

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

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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



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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;



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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.



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Activity

K-W-L Activity – My Research Experience

What do I KNOW about <i>conducting research</i> before I start the RET Program?	What do I WANT TO KNOW about <i>conducting research</i> before I start the RET Program?	What did I LEARN about <i>conducting research</i> now that I have almost finished the RET Program?
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K-W-L Activity – Translating Research into Instructional Experiences: Developing a Curriculum Module for My Students

What do I KNOW about <i>translating research into instructional experiences</i> in pharmaceutical engineering before I start the RET Program?	What do I WANT TO KNOW about <i>translating research into instructional experiences</i> in pharmaceutical engineering before I start the RET Program?	What did I LEARN about <i>translating research into instructional experiences</i> in pharmaceutical engineering now that I have almost finished the RET Program?
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Ongoing Professional Learning Three Phases

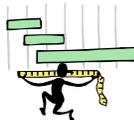
Contemplation



Collaboration



Implementation



from NJ DOE Slide Presentation available on-line at <http://www.state.nj.us/njded/prof-dev/pdf/leader/guide.ppt>

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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).



from NJ DOE Slide Presentation available on-line at **THE EDGE IN KNOWLEDGE**
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Collaboration

Steps 4,5,6



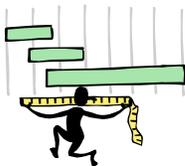
- Consulting with your superintendent
- Selecting Your Peer Review Committee (PRC).
- Convening and structuring your PRC.



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Implementation

Steps 7,8,9



- Collecting and Organizing Evidence of Professional Growth.
- Presenting Evidence of Professional Growth.
- Preparing for the Next Professional Growth Cycle.



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Project Overview



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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.



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Articulating Teacher Outcomes

- Specification of skills and knowledge. For example,
 - NJ Professional Learning Guide for School Leaders – Sample Professional Growth Plan (PGP) Template (NJ DOE, 2008)
- 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



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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



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NJ Professional Growth Plan (NJDOE, 2008)

Part 4 – Evidence, Timeline, and Resources

PROFESSIONAL GROWTH PLAN TEMPLATE
(Chart Format)
(New Jersey Department of Education, 2008)

TEACHER'S NAME: _____
STANDARD: _____
PROFESSIONAL DEVELOPMENT GOAL/OBJECTIVE: _____

ACTIVITIES	INTENDED OUTCOME	EVIDENCE TYPES	TIMELINES & BENCHMARKS	ANTICIPATED RESOURCES



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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



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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.



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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
- ✓ Time
- ✓ Materials & Equipment
- ✓ Financial



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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

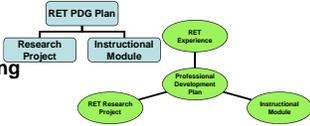


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Project Management Tools

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



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RET Project Management Plan and Timeline

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



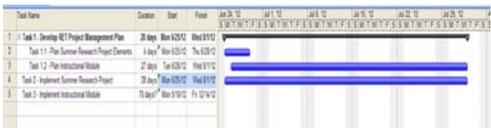
RET Project Management Plan and Timeline Chart



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RET Project Management Plan and Timeline

RET Project Management Plan and Timeline Chart



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Q & A



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