

# How Learning Communities Help Develop Medical Leaders

Susan B. Hathaway, Louise Arnold, Paul G. Cuddy,  
Jennifer L. Quaintance, Steven L. Kanter

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# Introduction

- **Impetus of research project**
  - Number of UMKC graduates in major leadership positions in medicine
  - Why?

- **Asked these graduates:**

**reflect on your career to  
identify factors contributing to  
your leadership success**



# Introduction

- Many of these graduates attributed their success in part to UMKC's learning communities
- Today's presentation therefore explores this question:

**What features of the learning**

**communities did our graduates  
identify as helping them  
become leaders?**



# Introduction

- Our work relates to ongoing issues about learning communities and medical education in general:
  - How learning communities generate outcomes<sup>1</sup>
  - How medical schools can best prepare leaders for medicine<sup>2</sup>
    - Little guidance in literature<sup>2-4</sup>
    - Medical leaders' perspectives absent, but their experience qualifies them to offer informed insight



# Introduction

- Theories of leadership & learning inform our study
- Contemporary leadership theory<sup>5</sup>
  - Leaders not necessarily born
  - Leadership behaviors can be learned
  - Via a process of exposure to many experiences, self-examination, reflection, & practice



# Introduction

- **Experiential learning theory<sup>6</sup>**
  - Process of learning leadership reflects tenets of experiential learning theory
  - Learning involves adaptation & engagement with environment via 4 modes of learning
  - Concrete experiences → observations & reflection → abstract concepts → implications for action → experimentation & testing → new experiences



# Introduction

- Experience-based learning theory<sup>7</sup>
  - Context + process creates outcomes
    - Attitudes, knowledge, skills, actions re leadership linked to
    - Attitudes, knowledge, skills, behaviors re clinical medicine
  - Context: human interactions & curricular factors
  - Process: progressive participation in a community of practice<sup>7,8</sup> with continuous meaningful relations between students & instructors



# Methods: Design

- We used **qualitative methods** to gather from UMKC graduates who are medical leaders **their points of view** about features of learning communities they believe contributed to their leadership development





# Methods: Setting

- UMKC's medical school admits most students directly from high school
- Six-year, round-the-calendar combined Baccalaureate-MD program
- Students interact with patients, physicians, other providers from the first week onward
- In small groups



# Methods: Study Group

- 1,664 BA/MD graduates 1976-1999
- 213 met study leadership criteria
  - Documented achievement as top administrators, clinicians, researchers, &/or educators in substantial national, regional, local medical institutions, organizations, &/or societies
- 71 (1/3) contacted for interviews
- 48 (2/3) in a variety of positions participated



# Methods: Data Collection

- Semi-structured phone interviews
- Open-ended questions re factors graduates thought contributed to the leadership development throughout their career
- Follow-up questions gathered additional views, especially about medical school experiences including learning communities



# Methods: Data Analysis

- We subjected interview notes to qualitative content analysis<sup>9</sup>
- Iterative cycles of open-coding
- Constant comparison method to modify codes
- Pairs of interviewers recoded interviews with finalized coding structure & checked for reliability
- Interviewees invited to comment on findings



# Results

- For many graduates, some element of UMKC's learning communities influenced their leadership development
- Description of learning communities
  - Called **docent teams**
  - Organized as **patient-care/education groups** composed of physician-leader called a **docent**, other health care providers, & **twelve senior/junior students**



# Results

- Year 3 student joins & remains with a team until graduation
- Team serves an annual inpatient medicine rotation for 3 years & a weekly outpatient clinic for 4 years
- Year 3 student is paired with a Year 5, stays with that senior partner until the senior graduates & junior becomes a senior partner
  - Partners responsible for nurturing each other's professional & personal development
- Team members interact in physical space



# Results

- What features of the docent system did graduates say influenced their leadership development?
- Most graduates said the **partnership between a junior & senior student** was critical
- It was **the** place for learning about teaching, leading & learning from others
  - Senior partner's tutelage, role modeling, mentoring, coaching, feedback
  - Need to apply what they learned when they became senior partners



# Results

- *“My senior partner was excellent. Her work ethic was superb; her relationships with patients, her patient care outstanding. She was an excellent role model. She demonstrated leadership by expressing her commitment to making things better, by trying to do things differently if it helped the patient.”*
- *“You got to appreciate your senior partner and what they did for you, then you replicated that with your junior partner.”*
- *“I enjoyed inspiring junior partners, enjoyed the challenge, it brought out the best in me and I tried to bring out the best in other people.”*





# Results

- Most graduates also said their **docent** was influential
- Role model
  - Lead, interact with others, care for patients, be humanistic
  - Observation continuous, not a one-time event
- Mentor
  - Guide, advocate, standard setter
- Surrogate parent
  - Dispensing tough love



# Results

- *“My docent was so influential....He taught us about respect for patients as humans.... In all he did he was gentle, dignified, exuded kindness, gave excellent patient care in all ways...was an excellent role model. He also put himself out there to relieve patient suffering. He would turn a five minute visit into what seemed like 30 minutes, just slowing down, and totally focusing on the patient, (good lesson for leadership). He also demonstrated leadership by his involvement with organized medicine, with community. That was inspiring. He actively worked to make change for the better..... he led by example.”*
- *“Best docent in the world, great leader and great role model, [I] aspired to be similar.”*



# Results

- Some graduates explained **importance of team membership** for subsequent leadership
- Said it was a team with special characteristics
  - Ongoing with responsibilities for helping each other & contributing to patient care
  - Therefore had to:
    - Get along
    - Be collegial, collaborative, supportive
    - Create safe learning environment
- Became a place for learning how to build & be part of an effective team



# Results

- *“There was a very strong team spirit that shaped you for leadership. You were on a team for four years, and it was a very strong group. It didn’t just come and go like on short rotations.”*
- *“...We had a solid experience; it [the team] taught us how teams function effectively, how to relate, how to get along with even those you didn’t exactly love; you knew that being a team member they would step up when needed and vice versa. It did that because the team stayed together for four years.”*



# Results

- 4-year team membership conferred graduated responsibility on students
  - Guide partners
  - Help other team members
  - Assist with patient care until ready to reach appropriate autonomy for patients
- Students knew responsibilities would grow year by year



# Results

- *“You were given incremental responsibility for the junior partner; it was planned, consistent, existed through time so you could build a relationship and that is what made it important for leadership. You were in charge and you also were expected to lead a subunit of the team. Older students on the team oriented us to being a partner. All this just didn’t happen, it was a formal part of the docent system, and not even like working with a younger student on a clerkship. It was to last through time.”*



# Results

- Over 4 years, students acquired & applied clinical knowledge, skills, attitudes to patient care as team members
- Many graduates said the team membership:
  - Immersed them in regular authentic leadership & clinical experiences
  - Gave them exquisite skills, confidence, & motivation to excel as PGY-1 residents
- Peers & supervisors in residency recognized their leadership
- Graduates received leadership opportunities leading to other opportunities



# Results

- *“Having our own panel of patients...encouraged a sense of development of that process of leadership that becomes n atural as we moved throughout the docent group.”*
- *“By the time we graduated we were doing things that interns and residents were doing elsewhere. This was a huge advantage. When I went into residency I was more confident than the others about what I was doing because I had already done them. And my clinical abilities helped me to stand out, to be noticed by faculty, and opened up leadership opportunities for me because I was ready and was not wondering about what to do with patients.”*





# Summary

- Noting that UMKC's graduates have attained substantial leadership positions in medicine
- We asked them to identify factors that contributed to their leadership development
- Most graduates said that medical school experiences were influential
- Most pointed to UMKC's learning communities



# Summary

- The features of the learning communities called docent teams they said contributed to their leadership success were:
  - **Four-year team membership** that immersed them in authentic experiences
  - **Learning & practicing leadership behaviors & clinical medicine** due to
    - Graduated responsibility for professional & personal development of **student partners** & other team members
    - Graduated responsibility for **patients**



# Summary

- Plus influence of:
  - **Docent's** role modeling & mentoring of leadership & clinical medicine
  - **Team culture** of support, collegiality, collaboration, safety, & effective team work
- All these features enabled graduates to demonstrate clinical leadership at PGY-1 which offered them further leadership opportunities



# Discussion

- Important to note that UMKC's learning communities part of an institution with other features that support the learning communities
- Graduates mentioned as contributing to their leadership development, e.g.
  - Inspiring nurturing overall learning environment relationships
  - Selection of well rounded students
  - Nontraditional curricular emphasis on clinical medicine integrated with liberal arts education



# Discussion

- Results offer direction to designing learning communities to nourish students' leadership development
- Recommendations:
  - Considering tenets of experiential & experience-based learning theory highlighting
  - Longitudinal immersion in authentic experiences<sup>3,7</sup>
  - Progressive participation in a community of practice with meaningful long-term relations between students & instructors
  - Expanding the theory to include long-term meaningful relations between students on teams



# Discussion

- Results recommend also considering tenets of contemporary leadership theory
  - Leadership is a journey
  - Exposure to many different leadership experiences, practice, & reflection that graduates expressed
- Results suggest leadership preparation not a matter of teaching just leadership skills<sup>5</sup>
- Also of imparting those skills linked to context, in this case clinical medicine



# Discussion

- Limitations of study
  - Retrospective
  - Leadership criteria ruled out participation of informal leaders & effective followers
  - Did not explore why other UMKC graduates have not become leaders
- Its significance
  - Results unique because they come from leaders with experience in the real world



# Discussion

- **Future work**
  - Study possibility that graduates' views about medical school experiences may differ by gender, graduation year, & type of leader
  - Discover opinions about school experiences of graduates who are not top leaders
  - Evaluate relevance of findings to changes in learners, physician roles, patient care, health care systems, types of future leaders needed





# Conclusion: Take Home Message

- **A supportive learning community emphasizing progressive participation in a community of practice via strong longitudinal clinical experiences with graduated responsibility for patient care & leading others gave UMKC graduates a springboard to medical leadership in the real world**



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