

PROJECT POSSIBILITY  
PLANTING THE SEED OF RESEARCH  
BY  
COURTNEY ELAINE HUTCHINS

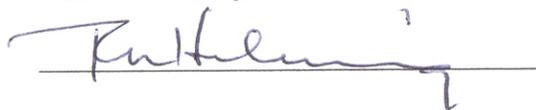
---

In partial fulfillment of a bachelors degree with honors in  
Health Sciences

THE UNIVERSITY OF ARIZONA

MAY 2011

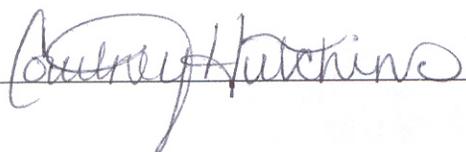
Approved by

A handwritten signature in black ink, appearing to read "R. Hilwig", written over a horizontal line.

Dr. Ronald Hilwig  
Sarver Heart Center

STATEMENT BY AUTHOR

This thesis has been submitted in partial fulfillment of requirements for a degree at The University of Arizona and is deposited in the University Library to be made available to borrowers under rules of the Library.

Signed:  \_\_\_\_\_

**Abstract:** After working closely with those involved in the cardiopulmonary resuscitation laboratory at Sarver Heart Center, I realized how important community outreach was to the research process. The science and effort behind research is of little value if its potential benefits are shared with no one, and I knew I had to do my part in this process. I have been able to learn so much through becoming involved in research and in science. I know that if more young students knew what the scientific world had to offer—they might seek it out. For this thesis project I was able to take research into the community in the form of science, and in the form of information about what it is, how each student can get involved, and how an entire society can benefit from it.

**Behind the Project:** Project Possibly came about from the beginning of a conventional thesis project in which the literature from the Cardiopulmonary Laboratory at Sarver Heart Center would be analyzed and reported on. Upon beginning to read the literature and discussing the history of the research with Dr. Ronald Hilwig, it became clear that such a large part of the research was not presented in the literature at all. Research is designed and carried out in order to find answers to questions that will help increase our livelihood and our knowledge about the world around us. In order for research to create any positive change in our society, its findings must be shared on a community level. Without the sharing of pertinent information and developments in science, healthcare, and many other fields, the beneficial effects of research would be more than limited. The research team at Sarver Heart Center has done far more than follow the scientific method to answer the question “How can the CPR be improved?” They have added an additional question to their inquiry “How can we ensure that our positive findings will reach as

many people as possible?” From personally training local emergency response organizations, to interacting with health organizations on a national stage, the researchers responsible for Continuous Chest Compression Cardiopulmonary Resuscitation have allowed their research to be the reason for thousands of saved lives. Project Possibility was born from the idea that each person, or group of researchers, can enact a positive change in the community if they simply have the desire to do so.

The components of the project consist of an interactive website created in order to give community members of all ages easy access to the new CPR information. The website includes a tutorial on the basics of CPR including anatomy, the new methods of resuscitation, and even a little history. The site also includes links to local and national sites and information on how to get certified, how to volunteer, and how to donate to many of the organizations affiliated with heart health. It is important to note that the website also serves as an example to the students involved with Project Possibility. It is a concrete example of how passion for a cause can lead to personal involvement, college education, and community improvement. Project Possibility itself is an interactive presentation designed for high school students. The project was designed to introduce the world of research to students who may have never stumbled upon it otherwise, and to introduce each potential community contributor to the endless opportunities ahead of them.

**The Website:** *<http://www.wix.com/courtshmort/cprtraining>*

**About Project Possibility:** The future of research and advancement in the world of healthcare and science certainly rests in the hands of those students we see standing on the corner of local high schools at about 3 o’ clock each afternoon, waiting for the bus.

While a few students may have grown up wanting to be scientists, many students go about their daily lives with no real position on what their involvement in science will be—much less what role research plays in their daily lives. In a world today where the average college graduate makes twice the salary of someone with just a high school diploma, getting students excited about research is not just important. It is necessary.

Project possibility takes the potential research has to change lives one step further. Rather than present the findings of the CPR research group alone, the project aimed to get students interested in research and in science as a whole. The project involved dispelling rumors about research; the white coats, the mad scientists, the impossible formulas, and centered on how broad research really is and how truly intertwined it is with our daily lives whether we know it or not. Many students do not realize that much of university funding comes from research projects, and that research projects come from people simply asking questions and using what they know, and what they don't know, about a subject to try and come up with answers. When considering whether or not to go to college, students often think that if they have no interest in their high school classes that they will certainly like college even less. The fact of the matter is that this widespread belief could not be more false. Project Possibility presents to students a new mantra: if you choose to make it so, college can be about finding something you love, learning all you can about it, and using your education to effect change around you.

Project possibility was presented in six high school freshman classes at Catalina High School in Tucson. This high school is among the bottom in the Tucson Unified School District in terms of funding, and over eighty percent of its student body would be first generation college attendees—if they go. With the help of Mark Hannah, the

school's college preparation counselor, Project Possibility was launched to several hundred freshmen. In a short fifty-minute class period, the students were exposed to the reality of research, what it can offer them, and what they can offer it. They were told by someone who experienced it herself just how much going to college can change a life, the future of a family, and just how much getting involved with research on a subject she was passionate about could lead her to doing something that would be personally fulfilling and community enriching for the rest of her life. By the end of the presentation, the students were encouraged to ask themselves an important series of questions: "what do I care about?" "What do I find interesting?" "What would I like to change out my life or my community?" and "how can I make this part of my future?"



## **Presentation Outline:**

- I. General Presentation overview: (PowerPoint and handouts)**
  - a.** Introduction to my story and challenges I have faced in education
  - b.** My college experience
    - i. How I found my passion for public health education and medicine and how it lead me to my major.
    - ii. How I found out about research
  - c.** Research
    - i. Myths and facts
    - ii. What it involves/how it effects us
    - iii. The broad possibilities
    - iv. What college can offer beyond a degree
      1. Little known facts
  - d.** My research
    - i. <http://www.wix.com/courtshmort/cprtraining>
    - ii. How easy it really is to make a difference
  - e.** Student options
    - i. How your passion can take you places
      1. Personal stories
      2. Finding a cause
    - ii. Getting involved
      1. Volunteer organizations
    - iii. Asking for help/ using resources
      1. Mentors
      2. Grants, scholarships
    - iv. Making a difference for the student, and for the community
  - f.** Questions, discussions and thinking activities

**Conclusions:** After developing and implementing this project, it became clear that the initial thesis that research can offer far more to people than just science is more than true. The unpublished side of research, the community outreach, the progression of human health, the opportunities for education, the opportunities for funding, and much more is a side that must be exposed to the next generations as early as possible. Students need to know what is out there and what is available to them, and if every researcher spent just a little more time interacting with the community that might be affected by their work—the research process would begin to become cyclical as the research process enticed the youth to begin to ask questions themselves. The full manifestation of what research truly has to offer to humanity is but a few outreach projects away.