Aligning RET Program with Professional Development Plan - Planning Your Summer Experience

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Summer 2012

Agenda

• Review of Education Component – Expectations
• Activity: K-W-L My Research Experience
  K-W-L Translating Research into Instructional Experiences
• Overview – NJDOE Professional Growth Planning & Linking to Planning RET Summer Experience
• Activity: Development – Project Management Plan for RET 2012

Education Component Expectations

Learning Objectives (before RET participation) & Learning Outcomes (after RET participation) are:

• to identify (comprehension cognitive level) the research topic and analyze (analysis cognitive level) the skills/knowledge that will be necessary for their summer experience;
• to select (evaluation cognitive level) the student-focused instructional module topic and analyze (analysis cognitive level) the skills/knowledge that will be developed for students to learn about an aspect of their summer experience;
Education Component Expectations

Learning Objectives (before RET participation) &
Learning Outcomes (after RET participation) continued:

- to prepare (synthesis cognitive level) a project management plan that describes the tasks, outcomes, and timeline to be achieved in the summer research experience which includes the development of a student-focused instructional module (which is comprised of several lessons).
- to write (synthesis cognitive level) a student-focused instructional module that consists of several lessons relating to an aspect of the research experience.

Activity

K-W-L Activity – My Research Experience

<table>
<thead>
<tr>
<th>What do I KNOW about conducting research before I start the RET Program?</th>
<th>What do I WANT TO KNOW about conducting research before I start the RET Program?</th>
<th>What did I LEARN about conducting research now that I have almost finished the RET Program?</th>
</tr>
</thead>
</table>

K-W-L Activity – Translating Research into Instructional Experiences: Developing a Curriculum Module for My Students

<table>
<thead>
<tr>
<th>What do I KNOW about translating research into instructional experiences in pharmaceutical engineering before I start the RET Program?</th>
<th>What do I WANT TO KNOW about translating research into instructional experiences in pharmaceutical engineering before I start the RET Program?</th>
<th>What did I LEARN about translating research into instructional experiences in pharmaceutical engineering now that I have almost finished the RET Program?</th>
</tr>
</thead>
</table>

Ongoing Professional Learning
Three Phases

Contemplation
Collaboration
Implementation

From NJ DOE Slide Presentation available on line:
http://www.state.nj.us/njded/profdev/pd/leader/guide.ppt
Contemplation
Steps 1, 2, 3

• Assessing your individual professional development needs, readiness and commitment.
• Assessing District, School, or Department Needs and Linking professional development to improvement objectives.
• Proposing your Professional Growth Plan (PGP).

Collaboration
Steps 4, 5, 6

• Consulting with your superintendent
• Selecting Your Peer Review Committee (PRC).
• Convening and structuring your PRC.

Implementation
Steps 7, 8, 9

• Collecting and Organizing Evidence of Professional Growth.
• Presenting Evidence of Professional Growth.
• Preparing for the Next Professional Growth Cycle.
Planning Your Summer Experience

The development and implementation of a plan to manage your summer research experience should be aligned with your Professional Development Plan based on:

1. Identification of the skills and knowledge the RET teacher will acquire as an outcome of the research in pharmaceutical engineering during the summer, and

2. Identification of the skills and knowledge the students of the RET teacher will acquire as an outcome of the implementation of the instructional module in pharmaceutical engineering during the academic year.

Articulating Teacher Outcomes

- Specification of skills and knowledge. For example,
- Opportunities to acquire skills and knowledge.
  - Summer Research Activities/Tasks with Time Frames (duration)
- Assessment and documentation of the acquisition of skills and knowledge.
  - Engineer’s Notebook
  - Research Project Presentation
  - Instructional Module
NJ Professional Growth Plan
(NJDOE, 2008)

• Part 1
  – Selecting a Standard or Standards and Possible Goals
• Part 2
  – District/School/Department/Class Linkages
• Part 3
  – Specific Goal and Intended Outcomes
• Part 4
  – Evidence, Timeline, and Resources

Planning Your Summer Experience

Project

≡ “a temporary endeavor undertaken to create a unique product or services”
  Project Management Institute, 2000

Finite Duration
e.g. Start and Finish Date

Endeavor
e.g. Resource Allocation

Product/Service
e.g. Deliverable

Microsoft Office Project Online, 2007
Planning Your Summer Experience

Project Management Plan for the Research Summer Experience (RET) in Pharmaceutical Engineering is a tool. The plan maps the entire summer research experience project through your Professional Development Plan that includes the scope of the research and development of the instructional module based on one or more elements of the summer research project.

The elements of a project management plan should guide the researcher, e.g. RET teacher, and should not necessarily be adhered to in lock-step fashion.

Project Management Plan

Purpose

To describe in words, pictures or symbols the systematic and clearly articulated plan for productive use of the resources necessary to meet the outcomes ("deliverables") of the project.

Example:
- √ Human
- √ Materials & Equipment
- √ Time
- √ Financial

Project Management Plan

Elements (from Professional Development Plan)

- ✓ Activity/Task (Major and sub-units)
- ✓ Time Frame (start date & finish date – duration)
- ✓ Desired Outcome
- ✓ Implementation Steps
- ✓ Documentation
- ✓ Notes
Project Management Tools

Description of the Plan - Documentation Tools

• Hierarchical Tree
• Project Web Mapping
• Bar Charts
  – Gantt Chart
• Program Evaluation and Review Technique (PERT)
  – PERT Chart
• Spreadsheet
  – Microsoft Excel Chart

RET PDG Plan

Research
Project
Instructional
Module
RET Experience
Professional
Development
Plan

RET Project Management Plan and Timeline

Transfer the information from the Personal Growth Plan – Personal Planning Tools

RET Project Management Plan and Timeline Chart

RET Project Management Plan and Timeline

RET Project Management Plan and Timeline Chart
How to reach us....

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Q & A

THE EDGE IN KNOWLEDGE