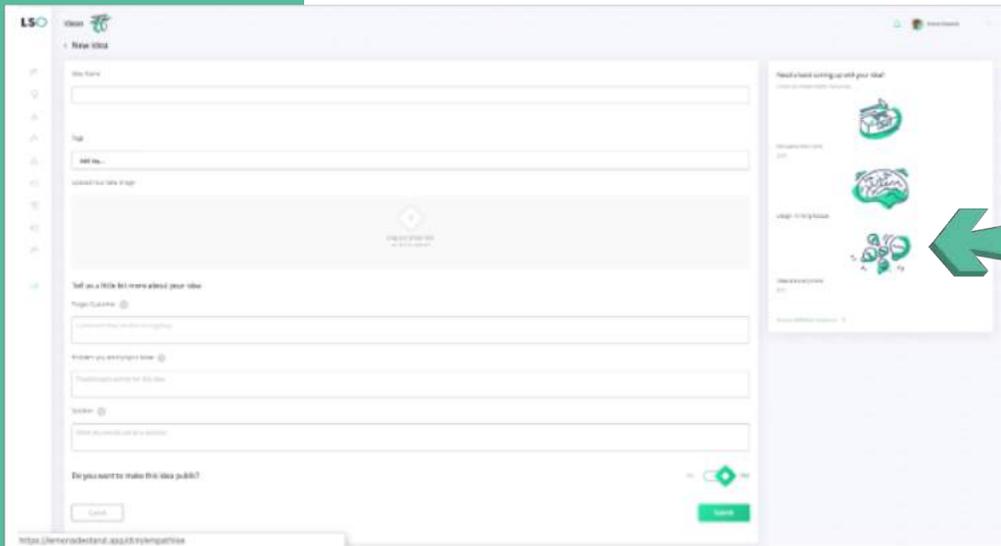
Access Design Thinking Module via the right sidebar in Create Idea

FAQ:

How many students should I have in a team?

Anywhere between 2 and 5.

Resources:

[Problem interview](#)
[Problem prioritisation tool](#)
[Design thinking module](#)
Problem Definition (see next page)

Resource: Problem Definition

Section 1: Turning learnings into problems

After going through the empathy stage you will have captured many learnings. Now it is time to make sense of your learnings! Organise your learnings into categories based on the following questions:

- Have any patterns emerged?
- Is there something compelling that you have heard over and over again?
- Is there a consistent problem that your customer group has faced?

Once you have developed your categories, define a theme for each category. This will help you not only make sense of the information that you have, but also provide direction moving forward.

Let's take the 'gift-giving experience' as an example, here is how a learning can be turned into a problem statement.

Learning: Adults spend a significant amount of time trying to find the right gift.
Theme: Time spent buying gifts.
Insight: Time is an important consideration in the gift buying process.
How Might We: How might we simplify the gift buying process?

Another technique that can be used to define your problem is the Point of View (POV) approach. A POV aims to capture your key problem into an actionable statement that will help you form your How Might We statement. Use the following template to develop your POV statement/s:

[CUSTOMER] needs to **[CUSTOMER'S NEED]** because **[SURPRISING INSIGHT]**

Section 1: Turning learnings into problems

Both the need and insight should come from the learnings that you have uncovered about your customer. Here is an example of a POV statement:

User: An overworked husband
Need: To feel good about recycling
Insight: When things pile up he feels behind. The big pile up of recycling on the curb feels more like generating waste than doing good.

Using the template we would turn this into the following:

Overworked husbands **need** to feel good about recycling **because** big piles of recycling on the curb makes them feel like they are generating waste.

This can then turn into a 'how might we' statement to take into the ideation phase. Here are some examples:

How might we make recycling feel less like waste?
How might we reduce the size of the recycling pile?
How might we eliminate overflowing recycling bins?

Section 2: Common mistakes to avoid when identifying your problem

Identifying your problem is not an easy task - especially if there are lots of learnings to sift through. Here are some common mistakes to avoid when identifying your problem.

1. **Forgetting about the customer:** Make sure your problem links back to the customer group that you are trying to help.
2. **Focusing on specific technologies or solutions:** It is important avoid including a solution or specific type of technology in your problem. You can get into solution mode when you start ideating!
3. **Not forward looking** - A good problem statement needs to look at the future. It should allow people to envisage future possibilities
4. **Imposing limitations** - your problem should not impose any limitations as they will hinder creative thinking when you get to the ideation stage.

5. **Too narrow or too broad** - It is challenging to pick a problem that is not too narrow or too broad. Just remember that your problem statement should allow for creative freedom but also be manageable at the same time.

Section 3: Tips to help you identify the problem

Here are a few tips that may help you when identifying your problem.

1. **Focus on what was surprising** - Choose the problem that you found most interesting or surprising. What sparked the most ideas? What problem did you uncover that you were not aware of?
2. **Identify problems individually first -** Try and identify problems individually based on all the learnings and then get together as a group and discuss your thoughts. You might find that each person in the team identified the same key problem.
3. **Get an outside perspective** - Share your learnings with someone who is not part of your team and get their thoughts. Take on their feedback when identifying the problem you want to focus on.

Remember that if you pursue a problem and realise during the ideation stage that the problem is not 'big enough', then go back to the define stage and focus on a new problem.

Step 2: Identify a Solution (60 minutes)

Now that we've defined a problem, it's time to identify a solution.

Initially, you'll want to encourage lots of ideas, because the first idea that comes to mind is usually not a very good one. By actively encouraging lots of ideas, we're more likely to not only get to breakthrough ideas, but also find ideas at the intersection of many of the proposed ideas.

Students can either:
1) Propose a solution to the Problem that you set in the Problem window
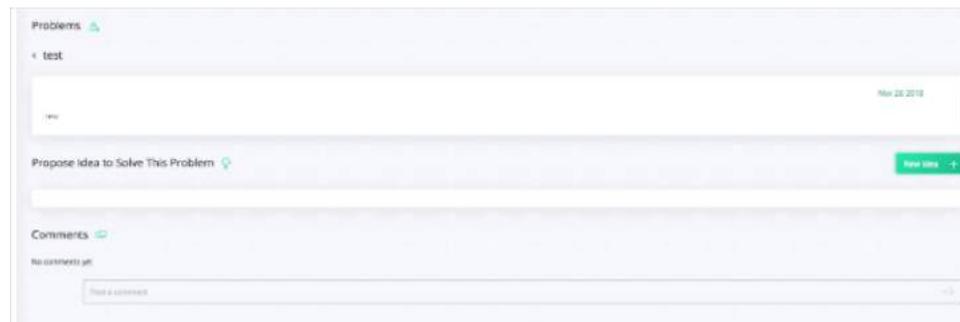
1) Propose a solution to the problem they proposed (using the same window)
2) **Recommended:** Use the design thinking module to identify lots of solutions and vote on the best one.

Step 2: Identify a Solution (60 minutes)

Resources:

Check out the many Idea Generation tools, accessible through the Education page on the left sidebar, that provides a wealth of resources and inspiration to help students come up with better ideas, including:
- Problem Interview
- Solution Interview
- Strategy Canvas
- 30 Elements of Value
- Doblin's 10 Types of Innovation
- Analogs
- Antilogs
- Business Model Map for the Future

Take a moment to read through the tool pages to familiarise yourself with each before introducing them to students.

Step 3: Create a Lean Canvas (60 minutes)

Traditionally, entrepreneurs would put together 100 page business plans, full of financial projections based on untested assumptions. More often than not, business plans don't survive first contact with a customer, *especially* in a world where things are changing so quickly and especially when we're taking something fundamentally new to the market. Under such circumstances, it's critical that we test our assumptions, fast, in order to determine what customers actually want.

The Lean Canvas is designed for entrepreneurs seeking to validate their idea fast. It helps people capture the building blocks of their would-be business model in one page, so that they can get busy testing, learning and moving from what Ash Maurya calls "plan A to a plan that works".

The lean canvas is accessible from an Idea's page.

Students should complete the lean canvas in the following order:
1. Customer Segment
2. Problem (already identifed assumptions in step 1)
3. Solution (already identified assumptions in step 2)
4. The rest

Guidance is provided around *what* students should enter under the respective sections. Simply click on the question mark to learn more about any entries.

Students should limit entries in each section to 3 to 5 items that are of most relevance to their idea.

Step 4: Create Assumptions (60 minutes)

Take Uber's business model. There are a number of assumptions that underpin its success. For example, people will use smartphones and have access to the internet, they'll be happy to pay through their phones or they prefer not to use taxis and so on. But there is one leap of faith assumption underpinning Uber's success above all else…
Trust.

Once students have completed their lean canvas, they need to determine what their make-or-break assumptions are.

It's critical that they don't overdo it and:
1. Limit assumptions to those that have the greatest impact.
2. Avoid paralysis by analysis.
3. Focus on the riskiest assumptions only.
4. Focus on what they don't know instead of falling into the trap of confirming what they already do know to be true.

In order to focus their efforts on only the most risky and impactful assumptions, the table below offers a simple approach to help students prioritise assumptions. First, divide how impactful the assumption will be if it turns out to be true/false by how certain you are that the assumption is true. Second, take this result and divide it by whether or not the assumption is something that matters today, and that you can test today, to determine the final number. The higher the number, the higher the priority. This forces students to not only focus on the most impactful assumptions, but also on those that you can actually test today.

	Step 1				#	Step 2		
	Low 0	High 10	Low 0	High 10		Today 1	Future 5	Rank
	Impact		Certainty			Time		
Assumption 1	9		3		3	2		1.5
Assumption 2	8		4		2	3		0.66
Assumption 3	7		5		1.4	4		0.35

There's also a handy quiz here to help students get their heads around defining assumptions. Assumptions will come straight out of the lean canvas - it's just a matter of defining the most important ones.

Step 5: Validation Board (15 minutes)

Step 5 is performed in conjunction with Step 6 (prototyping).

Once students know their assumptions, they'll need to define key metrics and build a prototype to test whether those assumptions are true - just like a science experiment! Their validation board will help you to keep track of which of their assumptions are true and which are false, and based on that help them determine whether to pursue the idea, adapt to new information or call a spade a spade and try a new idea.

Students can enter their target metric which could be something like the number of positive responses received from 10 interviews, or a desired clickrate of 5% on a Facebook ad.

The actual result can be entered and after numerous rounds of testing, the student can determine whether the assumptions is true or false by clicking on the tick or cross.

This result will get updated in the LSO dashboard under 'experiments run' and 'assumptions validated'.

Step 6: Prototyping (90 minutes)

Step 6 is performed in conjunction with Step 5 (validation board).

In order to test their assumptions, students will need to build prototypes.

Prototypes could be something as simple as user surveys, through to online ads, landing pages and functional mobile apps. You can learn more about a number of prototyping tools that students can use to test their assumptions in the Prototyping section, accessible under Education in the left sidebar.

One of the best ways to test an assumption is by running an online ad to acquire traffic, and have that traffic sent to a landing page (a one page website), where we can track sign-ups or 'pre-orders' to a product, as a means to gauge market appetite for our idea.

For example: a Facebook ad combined with a landing page built with LeadPages works really well. Both tools offer built-in analytics so that students can easily track key metrics and import this information into their validation board (step 5).

Step 7: Pitching (80 minutes)

You should give students about 45 minutes to prepare their pitch and 5 minutes to pitch. We have allocated 80 minutes for this section, assuming there are five teams pitching. You can allocate additional time if you deem it necessary, and you might want to incorporate some Q&A afterwards to get students to think on their feet.

What goes into their pitch deck should simply come straight out of their lean canvas and validation board.

1. What was their idea?
2. What did the business model look like?
3. What did they build to test it?
4. What did they *learn*?

These are key questions they'll need to answer in their pitch.

Students can download a pitch template PowerPoint document, watch some example pitch videos and get some pitch pointers in the Pitching section, accessible through Education in the left sidebar.

Total Time: 375 minutes / 6 hours and 15 minutes

Thank You