

**EXAMPLE: Project Work Plan (for Research)**

Date of Planning Session: 7/7/1273

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| **Project Name:** | **Magic Beanstalks for Prosperity** |
| **Principal Investigator:** | **Dr. Jack Jackman (Agriculture Studies)** | **Team Members:** | **Dr. Peasant (Genetic Engineering), Mr. Magician (Magic Arts), Ms. Merchant (Business)** |
| **Estimated Project Start Date:** | **7/07/1273** | **Estimated Project End Date:** | **7/06/1274** |

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| **Before You Get Started: Important Questions to Answer** |
| **1) What problem or opportunities are you trying to address**? | Research shows that extreme drought and poverty in our community has been caused by a thieving giant stealing our community's magic singing harp. |
| **2) How will your project address this issue?** | Develop a magic bean that grows a beanstalk tall enough to reach the giant's castle in the sky so we can reclaim our magic singing harp. |
| **3) Who is the target population**? | The community of Far-Far Away. |
| **4) What potential impact can your project have (long and short term)?** | Short term: failed prototype magic beans developed will feed starving community members. Long-term: successful magic bean prototypes will be planted, grown, and used to reach the giant's castle in the sky to reclaim our magic singing harp and revive the land of Far-Far Away. |
| **5) How will you measure the project’s success?** | 1) count the # of Far-Far Away citizens fed by the failed prototype beans; 2) at least one successful magic bean prototype will be developed and planted; 3) interview a focus group of 25 members of the Far-Far Away community with pre- and post- surveys administered before planting of the successful prototype bean and after. |
| **6) What makes this different/better/more innovative than previous research/creative efforts?** | Other researchers have tried to build ladders or stair steps to the giant's castle in the sky, yet all have failed due to structural flaws. By developing a prototype of a magic beanstalk that naturally reaches to the sky for sunlight, we are building on previous research that proves the structural soundness, fast growth rate, and upward growing pattern of magic beanstalks.  |
| **7) Who do you need to work with to accomplish your goal? (team-members/partners/administrators/etc.)** | Dr. Peasant (Genetic Engineering), Mr. Magician (Magic Arts), Ms. Merchant (Business), the Farmer’s Union & University of Far-Far Away Facility Coordinator. |

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| **Goal or Research Question 1:**  |  Based on high growth rate and strength, which parent plant is best-suited for a protoype magic bean? |
| **Objective 1.1** |  Identify best suited parent plant to develop initial bean prototype. |
| **Key Action Step** | **Timeline (important dates or length of time to complete)** | **Required Resources (personnel, data, supplies, travel, etc.)** | **Milestones** | **Person(s) Responsible** | **Comments** |
| Complete literature review.  | Now-08/31 |  Library access/multiple scientific scrolls | Literature Review complete (1 scroll written). | Dr. Jackman, Dr. Peasant, friendly librarian monk | Dr. Peasant has a friend who is a friendly librarian monk who will help us find relevant scrolls at the library. |
| Identify best practices from literature review. |  9/1-9/7 | Literature Review | A list of best practices created that identify possible parent bean candidates, best methods for nurturing each type of bean, best methods for measuring height and sturdiness of beanstalks, and best-suited magic dust. | Dr. Jackman, Dr. Peasant, Mr. Magician | Get permission from Dr. Jackman's mom to use her land next week. |
| Gather planting supplies and incorporate best practices from literature review into developing an initial parent plant prototype.  | 9/8-9/15 | List of best practices, variety of beans from potential parent plants, ensure access to soil, water, sunlight, fertilizer for planting day. | 1) Fertilized soil prepared; 2) Markers prepared; 3) tools and supplies gathered; 4) List of volunteers for planting day. | Dr. Jackman, Dr. Peasant, Ms. Merchant | Ms. Merchant will find and organize the volunteers for planting day. |
| Plant parent beans using best practices for each.  |  16-Sep |  Selected parent beans, soil, water, sunlight, fertilizer, planting beds, planting tools, bean markers | 1) Control and study group parent beans planted and neatly marked. | Full team and volunteers | NA |
| **Objective 1.2** | **Measure the height and sturdiness of parent plants produced.** |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
| Day 7: Once bean plants sprout, one grain of magic dust is sprinkled on each. | 23-Sep | water, tools, magic dust, stop watch and clock, measuring tape | 1) Data gathered on how long each plant takes to sprout; 2) Data gathered on the time the magic dust grain was placed on each sprout; 3) Data gathered on plant strength. | Dr. Jackman, Dr. Peasant, Mr. Magician. | Mr. Magician applies the magic dust while Dr. Jackman keeps track of time and weight and Dr. Peasant measures and records growth rates and weight during strength tests. |
| Day 8: Nurture plants and collect data | 24-Sep | (same) | (same) | (same) | Mr. Magician offers assistance when magic plants get out of control while Dr. Jackman and Dr. Peasant continue collecting data for growth and strength tests. |
| Day 9: Nurture plants and collect data | 25-Sep | (same) | (same) | (same) | (same) |
| Day 10: Nurture plants and collect data | 26-Sep | (same) | (same) | (same) | (same) |
| Day 11-13: Repeat parent plant test with new crop for accuracy. | Sep 27-29 | (same) | (same) | (same) | (same) |
| Day 14-16: Repeat parent plant test with new crop for accuracy. | Sept 30-Oct 2 | (same) | (same) | (same) | (same) |
| **Objective 1.3** | **Analyze and evaluate collected data to select possible parent plants with desired attributes.** |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
| Select parent plants based on consistent data showing greatest strength and growth rate. | 3-Oct | Data | 1) Prototype bean selected and separated from unselected beans. | Dr. Jackman and Dr. Peasant. | NA |
| **Objective 1.4** | Measure the height and sturdiness of parent plants produced. |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
| Gather all unselected beans. | 4-Oct | Unselected beans, harvest tools, sacks, ties for sacks | 1) Unselected beans gathered into sacks; 2) Data collected on number of sacks filled with beans. | Ms. Merchant and volunteers | NA |
| Distribute most unselected beans with a few kept as possible future parent plants for additional testing. | 5-Oct | Sacks of beans, calculator | 1) Unselected beans distributed; 2) Data collected on number of people fed; 3) List of organized parent plant beans and beans stored. | Ms. Merchant and volunteers | NA |

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| **Goal or Research Question 2:**  |  Will genetically engineered magic beans grow a beanstalk tall enough to reach the giant's castle and stong enough for Dr. Jackman to climb? |
| **Objective 2.1** |  Pilot 1: Pilot test prototype. |
| **Key Action Step** | **Timeline (important dates or length of time to complete)** | **Required Resources (personnel, data, supplies, travel, etc.)** | **Milestones** | **Person(s) Responsible** | **Comments** |
| Plant prototype beans. | Oct. 4 | Selected prototype beans, planting tools, water, fertilizer, soil | 1) Prototype beans planted. | Dr. Jackman, Dr. Peasant, Mr. Magician | NA |
| Watch for first sign of bean sprout. | Oct.5 | Flashlights | 1) Phone call to Mr. Magician at first sign of sprout. | Dr. Jackman and Dr. Peasant. | NA |
| Add substantial magic fairy dust and nurture. | Oct. 5 | magic fairy dust, water, fertilizer | 1) Giant magic beanstalk prototype grown. | Mr. Magician | Add water and fertilizer overnight as needed. |
| **Objective 2.2** | **Test sturdiness and height.** |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
| While distributing beans, gather volunteers of similar height, weight, and strength as Dr. Jackman. | Oct. 6 | Sign-up sheet, legal disclaimer forms, possible whip to persuade volunteers if beans are not enough | 1) list of volunteers; 2) legal forms signed by each volunteer | Ms. Merchant | Make sure suitable volunteers sign a legal disclaimer form before they climb in case of accidental death or dismemberment. |
| First volunteer begins the climb.  | Oct. 7 | Arrows to shoot at volunteer if he tries to turn back | 1) Volunteer reaches top (or does not and Objective 2 must be repeated with a different parent plant). | Ms. Merchant and archers | If they make it, then Dr. Jackman follows, if not repeat experiment with more magic powder or different beans until appropriate magic beanstalk is developed. |
| Repeat all previous steps as needed until appropriate beanstalk is grown. | repeat | repeat | repeat | repeat | repeat |
| **Objective 2.3** | **Dr. Jackman climbs the beanstalk to reclaim the magic singing harp and bring back prosperity to Far-Far Away.** |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
| Climbs beanstalk | Unknown | Weapon, sack for storing the harp, long rope for coming down quickly, etc. | 1) harp retrieved | Dr. Jackman |  Don't forget to be sneaky. |
| **Objective 2.4** | **Publish data.** |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
| Create and send final report to the King.  |  Within 1 month of Dr. Jackman’s return. | Scrolls and quills. Salary. | 1)final report created; 2)final report delivered to King. |  Team |  Dr. Jackman and Dr. Peasant write final report and deliver to King. |
| Gather all data and publish. |  Within 9 months of Dr. Jackman’s return. | Scrolls and quills. Hefty salary for Dr. Jackman and Dr. Peasant. |  1)data published in 3 scrolls and housed at the most prestigious libraries in the world including one in Far Far Away. |  Dr. Jackman and Dr. Peasant |  NA |

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| **Goal or Research Question 3:**  |   |
| **Objective 3.1** |   |
| **Key Action Step** | **Timeline (important dates or length of time to complete)** | **Required Resources (personnel, data, supplies, travel, etc.)** | **Milestones** | **Person(s) Responsible** | **Comments** |
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| **Objective 3.2** |  |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
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| **Objective 3.3** |  |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
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| **Objective 3.4** |  |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
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| **Goal or Research Question 4:**  |   |
| **Objective 4.1** |   |
| **Key Action Step** | **Timeline (important dates or length of time to complete)** | **Required Resources (personnel, data, supplies, travel, etc.)** | **Milestones** | **Person(s) Responsible** | **Comments** |
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| **Objective 4.2** |  |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
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| **Objective 4.3** |  |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
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| **Objective 4.4** |  |
| **Key Action Step** | **Timeline** | **Required Resources**  | **Milestones** | **Person(s) Responsible** | **Comments** |
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