

The Heilmeier Questions

Use these questions to make sure your project idea is clear, compelling, credible, and ready for fuller proposal development. These prompts are starting points that can be adapted to nearly any grant funding opportunity. More info [here](#).

01. What are you trying to do?

- **What this asks you to explain:** What problem or need will your project address, what do you want to accomplish, and how will your proposed approach help?
- **Start here:** Write one sentence about the problem, one about the project's goal, and one connecting the goal to your approach.

02. How is it done today, and what are the limits of current practice?

- **What this asks you to explain:** How is the problem currently addressed, what do existing approaches accomplish, and what important limitations remain?
- **Start here:** Describe the current approach, its principal strength, its most important limitation, and why that limitation needs to be addressed.

03. What is new in your approach, and why do you think it will be successful?

- **What this asks you to explain:** What will your project do differently, why does that difference matter, and why should a reviewer believe the approach can work?
- **Start here:** Identify what is new, connect it to the problem or limitation, and name the evidence, experience, preliminary work, partnerships, resources, or logic that support your approach.

04. Who cares? If you are successful, what difference will it make?

- **What this asks you to explain:** Who will benefit from the project, and what practical, scientific, societal, or other meaningful change could result?
- **Start here:** Name who benefits, the expected near-term result, and the broader difference the work could make. Keep your claims specific and supportable.

05. What are the risks?

- **What this asks you to explain:** What could prevent the project from succeeding, and how would you reduce or respond to those challenges?
- **Start here:** Identify the risks most likely to affect the project's main goal. For each, note how you would respond and how you would know an adjustment is needed.

06. How much will it cost?

- **What this asks you to explain:** What people, materials, equipment, data, services, travel, partnerships, or other resources will the project require, and why are they necessary?
- **Start here:** List the major resource needs and connect each one to a project activity, milestone, or expected result.

07. How long will it take?

- **What this asks you to explain:** What are the major stages of the project, when will they occur, and why is the proposed timeline realistic?
- **Start here:** Identify three to five major milestones. For each, note its timing, what will demonstrate completion, and anything that must happen first.

08. What are the mid-term and final “exams” to check for success?

- **What this asks you to explain:** How will you know whether the project is making appropriate progress and whether it ultimately succeeded?
- **Start here:** Identify at least one progress check and one final check. For each, state what you will assess, the expected result, when it will be assessed, and what information will demonstrate success.