Project Management Evaluation & Assessment
Proposal Writing Workshop IV
November 11, 2009

Introductions
ORSP Proposal Development Team
Ann Gates, Associate Vice President for Research
Claudine Riccio, Associate Director
Flo Dick, Coordinator of Pre-Award Services
Malu Picard-Ami, Proposal Development Specialist

Workshop Topics
Components of a Project Management Plan
Project Timeline
Project Evaluation & Assessment Plan

COMPONENTS OF A PROJECT MANAGEMENT PLAN
Project Management Components

- Personnel & organizational structure
- Planned collaborations
- Project implementation schedule
- Project risks and limitations
- Optional subsections
  - Financial management & institutional resources
  - Subcontract management
  - Acquisition and maintenance of instrumentation or equipment

Personnel & Organizational Structure

- Describe qualifications and experience of the Principal Investigator (PI) and project team
- Describe how overall program will be directed and implemented
- Clearly lay out the various participants and their roles and responsibilities in the project
  - Relate to activities in project
  - Describe reporting structure
- May include an organizational chart to show personnel interaction
- Explain role of advisory committees if part of project

Activity: Review of Examples

Criteria:
- Presents team’s qualifications and experience?
- Describes roles and responsibilities?
- Describes reporting structure?

Question:
- How would you show how the project will be implemented?

Project Implementation Schedule

- Outline activities/tasks of the proposed project as they relate to the project goal and objectives, including evaluation
- Set a timeline for various stages of the project
- Define the milestones associated with the project
- Provide benchmarks, if applicable
- Describe how the project will be tracked, e.g., reporting structure
**Financial Management & Program Risk**

Provide information on:
- Financial systems and safeguards used to ensure the reliable management of program finances
- Project and Institutional resources
- Program risks - describe alternate plans if necessary

**Subrecipient Management & Planned Collaborations**

- Identify subrecipients and existing relationship
- Describe means and structure of communication
- Describe processes used to manage subrecipients to ensure program goals and requirements are met
- Provide information on contractual arrangements
- Identify and describe existing relationships or plans to expand relationships with internal or external collaborators
- Describe and define collaborative proposal partnerships

**Acquisition and Maintenance of Instrumentation or Equipment**

**Answer the questions:**
- How will the acquisition be made?
- Who will be in charge of overseeing it?
- Who will have access to the equipment?
- How will it be scheduled?
- What mechanisms will be put in place for training?
- Where will the equipment be housed?
- How will it be maintained?
- How will it be sustained on a long-term basis?

**Some Notes:**

Handouts - Collaborations & Instrumentation Acquisitions
DEVELOPING A PROJECT TIMELINE

Don’t leave it up to the reviewers’ imagination as to how you will get it done

- Include the evaluation effort early in the timeline
- Indicate initiation and duration of activities
- Identify milestones and expected dates of completion
- Balance the amount of detail with information needed

Provide a realistic timeline

Types of Project Timelines

- Basic timelines
- Gantt chart is a graphical representation of the duration of tasks against the progression of time
- Pert chart is a model for project management designed to analyze and represent the tasks involved in completing a given project

CREATING A BASIC TIMELINE
**Basic Project Timeline**

<table>
<thead>
<tr>
<th>Year</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1</td>
<td><strong>Plan experiment</strong></td>
</tr>
<tr>
<td>January - March 2010</td>
<td>Management review</td>
</tr>
<tr>
<td>April - June 2010</td>
<td>Collect data</td>
</tr>
<tr>
<td>July - September 2010</td>
<td>Conduct experiment</td>
</tr>
<tr>
<td>October - December 2010</td>
<td>Prepare and administer survey</td>
</tr>
<tr>
<td>Year 2</td>
<td><strong>Complete data collection</strong></td>
</tr>
<tr>
<td>January - March 2011</td>
<td>Start data analysis</td>
</tr>
<tr>
<td>April - June 2011</td>
<td>Complete data analysis</td>
</tr>
<tr>
<td>July - September 2011</td>
<td>Conduct comparative analysis</td>
</tr>
<tr>
<td>October - December 2011</td>
<td>Prepare report</td>
</tr>
</tbody>
</table>

**Workplan**

**Year One:**
- Conduct an ethnographic study of newsrooms to identify key aspects of the social context that news organizations use to build information montages.
- Implement initial prototype ABC server for collecting and disseminating basic readership statistics.
- Release a desktop MeedFeed prototype to a selected community of Northwestern users for initial feasibility testing.
- Translate a set of search techniques (hill climbing, simulated annealing, tabu search, evolutionary algorithms) to operate within a Clifford algebra framework.
- Outcomes: Representations and models for montage construction will be established; Theoretical feasibility of search using Clifford algebras will be determined; Demonstrate personalization effects.
- Outputs: Initial experimental software framework will be deployed amongst a small user community.

**Year Four:**
- Analyse empirical data from user community observations.
- Translate the MeedFeed concept to another physical context: e.g. news reading within an interactive physical space (smart environment) or on a Tablet PC device.
- Implement a centralized Web version of MeedFeed, to investigate the potential of sharing and amortizing evolutionary searches across communities.
- Benchmark, evaluate, and potentially revise search algorithms.
- Benchmark, evaluate, and revise social network analytics.
- Outcomes: Insights into community behavior from empirical studies; Rigorous evaluation of the potential and limitations of the two key elements of evolutionary journalism; Demonstration of amortizing the cost of evolutionary search across users.
- Outputs: Empirical data for other researchers to investigate; Two new instantiations of the MeedFeed concept.

**Tabular Timeline (GANTT Chart)**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6-12 months</td>
<td>6-12 months</td>
<td>6-12 months</td>
</tr>
<tr>
<td>Activity 1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Activity 2</td>
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<td>Activity 3</td>
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<td>Activity 4</td>
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<td>Activity 5</td>
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<td></td>
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<tr>
<td>Activity 6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Project Evaluation</td>
<td>Prepare final report</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Using the solicitation you brought with you, develop a basic timeline that charts the activities that must be accomplished to meet the proposal deadline.

**Activity:**

- **Time Limit:** 15 minutes

**Sample Proposal Planning Timeline**

- Identify, contact and confirm Co-PI's and/or collaborators*
- Notify ORSP Proposal Development Team (DevT) & ORSP Research Administrator (RA) of proposal intentions
- Outline solicitation and requirements
- First draft budget and submission planning meeting with ORSP RA
- First rough draft narrative sections
- First draft narrative – review & send for edit by DevT
- Submit requests for collaboration, commitment, institutional support letters, etc.
- Contact ORSP RA on any budget changes
- Biosketches, current & pending or other required forms completed
- Second draft narrative – edit, send to DevT for agency review criteria
- Finalize budget, prepare budget justification
- Complete Abstract or Project Summary
- Complete narrative & other sections of proposal - submit to DevT for review
- Submit narrative for internal and external review from senior colleagues
- Incorporate review recommendations and prepare Final Draft
- Appendices – provide departmental letters, collaboration letters, institutional support letters (if required) and submit to ORSP RA
- Final submission review
- Submit final documents to ORSP RA

**Discussion**

**PROJECT TIMELINE TOOLS**
Project Timeline Software Tools

- Excel Spreadsheet Templates
  http://www.vertex42.com/ExcelArticles/create-a-timeline.html
  Sample Excel spreadsheet
- Microsoft Visio templates
- Word document tables
- Project management software on web
- Microsoft Project

Project Evaluation - Definitions

Evaluation is the “systematic investigation of the worth or merit of an object.”
The Joint Committee on Standards for Educational Evaluation (1994)

Project Evaluation – Overview

- Integral part of a grant proposal
- Provides different kinds of information
  - Gauge how project is progressing
  - Determine impact of project
  - Verify and validate results
  - Indicate ability to meet project goals
Project Evaluation - Purpose

“Evaluations should be conducted for action-related reasons, and the information provided should facilitate deciding a course of action.”

NSF 02-057 The 2002 User-Friendly Handbook for Project Evaluation

Project Evaluation Plan

• Helps with the planning of a project (understanding the project’s goals, objectives, and strategies)
• Determines whether a project is proceeding as planned (meeting its stated goals and objectives)
• Allows for continuous improvement (provides immediate information on direct effects of the project)
• Provides insights on new or unintended project effects
• Tells you what you have accomplished

Types of Project Evaluation

Formative

• assesses initial and ongoing project activities
• begins during project development
• continues through implementation

Summative

• assesses the quality and success of the project in reaching its stated goals
• provides data on the activities and outcomes
• takes place after the completion of the project

Project Evaluation Plans

• Consider using a table to illustrate evaluation plan
• Helps reviewers to understand the evaluation process

<table>
<thead>
<tr>
<th>Goal</th>
<th>Objectives</th>
<th>Evaluation Technique</th>
<th>Anticipated Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increased retention of women students in STEM fields.</td>
<td>Develop courses with interdisciplinary focus to connect STEM fields with societal concern</td>
<td>Retention data after each semester &amp; for cohorts after 4 and 5 years</td>
<td>Increased percent of women remaining in any STEM major</td>
</tr>
</tbody>
</table>

Project Evaluation

- Get an expert evaluator
- Use an external evaluator
- Get evaluator advice early in proposal process
- Provide details on evaluation design and tools
- Describe how and who will collect, analyze and interpret the data

GROUP ACTIVITY

Exercise: Evaluation Plan

Read the sample Evaluation Plan and list suggestions for improving it

(Time Limit: 10 minutes)

Sample Evaluation Plan

Assessment of the Student Response Technology (SRT) will be both quantitative and qualitative. First, students will be surveyed at the end of the semester on the content, level of difficulty, and their perceived level of mastery of the proposed algorithms. Second, faculty members teaching the course using SRT will be asked to judge its effectiveness in monitoring student achievement throughout the semester. In addition, faculty members who have been teaching the proposed course for several years will be asked to compare students' abilities after using SRT with those in previous years who have not used SRT. Finally, the final grades of students using SRT will be compared with those from previous years who have not used the technology in the classroom.)
**PD’s Response**

**Evaluation Plan (1)**

- Include formative assessment
  - Provides feedback during the design and implementation phases
  - Helps monitor progress toward outcomes

**Evaluation Plan (2)**

- Get help at the beginning – in the proposal writing phase
  - Involve an expert evaluator
  - Consider an outside (independent) evaluator
    - Size of budget
    - Importance of objectivity

**Evaluation Plan (3)**

- Consult other sources
  - NSF’s User Friendly Handbook for Project Evaluation
  - Online Evaluation Resource Library (OERL)
    - http://oerl.sri.com/
  - Field-Tested Learning Assessment Guide (FLAG)
    - http://www.wcer.wisc.edu/archive/cl1/flag/default.asp
  - Science education literature
    - *J. of Engineering Education*, Jan, 2005

**Evaluation Plan (4)**

- Provide details on tools & experimental design
  - Describe how
    - Students will be “surveyed”,
    - Faculty will be “asked”,
    - Grades will be “compared”
  - Indicate who will do these tasks
  - Indicate who will analyze and interpret the data
  - Consider confounding factors
  - Try to measure deeper learning
  - Collect demographic data on student populations
**PD’s Response**  
**Evaluation Plan (5)**

- Consider broadening the approach
- Examine effects on retention and diversity
- Involve larger populations
  - More diverse populations
- Collaborate
- Beta test

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**Some Evaluation Resources**

- **Practical Assessment, Research and Evaluation (PARE)** is an online journal. Its purpose is to provide education professionals access to refereed articles that can have a positive impact on assessment, research, evaluation
- **National Institute for Science Education** (NSF funded)
- **North Carolina State University Internet Resources for Higher Education Outcomes Assessment** A portal to numerous web-accessible resources on assessment

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**Resources**

- ORSP Development Team
- ORSP Research Administrators
- ORSP web [page](#)
- Expertise [System](#)
Proposal Development Team
Contact Information

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Reflection

What did you learn today that was new?

What would you like to learn more about?

What elements of the workshop did you find the most relevant?

Proposal Writing Workshops

Session V - December 2nd

Budget Preparation
1:30-3:30pm

Location: Blumberg Auditorium
(UTEP Library)