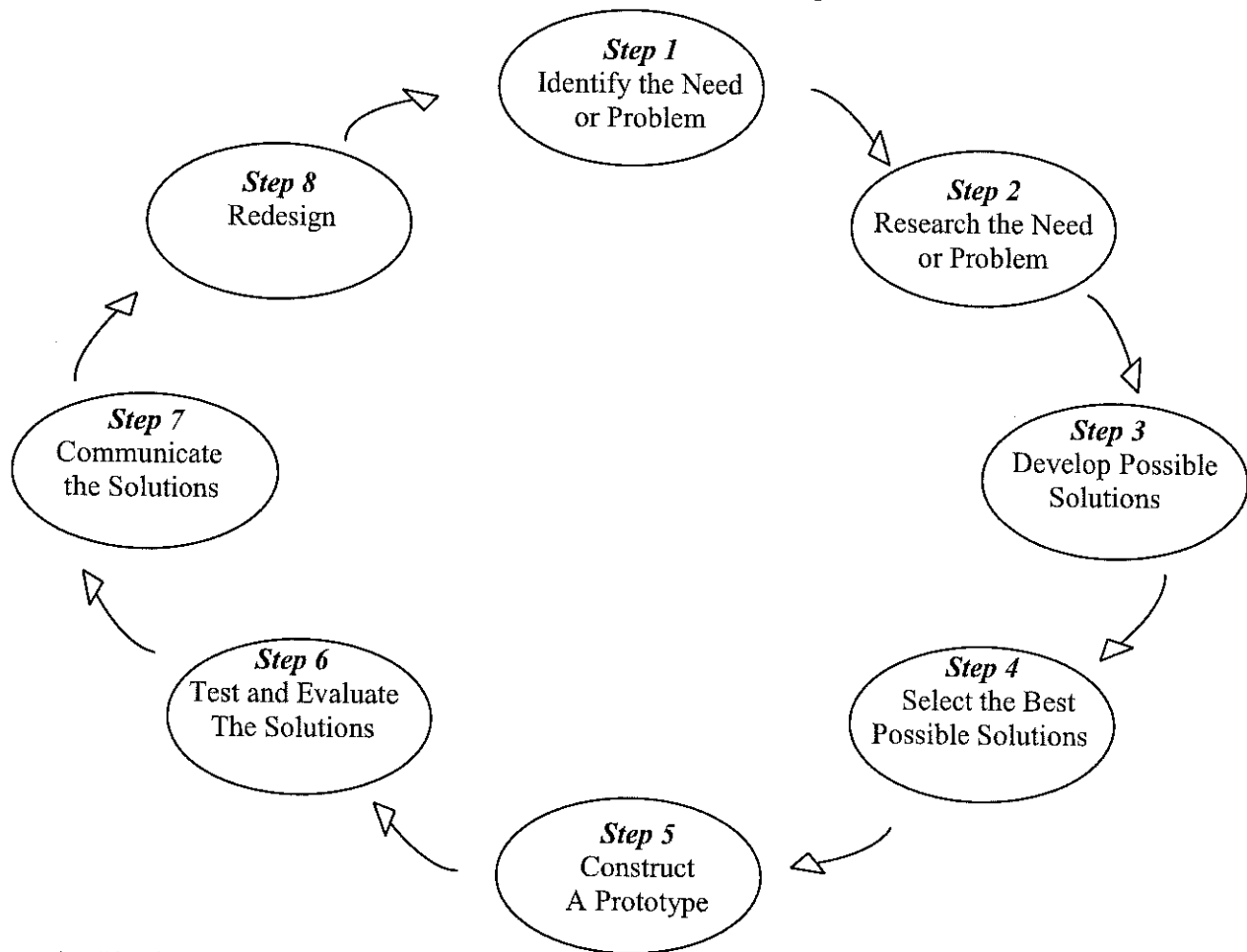


## *Steps in the Engineering Design Process*



1. Identify the need or problem
2. Research the need or problem
  - Examine current state of the issue and current solutions.
  - Explore other options via the internet, library, interviews, etc.
3. Develop possible solutions
  - Brainstorm possible solutions
  - Draw on mathematics and science
  - Articulate the possible solutions in two and three dimensions
4. Select the best possible solution(s)
  - Determine which solution(s) best meet(s) the original requirements
5. Construct a prototype
  - Model the selected solution(s) in two and three dimensions
6. Test and evaluate the solution(s)
  - Does it work
  - Does it meet the original design constraints
7. Communicate the solution(s)
  - Make an engineering presentation that includes a discussion of how the solution(s) best meet(s) the needs of the initial problem, opportunity, or need.
  - Discuss societal impact and tradeoffs of the solutions
8. Redesign
  - Overhaul the solution(s) based on information gathered during the tests and presentation