COMPLETED GRANT SYNOPSIS

How Student Pharmacists Can Develop Leadership Skills and Expand Community Pharmacy Based Services
through Curricular and Co-Curricular Activities

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Objectives
The overarching goal of this collaborative leadership curriculum is to provide all student pharmacists currently enrolled in Doctor of Pharmacy programs in Washington State the opportunity to develop the key competencies needed to innovate and advance practice based on the following themes: *Leadership*: Develop high-impact skills as front-line leaders and contribute to positive change.   *Strengths*: Identify strengths, learn how to develop strengths, and apply within a team.   *Teamwork*: Collaborate with others to achieve shared goals with structured tools and opportunities for reflection and feedback.   *Real World Application*: Create an authentic leadership experience in developing or enhancing a patient care service in a community pharmacy setting.

Methods	
Design	• Curriculum is composed of 5 Modules delivered over 10 weeks. Modules 1, 2, and 3 discussed the need for pharmacist leaders, identifying your own leadership strengths and how to apply your strengths to maximize a team's potential. During these modules, students are preparing a proposal for a clinical community pharmacy project, which will enhance or create a new service. Module 4 and 5 relate to pitching the project idea effectively. • Our primary methods of assessment of the overall innovation was a pre-course assessment and post-course assessment to compare change in leadership knowledge and confidence in making change.
Study endpoints	• Students report on their confidence in a number of areas related to leading change. On the pre-course assessment, students rated their confidence at that moment in time (PRE). On the post-course assessment, students rated their confidence at the end of the course (POST). They were also asked to think back to the beginning of the course and, knowing what they knew at the end of the course, rate how confident they felt they were at that time (THEN). • Our goal in asking for students to report their pre-course confidence at the end of the course was to account for response-shift bias that may have occurred between the PRE and POST scores due to student learning and a deeper level of conceptual understanding developed over the course of their participation in these modules and activities.

Table 1. Leadership confidence responses based on pre, post and then assessments.

Question (n = 404)	Then (SD)	Pre (SD)	Post (SD)	P
Confidence in Leading Change	56.436 (2.113)	62.97 (2.072)	72.153 (1.661)	$p < 0.001$
Confidence in Identifying & Describing Personal Strengths	64.109 (1.938)	73.094 (1.959)	80.421 (1.516)	$p < 0.001$
Confidence in Identifying & Fostering Strengths in Others	62.797 (2.014)	68.317 (1.858)	75.965 (1.705)	$p < 0.001$
Confidence in Identifying New Services	55.594 (2.151)	60.272 (2.035)	73.144 (1.636)	$p < 0.001$
Confidence in Developing a Plan	55.396 (2.258)	59.257 (2.1)	73.342 (1.693)	$p < 0.001$
Confidence in Implementation	56.064 (2.251)	61.51 (2.093)	74.233 (1.691)	$p < 0.001$
Confidence in Creative Decision-making	59.307 (2.196)	64.579 (2.074)	76.089 (1.664)	$p < 0.001$

For all seven confidence questions, an increase was found between the mean of PRE scores and POST scores along with a decrease in the THEN score from the PRE score. This indicates that students felt more confident in their ability to lead change at the end of the course than at the beginning. The change from PRE to THEN also can be an indicator that students' understanding of these concepts changed during the course, as well. All three means were compared via ANOVA and the relationships were found to be statistically significant.

Table 2. Student pharmacists reporting improvement and confidence in areas in leading change based on Kotter's 8 steps of change

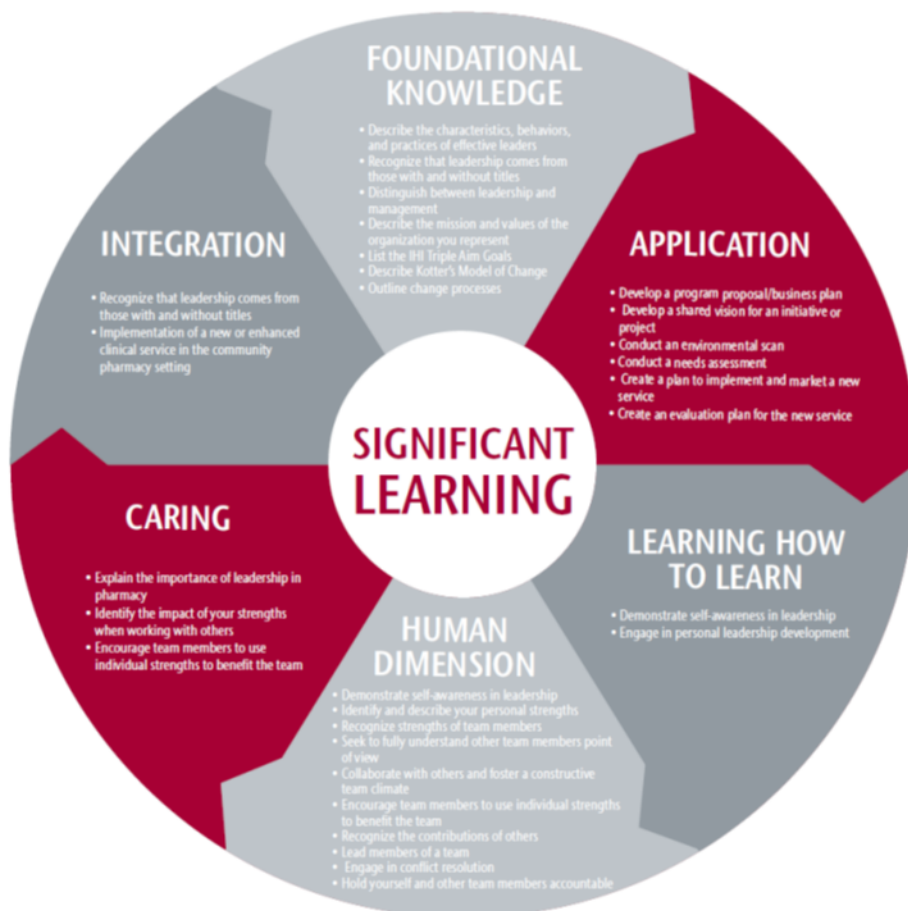| Step (n=420)	Improvement		Confidence	
	Number	%	Number	%
Create Urgency	122	29.04	161	38.33
Form a Guiding Coalition (team)	228	54.29	230	54.76
Create a Vision	270	64.29	237	56.43
Communicate Decisions	305	72.62	317	75.48
Empower others to act on the vision	207	49.29	218	51.9
Create Quick Wins	120	28.57	146	34.76
Build on the Change	194	46.19	203	48.33
Institutionalize the Change	95	22.62	100	23.8

Students were also asked in the pre- and post-course assessments to indicate how important they feel it is to continue improving on their skills in leading change. While the mean response from the pre-course to the post-course assessment decreased slightly, the response started high (84.98%) and the relationship was not found to be statistically significant.

In the post-course assessment, students were asked to reflect on Kotter's 8 Steps of Change, which were introduced during the course. Students were asked which of the areas they felt they had improved on since the beginning of the course and which areas they would say they felt comfortable applying in the community pharmacy setting.

The areas that students felt had improved the most and felt most comfortable applying to a community pharmacy setting were Communicate Decisions (72.62%/75.48%), Create a Vision (64.29%/56.43%), and Form a Guiding Coalition (54.29%/54.76%).

Conclusion

We believe this leadership and project based curriculum is an innovative model helping students use the **foundational knowledge** and concepts learned in the course (e.g. Kotter's model of change and the IHI Triple Aim goals) which are **applied** it to address real challenges in the community setting **(integration)** resulting in students seeing the relevance and importance of their learning **(caring).** Completing leadership development with StrengthsQuest™, reflection papers, and receiving feedback from peers, faculty, and community practitioners helped them also understand the critical role of interpersonal relationships, how they could be an effective leader, supportive team member **(human dimension)**, and a self-directed learner **(learning how to learn).** All of these elements are essential to **"significant learning"** which has been outlined as **Fink's Taxonomy.**

StrengthsQuest™ Reflection
"Who am I as a Leader?"

Learning Outcomes:

1. Reflect on your personal strengths and identify how these strengths are beneficial to yourself and others.
2. Analyze how your personal strengths could be a liability when working independently and in a group.
3. Review your top strength themes and determine which action you are most likely to take for each strength theme.
4. Determine how you will use your strengths to contribute effectively to a team when working on a group project.

Grading: You will be graded based on thoughtfulness, thoroughness, and completeness for professionalism credit.

Directions: Download your Strengths Insight and Action-Planning Report from StrengthsQuest™. Focus this reflection on 'Section 1: Awareness' only. For each of your top 5 themes, you will see a 'Shared Theme Description' and a section on 'Your Personalized Strengths Insights'. Please use this information to answer the questions below. Turn in this assignment via Blackboard by 9/28/17, 3:00 pm.

1. Theme 1 (please list):

    a. Based on 'your personalized strength insights', what would you like for others to see most in you?
    b. What do you think some potential downsides might be to this theme and/or 'your personalized strength insights'? (This can be professional and/or personal.)

2. Theme 2 (please list):

    a. Based on 'your personalized strength insights', what would you like for others to see most in you?
    b. What do you think some potential downsides might be to this theme and/or 'your personalized strength insights'? (This can be professional and/or personal.)

3. Theme 3 (please list):

    a. Based on 'your personalized strength insights', what would you like for others to see most in you?
    b. What do you think some potential downsides might be to this theme and/or 'your personalized strength insights'? (This can be professional and/or personal.)

4. Theme 4 (please list):

    a. Based on 'your personalized strength insights', what would you like for others to see most in you?

    b. What do you think some potential downsides might be to this theme and/or 'your personalized strength insights'? (This can be professional and/or personal.)

5. Theme 5 (please list):

    a. Based on 'your personalized strength insights', what would you like for others to see most in you?

    b. What do you think some potential downsides might be to this theme and/or 'your personalized strength insights'? (This can be professional and/or personal.)

Directions: Download your Strengths Insight and Action-Planning Report from StrengthsQuest™. Focus this reflection on 'Section 2: Application' only. For each of your top 5 themes, you will see a list of 'Ideas for Action'. Please use this information to answer the questions below.

Top 5 Themes Assessment

1. Theme 1 (listed above):

    a. Which action are you most likely to take? Why?

2. Theme 2 (listed above):

    a. Which action are you most likely to take? Why?

3. Theme 3 (listed above):

    a. Which action are you most likely to take? Why?

4. Theme 4 (listed above):

    a. Which action are you most likely to take? Why?

5. Theme 5 (listed above):

    a. Which action are you most likely to take? Why?

Group Work Application

6. What 2 actions are you most likely to apply to your approach to your group work for the Community Pharmacy Project? (This can be an action item from your 'Top 5 Themes Assessment', but does not have to be.)

    a. Action 1:

b. Action 2:

7. How will you hold yourself accountable to apply these actions (listed above) to your group work, as you work on the Community Pharmacy Project?

a. Action 1:

b. Action 2:

Team Member Names:
Due 10/12/17, 3 pm
StrengthsQuest Debrief
Follow up from Discussion Presented by Leslie Fox

Objectives:
1. Review and evaluate your group strengths to determine how you will work as an effective team.
2. Determine the most effective path for team project progression.

This worksheet is to be completed by each team and turned in prior to leaving class. Remaining class time will be allocated for the assignment.

- What tools/nuggets of information does the team now have that will help move your current project forward?

- What project milestones have we celebrated?

- What has motivated the team?

- What is our communication level, where do we excel or stall?

- If Leslie had presented before teams were selected, would you have selected differently and why?

- In the future will you be more strategic in your team selections? Why or why not?

Project Proposal Guide

This guide is intended to pose questions that help the group develop a plan for a clinic service or to address a health need in a community pharmacy.

A. The Big Idea
- broad concept that can be explored in multiple ways
- is engaging
- has importance to you

Big Idea for All Groups: Community Pharmacy Practice

B. Essential Question:
- serves as the link between your life and the big idea

Essential Question for All Groups: What can we do to improve the quality of care, resource utilization, and/or population health in the community pharmacy setting? (How can we meet one or more of Triple Aim goals?)

C. Challenge:
- A concise challenge is articulated (based on the essential question) that asks the learners to create a specific solution that will result in concrete, meaningful action.
- Here is a sample challenge from Apple in the arena of public health: Increase the availability of flu vaccines to children in your community.
- To narrow down the scope of your challenge focus your challenge on planning for implementation of a new or enhanced clinical service in the community pharmacy setting
- The Healthy People 2020 is a federal initiative aiming to improve the lives of Americans by the year 2020. Pharmacists can play a role in this initiative and this can serve as a source of ideas for your clinical service to improve the health of the population. http://www.healthypeople.gov/2020/topicsobjectives2020/default

Learning Outcomes:
1. Develop a service project idea as a team that will improve patient care, resource utilization and or patient health in a community pharmacy setting meeting the triple aim goals.
2. Evaluate and identify an unmet need of a patient population receiving care from a community pharmacy that can be addressed through the development of a new or modified clinical patient care service.
3. Present and defend as a team a project proposal that has been developed to be of benefit to patients, pharmacists and the pharmacy.

Part 1: New/Enhanced Clinical Service

- What is your group's challenge?
- Why is this challenge (new clinical service) important to your group?

D. Guiding Questions

Part 2: Needs Assessment

- What is the nature and extent of the need for this service?
- What is your target population? Who benefits?

Part 3: Vision

- What is your team's vision for this service?
- How will this service meet the needs of your patients?
- How will it improve patient care/patient outcomes, population health, and/or resource-utilization?

E. Solutions

Learning Outcomes:
1. Evaluate project details to identify barriers to project implementation and determine solutions intended to overcome the barriers.
2. Create a team implementation plan that will facilitate the development of buy in from stakeholders.
3. Calculate the immediate and long term costs associated with the service project.
4. Determine a plan outlining how this project will be sustained over time.
5. Develop an assessment plan that will evaluate the overall effectiveness of the service project if implemented.

Part 4: Challenges & Barriers & Solutions to Challenges/Barriers

	Challenges/Barriers	Solutions to Challenges/Barriers
Brainstorm	What are the challenges/barriers you foresee?	What are some ideas as to the solutions to each of the challenges/barriers you foresee?
Other Models	What has not worked previously at your Community IPPE sites and the reasons why (if you know)? Review the literature for examples of models that have not been successful. What examples did you find? What evidence do you have that they did not work?	What has worked previously at your Community IPPE sites and the reasons why (if you know)? Review the literature for examples of models that have been successful. What examples did you find? What evidence do you have that they worked?
Resources	What resources are available currently, what additional resources are needed? Are there any legal considerations or legal documents needed?	Is there training already available?
Stakeholders	Foes: Definition	Friends Definition: - Already support the change

Categorize stakeholders, then define as Foe, Friend, Foreign, or Fence Sitters See categories of stakeholders below.	• Unlikely to ever support the change • Don't attack a brick wall • If you have too many of these, reframe, seek more support, or reconsider the charge • Who are your foes? What reservations and risks are they likely to see? How can you counter or deal with these risks? Foreign: Definition • Don't know where they stand • Ignorance is bliss, but dangerous • Who is in the foreign group? How will you determine where they stand?	• Tendency to spend too much time with them, but they can't be ignored • Who are your friends? Any funding partners? Fence Sitters Definition • Could support the change, or not, depending on how you deal with them • Most important group to sell your ideas • Who are your fence sitters? How do you ensure they stay on board and preferably move to assist the change?
Organizational Culture	What about the organizational culture of community pharmacy practice (in your group's experience) would be a barrier to implementing your new/enhanced clinical service?	What about the organizational culture of community pharmacy practice (in your group's experience) support your clinical service? For those cultural barriers, is there anything you could do to address and/or overcome those barriers?

The five stakeholder categories include:

Contact or working stakeholders are those individuals that represent sponsor stakeholders and who typically work together on a task force or team. This group is typically project focused, busy people whose focus is *"how can we successfully complete this project on time and on budget, and gain support for implementation*."

Sponsors, funders or decision shareholders have the authority to approve a project, and their primary focus is *whether the proposal is organizationally and financially sound*, and the overall impact on the organization. While their approval is essential, it may not be sufficient for successful approval and implementation.

End user stakeholders are those who will actually implement the changes and make them part of the work flow. Their basic concern is *"will this actually work in my situation or practice and will it make my job easier or harder?"* Their issues are very pragmatic and focused on the actual work and the impact of the change.

Indirect stakeholders aren't always obvious, since they are not the decision makers or funding sources, but they can say "NO" and hold up your project. Their focus is on the question: *"does this proposal meet the standards and policies we control?"* Typically, these groups include legal, human resources, purchasing, compliance, safety, information technology, etc. Build coalitions with these groups to understand their issues and perspectives and to do some advance influence and persuasion work.

Coach stakeholders help you to understand and influence the informal stakeholder system. They can be in any level of the organization, and their assistance is crucial to getting your change proposal approved and implemented. Their basic question is *"how can we get the job done"* and they will help you navigate the obstacles, understand the unwritten rules and clarify how things get done. The more complex the initiative, the more important coaches can be.

F. Implementation

Part 5: Prepare for Implementation
- What will be the division of labor and how will it impact current work flow?
- What are the training needs?
- How will you partner with other healthcare professionals?
- How will this service be promoted?
- What start-up costs do you expect?
- What is your timeline for implementation?

G. Evaluation

Part 6: Program Evaluation

- How will you measure the impact of your service in terms of patient outcomes?
- How will you assess the sustainability of this initiative?

Adapted From:
- **Apple's Challenge Based Learning**
- **WSU's Pharm 533 – IPPE II - Panther**
- **Healthcare Focused Leadership Project Management Template - Akers/Murphy**
- **ASHP's Leadership Resource Center: Leader's Toolbox**

5-Minute "Pitch" Presentation

"Pitch" Presentation
Your group will be given 5 minutes to present a "pitch" presentation to a practitioner or group of practitioners to present your new or enhanced service for the community pharmacy setting.

Goal:
The goal of this presentation is to increase your ability to lead from any position by being able to succinctly communicate a message in a persuasive manner that creates follow up action.

Preparation:
To prepare for this presentation, please watch the 15 minute ASHP video, "The 'Elevator Speech': Prepare, Pitch, and Persuade!" on your own time prior to coming to class.
https://www.dropbox.com/s/irv24ed47xl2csq/Elevator_Speech_08_30_12.mp4?or ef=e&n=53982814   This is part of ASHP's Great Expectations video series.

You do have to create an account with ASHP to access the video. You do not need to be a member or pay for membership though. Access to the video is free for both members and non-members of ASHP.

As you will see in the video, they mention that an elevator speech should not be longer than 2 minutes. Your group presentation will be 5 minutes, so you will have a slightly expanded version of an elevator speech, but 5 minutes is still very condensed, so many of the principals for efficiency that you would use for an elevator speech will be very helpful in preparation for your group's "pitch" presentation.

Structure: We would like for your group to have a lot of creative freedom with your presentation. With that being said, 5 minutes is a very short timeframe, so we wanted to give you just a little bit of guidance in terms of structuring your 5 minute pitch. This guidance closely follows the same principles outlined in the ASHP video, "The 'Elevator Speech': Prepare, Pitch, and Persuade!", but is customized to your group's presentation.

> **1. Introduction**
> - Introduce group members
> - Provide learning objectives for learners. You may only have a few, since this is a quick presentation. Briefly summarize what you would like your learners to take away from your presentation.
>
> **2. A good opening statement**
> - This should be brief and provide a quick summary of your group's position

- The video indicates this should only be one sentence. It is okay to expand that just a bit for your 'pitch' presentation.
- This should quickly pique the interest of your audience.
  - Think about posing a question to the audience or provide some persuasive information or fact that increases interest in your enhanced or new clinical service.

3. A statement of the problem or goal trying to achieve with supporting data
- What you want to focus on here is what the service is that you are promoting and why there is a need for this service.

4. A solution to the problem
- Detail the benefits to the practice of pharmacy that your solution (your new/enhanced clinical service) provides. Think about benefits from an administrative perspective, from a pharmacy provider perspective, and from a patient perspective.
- Again if you can use data, this can be very powerful. If there are pharmacies out there already implementing a service like you are suggesting, this can be very powerful to include in your presentation.

5. Implementation of New/Enhanced Clinical Service
- Discuss the high points of how your group envisions this service being implemented in a community pharmacy setting.
- This wouldn't necessarily be part of a normal elevator speech, but would be an important next step and is an important part of your 'pitch' presentation.

6. A strong close
- Address what any next steps may be.
- Is there anything that your audience members could do to advocate for this new service or further this cause?
- Ask the audience for questions and thoughtfully respond.

Participation:
Our expectation is that each group member will participate in the preparation and in contributing to delivering the presentation itself. Each group member is expected to speak during the presentation.

Timing:
As mentioned above, our expectation is that your group will provide this presentation in 5 minutes or less.

Evaluation:
This presentation will be worth 30 points for each individual of the group. The pharmacist(s) listening to your presentation will use a rubric to score your group's

*Model for content of the pitch presentation adapted from ASHP's Great Expectations video: The 'Elevator Speech': Prepare, Pitch, and Persuade!" http://elearning.ashp.org/products/1089/the-elevator-speech-prepare-pitch-and-persuade-great-x-evideo.

presentation and to provide feedback on your presentation. If more than one pharmacist rates your group's presentation, we will use an average of the scores to create your group's final grade.

Please see the Rubric for Evaluation of the 5 minute "Pitch" to see how you will be scored for this activity.

If possible, we also will record these presentations to help document your progression throughout the curriculum.