Assessment of Independent Environmental & Occupational Health, Safety, Science and Policy-related Graduate Programs: How to Best Support Students and Young Professionals

Focus on Rutgers Biomedical & Health Sciences and New Brunswick Campus

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Project Overview/Introduction: Framing Its Need

Enhance connections between/among entities at Rutgers to increase both Rutgers undergraduate student applications to, and Rutgers faculty participation in teaching and advising students in, two MPH concentrations (at SPH), Environmental Health Sciences and Occupational Safety & Health as well as other environment-related master's degrees offered at Rutgers.

Result in:

- Higher #s of qualified master's (MPH/MS) students applying to and being accepted to PhD programs in final year of program or years after graduation.
- Increased continuity of research and scholarship.
- Reduced loss of talented junior researchers—even future faculty—to competitor U.S.-based universities.

Needs Assessed: Problem to Attempt to Address

Summary of personal thinking, based on the RLA 2017-18 class meetings plus other informal meetings/observations and anecdotal data at/about Rutgers:
No need to conduct individual-level interviews in fall-winter 2018-19.

Anecdotal evidence and comments received in conversations in meetings or at conferences attended with colleagues spring-summer 2018 suggested:
- Substantial barriers exist to discussing new dual-degree programs between traditional science and non-science based schools/programs, even if every Rutgers discipline involves critical thinking, problem solving, data management and analysis.

- Students, and faculty, are unaware of graduate student main interests and current/ongoing projects in environmental areas.

- Faculty: School/Department (Rutgers-sponsored) and/or personal websites can exist…different protocols for updating.

RUTGERS LEADERSHIP ACADEMY

Center for Organizational Leadership

Project Goals

- **To conduct a stakeholder survey with a high response rate.**
- **PsychData tool used** (part of many IRB-approved protocols 2006-18).

    Done anonymously--no individual names/personal data mandatory…

    Goals:
    - <10 minutes to finish
    - Single-answer/"choose all that apply" questions, 1-x parts each
    - Few questions with open comments if "other" (≤100 characters)

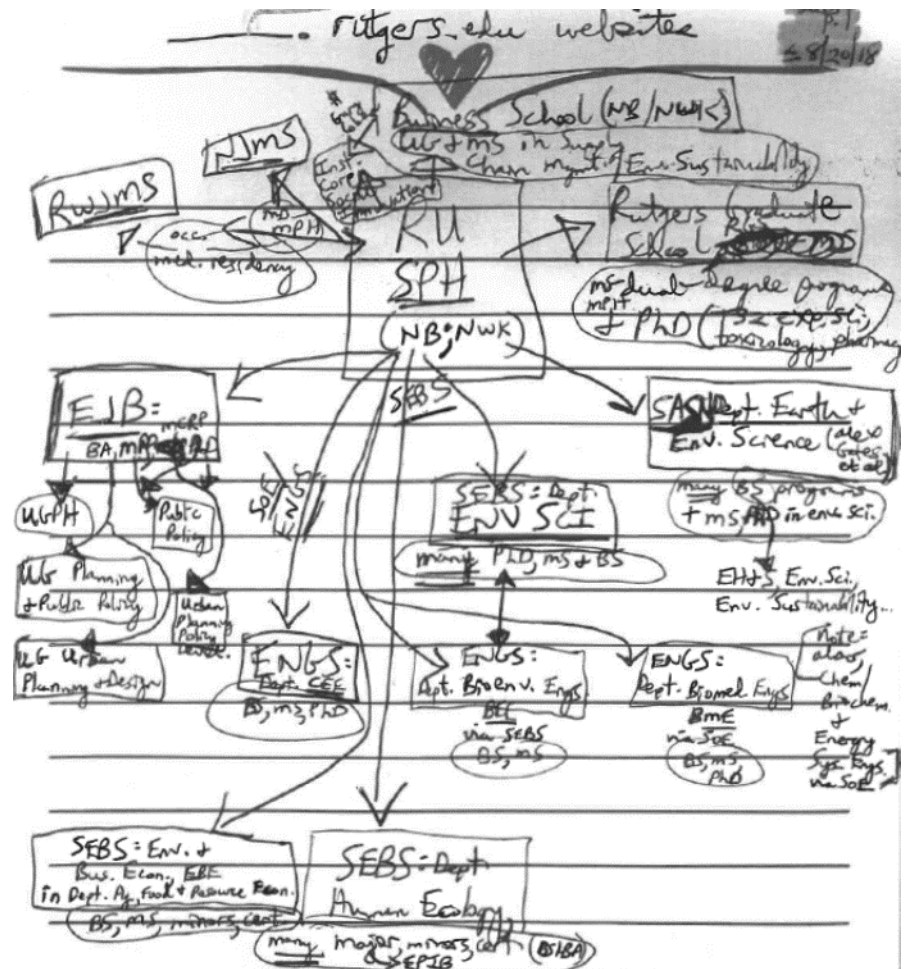   Questions include topics/themes like:

    Ideas for website matrix keywords/themes,

    Social media tags (marketing)

Preliminary Data / Information Available

- Examination of Rutgers websites at School and Department levels…

These are just my hand-written summary notes in flowchart/organization chart form from summer 2018 perusal of many Rutgers-based websites

Initial Stakeholder Engagement Activities

- **Students survey** was drafted in Word and then coded online in PsychData with a draft in Word of an introduction email (voluntary participation, consent without documentation and exempt given conducted in course of normal educational assessments/activities) in late summer 2018, based on thinking/planning spring-summer 2018.

- Survey reviewed by trusted colleagues who are considered full-time staff and work with both faculty and colleagues in various environmental areas at Rutgers. Feedback positive, edits minor….

Dr. Kathy Black (EOHSI)

Ms. Sarah Kelly (SPH, *and future doctoral student at Rutgers GSE*!)

Ms. Lauren Gonzalez, BS (SPH, *and future M.Ed student at Columbia*!)

Ms. Maryanne Fakeh, BS (SPH)

Data Collected: Methods in Brief

- **Students survey** conducted online in PsychData with introduction email (voluntary participation, consent without documentation and exempt given conducted in course of normal educational assessments/activities) in late fall/early winter (Nov. 2018-Jan.2019).

  Actual realized goals (after ß-test and pilot test with core course graduate student teaching assistants and federal work-study):

  - "<10 minutes to finish": **Mean/median was 5-6 minutes**!

  - **~84% response** [(73+31)/124] by SPH students, AY 2018-19. [*Course Director: me*]

  - **~30% response** (12/42) from undergraduate sustainability minor students enrolled in a fall 2018 course via Rutgers SEBS but representing many Schools at Rutgers in terms of majors. [*Course Instructors: Drs. Jill Lipoti, Marci Meixler*]

Data Collected: Key Initial Results Summary

Q.1: …[O]ne Rutgers-hosted website unifying the various environmental and occupational…programs here at Rutgers-New Brunswick, including RBHS…good idea?
- Yes = 84%; *(Q.2)* overall, ~½ said title may be "Rutgers and Our Environment"

Q.3-7…[T]hink a separate ____-focused page on proposed website is a good idea?
- Yes = ~92% for undergraduate students and for master's level students
- Yes = ~90% for doctoral-level students
- Yes = ~81% for post-doctoral fellows (was ~92% for faculty and staff overall)

*Q.8,10-12…*For potential *layout of matrix webpage design (preferred over bullet points)*:
No option presented had majority vote; some wrote in comments.
These were "top 3 options" with 30-33% of students liking each of these orders:
Human Health, Ecological Health, Safety, Sustainability
Human Health, Safety, Ecological Health, Sustainability
Human Health, Safety, Sustainability, Ecological Health

No relative ranking options for links to sub-pages had majority vote, *but,*
one had ~33% liking it: undergraduate students, graduate (master's) students, doctoral students; faculty, staff, post-doctoral fellows.

Current Status of Project and Future Steps

- Write commentary with parts of survey data for peer-review to *J Environ Health* (National Environmental Health Association).

- Mock-up of a new webpage, based on last part of survey (2018-19 data), concerning current graduate students research interests or ongoing projects (e.g., approved thesis/dissertation topics or titles).

  A **matrix format** is envisioned**:** 2-3 rows/2-3 columns.

  Each cell in matrix would have identifying word/phrase and a visual.

  Think free clip art/photo/symbol/pictogram related to that area of environmental science, engineering, ecology, safety & health, policy…

  Then, each cell links to page containing listing of students/information.

  Rutgers Graduate School, or **Rutgers EOHSI**, *hosts webpage*?!

Successes and Challenges/Obstacles

- Rutgers is a big place, in Big 10 Conference and Academic Alliance!

- Rutgers has many Schools, and Departments and Programs, with relevant majors, minors, certificates, and coursework for current students and continuing professional education, and an Agricultural Experiment Station with extension specialists and research activity.

- Rutgers has faculty on various tracks and calendars (9-mo., 10-mo., 12-mo.), and full-time and part-time staff working with those faculty…with different (and changing) priorities, union contracts, etc.

- Everyone @Rutgers in environment-related area is passionate about their/team's work and want to help Rutgers be the best it can be.

Lessons Learned about Leadership via RLA

- Roles, importance and "added value" of informal leadership at Rutgers.

- There are varying lengths of terms for leadership positions in the university/college (higher education) setting, each with "pros & cons."

- Most challenges can be viewed as an opportunity presented, and strengths in one (or some) settings may be weaknesses in other(s), *and visa-versa*. This is especially true at Rutgers, a multi-campus university with a rapidly growing academic health center with Schools.

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(previously Interim Dean and Department Chair then Vice Dean and Director of Doctoral Programs)

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Howard M. Kipen, MD, MPH, Professor, former Interim Department Chair

And,
Other collaborators/interviewees (staff) and volunteer students noted!