



## Forgiveness Element 9: What Can You Do?

<b>Craftsmanship</b>	<b>What Can You Do?</b>
<p><b>Age Level</b> All Ages</p> <p><b>Time</b> Variable</p> <p><b>Resources</b> Variable</p> <p><b>Objectives</b></p> <p>Students will:</p> <ol style="list-style-type: none"><li>1. Understand the importance of using inventiveness for the benefit of humanity, through unconditional caring.</li><li>2. Apply the criteria for product design and evaluation.</li></ol>	<p><b>Teachers, Parents or Self-Guided Learners will</b></p> <ol style="list-style-type: none"><li>1. Picture the unseen beneficiaries of talents and skills.</li><li>2. Imagine inventive gifts for society that help not only friends but those who have caused harm.</li><li>3. Create and evaluate a prototype for a dream project.</li></ol>

## What Can You Do?



Around the world, young people find good uses for their creative ideas. A student in Lesotho had time to think while raising his sheep. He invented an alarm that would ring at his grandmother's house so he would know if anyone was trying to enter her home. He went on to develop robotics and solar inventions. Soon he traveled to the city to work in an electronics company.

A film called *The Boy Who Harnessed the Wind* tells a similar story of a boy who saw a need and devised a way to bring wind power to his community.

Do you have an engineering or electronics idea? How can it help your family? Now stretch beyond and imagine how it can help not only your own family but many others, regardless of whether they have helped or harmed you. How can your idea make the world a better place for humankind? The mark of true forgiveness is when you can give service to others even if they have hurt you.

What concept have you recently learned in math or science?

Perhaps you would rather write a story that changes hearts. You may want to write a whole book of short stories, based on the information in the last unit, which will strengthen your future communications skills. Or you may want to embrace an engineering challenge that helps your community and prepares you to meet a challenge needed by people throughout society.

Go to someone in the community who needs your skills. Find someone with a different background or belief system. Offer to serve as an apprentice. Before you do, bring something to show your sincerity about offering help.

**Using the following template, apply your skills to help address a current problem in a community *different from your own* or for *people you may never meet*.**

## Make Your Dream Design

Think about the engineering challenge before you based on the video. Answer the questions about your project:

1. What problem do you seek to solve?
2. Who are the people affected by the problem? How will your solution help them?
3. Number the criteria, in order of importance, that you will need to consider in the creation of such a product:
  - Cost and availability of resources
  - Impact on the environment
  - Safety
  - Reliability
  - Cultural considerations (will people use it?)
  - Aesthetics (how does it look?)
4. Next, draw a design or prototype of the invention you have in mind.
5. Collect makeshift materials.
6. Measure and arrange the materials carefully to assure none are wasted. (Measure twice; cut once.)
7. Build your prototype.
8. Test your prototype or show it to a sampling of users who will evaluate it (a focus group). Ask them to assess its likely effectiveness according to your list of criteria. (A partner may want to help you survey people anonymously.)
9. Make any needed improvements. Test the device again.

10. Discuss with your learning partners the value of forgiveness as a practiced attribute for an engineer or scientist. Consider these points:

- Each experiment is an opportunity to learn.
- It is more logical to thank people for their honesty rather than to feel offended if they tell you a part does not work reliably.
- Imagine what would happen if patients did not report true symptoms to researchers searching devices for cripples or to carmakers testing safety features.
- Engineering real benefits for society requires a creative mind and a listening ear that does not perceive input as criticism, along with a heart practiced in forgiveness for co-workers and for those served.

