

How to Create a Compelling Scientific Poster

Every poster (and presentation) must answer the following five essential questions (known as the Heilmeier Catechism):

1. What is the problem you are tackling?
2. What is the current state-of-the-art?
3. What is your key make-a-difference concept or technology?
4. What have you already accomplished?
5. What is your plan for success?

A nine-slide poster might look like this:

Problem Statment	State-of-the-Art	Key Concept
Accomplishment Number 1	Title and Visual "Logo"	Accomplishment Number 2
Accomplishment Number 3	Plan for Success	Summary and Conclusion

Note: Many people can identify problems; few can come up with a feasible and logical approach to solving the problem. The conceptual breakthrough slide is really the **most important** part of the five questions (assuming that you have identified a problem that is worth solving and that has not already been solved!).

An early stage project, short on accomplishments to date, might focus more on the conceptual/algorithmic/technological elements that convince the viewer that you have a chance to be successful. A more mature project would not have to convince the viewer that the approach is promising because there would be many accomplishments to share. Such accomplishments would be things like (1) deployment of a testbed, (2) development of a new algorithm, (3) simulations and evaluations, etc.

This schematic is also reasonable for a 15-minute talk.

If your project is part of a larger, overall project, make a single graphic for the overall project that allows each member of that project to easily identify the part that s/he plays, and use this as the basis for introducing each of the posters and/or presentations involved.