Connecting the Sciences and Pharmacy Practice Through Student Engagement

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Background and Goal

Goal: Connect the College of Pharmacy to the community, so that:
- Learning is grounded in reality
- Research & clinical programs respond to community needs
- Faculty & students have access to the expertise of practitioners
- Practitioners have access to expertise and resources in the College
- College and practitioners can respond to changing nature of the profession

To recognize opportunities requires a new paradigm, students are viewed as:
- Assets; can be considered soft infrastructure
- Having the ability to contribute to the community
- Learning with and from the community to each others’ mutual benefit
- Particularly effective when working with disadvantaged populations
- Contributors, not burdens, in the work of interprofessional teams

Students are already part of colleges, no new infrastructure needs to be added to develop programs to connect colleges and community practitioners.

Metaphor for Connecting Sciences and Practice

Student Research Projects

All professional students are required to complete a research project.

The project involves:
- A project advisor who may be a community practitioner and groups of 1-4 students
- Project may be on any topic related to health; e.g. Community health assessment
- Chart reviews used to answer research question
- Questionnaires/ surveys
- Community educational programs

Role of advisor (i.e. community practitioner):
- Identifies an issue they want addressed
- Serves as the content expert
- Reviews proposal
- Oversees data collection

Role of College faculty:
- Assist students with writing their proposal
- Oversees project process
- Assists with data analysis

Outcome: Student is exposed to community practice issues, advisor increases research skill, and the faculty increases their knowledge of the community.

QI Projects

All professional students are required to complete a Quality Improvement (QI) project.

The project involves:
- A project preceptor who is a practicing pharmacist, physician or nurse and groups of 3 students
- Teams meeting with their preceptors and developing site-specific QI projects
- Students implementing their plan, collecting, analyzing, and evaluating data to measure plan impact and presenting results at a poster forum

Role of preceptor:
- Identifies an issue they want addressed
- Guides team during plan development, execution and interpretation

Role of course coordinator:
- Provides feedback to team during plan development, execution and interpretation
- Oversees project process

Outcome: Student is exposed to quality and safety issues in community practice, preceptor gets quality issues addressed at his/her practice site, and the faculty increases their knowledge of the community.

Interprofessional Program in Regulatory Science

An interprofessional, graduate certificate program was developed with industry leaders in regulatory science as a partnership between the Colleges of Law, Pharmacy, Public Health and Medicine.

The program involves:
- Equipping students and working professionals across disciplines with basic competencies in regulatory science
- Students from pharmacy, law, medicine, nursing and public health:
  - attend guest lectures
  - perform interactive team activities
  - complete reflective writing assignments and discussion board postings
- Students also assist in scholarly projects precepted by faculty and industry partners

Role of preceptor:
- Giving seminars on emerging issues in regulatory sciences by pairing faculty from the colleges of pharmacy, public health and law with guest speakers from a variety of venues including:
  - Administrative agencies (e.g., FDA, EPA)
  - Industry (e.g., Regenesis BioMedical, Arrowhead Pharmaceuticals, and Roche/Ventana Medical Systems)
  - Academia

Outcome: The academic community engagement across sectors links students to real world experiences and synergistically improves the relationships between the community and the institution.

Conclusions

Student engagement programs can connect colleges and practitioners so that the colleges and students benefit from practitioner experience and practitioners benefit from increased access to the university’s expertise and resources.