

Exploring the History of Segregation at Duke while Orienting New Students to Team-Based Learning

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BACKGROUND AND OBJECTIVE

- The Master of Biomedical Sciences (MBS) is the newest masters program in the Duke University School of Medicine. This program delivers a one-year, interdisciplinary curriculum for students aspiring to the healthcare professions and careers in biomedical science.
- The predominant pedagogy employed in the Duke MBS program is team-based learning (TBL), an evidence-based approach that incorporates individual responsibility, active learning, small-group collaboration, application of conceptual knowledge, and immediate feedback (Koles et al., 2010; Kamei et al., 2012; Parmelee et al, 2012).
- Our first three cohorts (Duke Classes of 2016-2018) comprise a diverse group of 118 matriculants, most of whom have no prior experience with TBL. In each year, we dedicated an afternoon of our 2-day orientation to introduce our andragogical methodology through active learning activities and team-based discussion of social-cultural aspects of healthcare.
- Objective: to implement an “application” exercise that demonstrates TBL practices and reinforces programmatic values of diversity, inclusion, and teamwork, while introducing new pre-professional students to Duke’s history of discrimination and segregation.**

MBS PROGRAM – CLASSES OF 2016-2018

- The Master of Biomedical prepares students to be highly competitive candidates for the health professions and other biomedical careers. The curriculum integrates graduate level human biological sciences with professional formation, aiming to develop skill in critical thinking, communication, and teamwork.
- coursework:



- ❖ 1,500 applications initiated
- ❖ 118 matriculated students
- ❖ 41% are females
- ❖ 72 universities/colleges represented in our three classes
- ❖ ~1/3 are individuals from ethnic and racial communities that are underrepresented in the health professions
- ❖ another ~1/3 are rural born, first generation to college, from families for whom English is not a first language, identify LGBTQ+, or represent some other background disadvantaged for health professions admissions



ORIENTING NEW LEARNERS TO TBL

- Present programmatic/professional values and principles from which the practices of TBL are derived



- Discuss TBL practices:

Learner Preparation (before class—core knowledge is acquired through video tutorials, accompanying notes, and assigned readings)

Readiness Assurance (in class—core knowledge is assessed individually, then in teams with consensus responses and immediate feedback)

Facilitated Discussion (in class—discussions are driven principally by student inquiry, rather than faculty exposition)

Team Application (in class—core knowledge is applied through diverse learning experiences, including hands-on laboratory work, integrative clinical case analysis, patient interviews, or experimentation)

LIBRARY RESOURCES

References:

- “The Road to Desegregation at Duke” (<http://exhibits.library.duke.edu/exhibits/show/desegregation>)
- “African American History at Duke Medicine” (<http://guides.mclibrary.duke.edu/afam>)
- Kamei, R.K., Cook, S., Puthucherry, J., Starmer, C.F. (2012) 21st century learning in medicine: traditional teaching versus team-based learning. Med. Sci. Educ. 22:57-64.
- Koles PG, Stolfi A, Borges NJ, Nelson S, Parmelee DX (2010) The impact of team-based learning on medical students’ academic performance. Academic Medicine 85:1739-45.
- Parmelee D, Michaelsen LK, Cook S, Hudes PD (2012) Team-based learning: A practical guide: AMEE guide no. 65. Medical Teacher 34:e275–e287

READINESS ASSURANCE (INDIVIDUAL & TEAM)

- Students prepared for the session by reading/viewing a digital exhibit prepared by the Duke University Libraries (“The Road to Desegregation at Duke”). In class, students completed **individually** a readiness assurance comprising 10 multiple choice questions based on the reading. Then, students gathered in their **teams** and worked through the same question set. Students were assigned to 7-9 TBL teams (4-5 students per team) to maximize academic, biometric, and sociological diversity.
- Example question:
During the protests of 1968-1969, student organizers made a number of demands of Duke University administration. Of the following list of these demands, which was chief?
 - establishment of a “black dorm” on campus
 - within 4 years, census of black students at Duke University equivalent to the census of blacks in the southeastern U.S. (29%)
 - that non-academic employees of Duke University determine the basis for their working conditions, rights, and other employment matters
 - establishment of a fully accredited department of Afro-American studies
 - an immediate end to harassment of black students by police and protection of all black students on campus

TEAM APPLICATION EXPERIENCE

- A TBL application experience was prepared using a research guide compiled by the Duke University Medical Center Library & Archives (“African American History at Duke Medicine”). Teams were given learning activities designed to illuminate key events, persons, places, and milestones in the history of discrimination and segregation at Duke; learning outcomes were evaluated for factual findings, and descriptive evidence was gathered with a survey in Qualtrics.

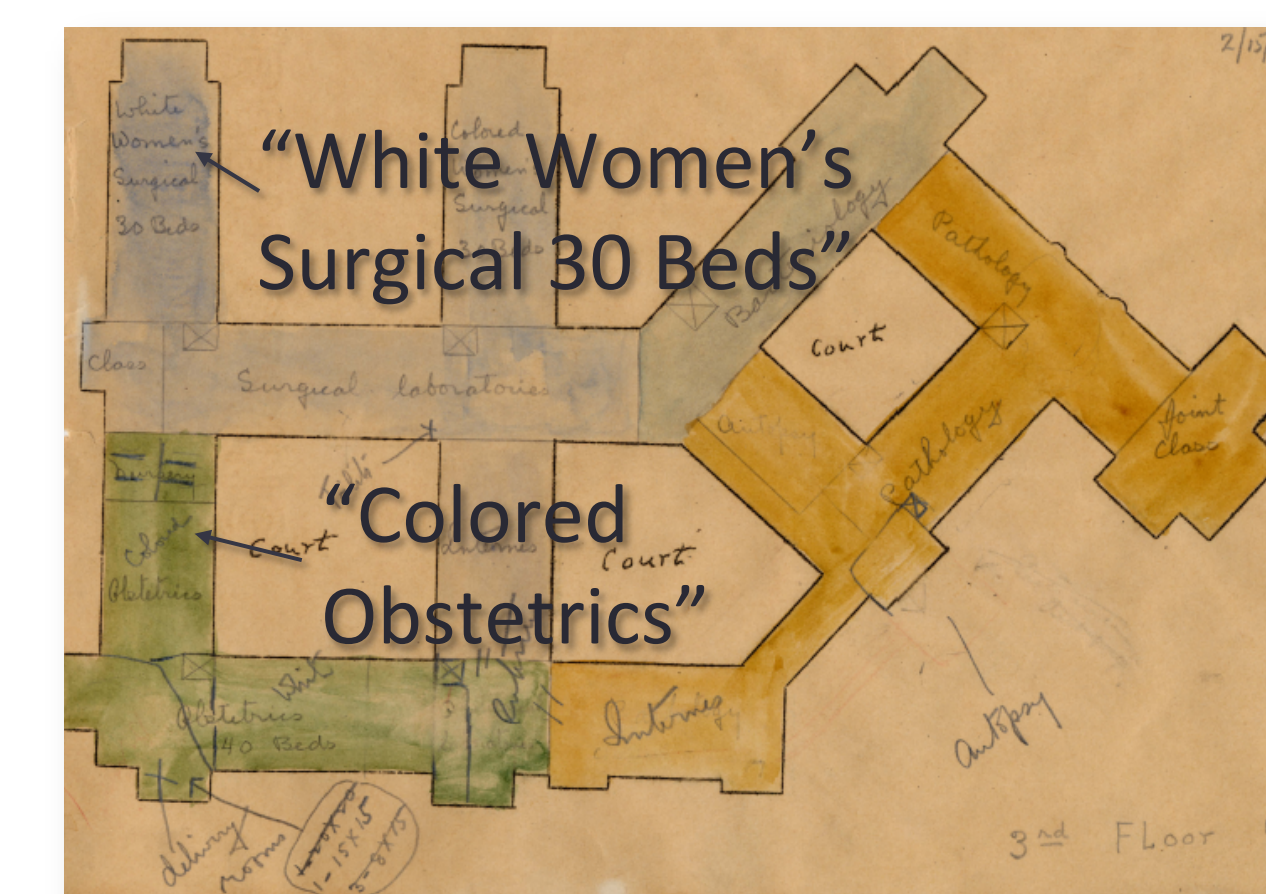
- Example questions:



Who was **Julian Francis Abele** (1881-1950) and what was his relationship to Duke University? Now, find this portrait on campus and take a “team selfie” in front of this painting (sample submission, right). As you visit this portrait, consider what it might have been like to be in Mr. Abele’s position throughout his time with Duke University as a principal client. If you were he, would you have ventured from Philadelphia to Durham? So what did Mr. Abele decide – did he ever visit Durham and Duke University?



Portrait of Julian Francis Abele, commissioned by former Duke President, H. Keith H. Brodie (term, 1985-1993) – the first portrait of an African American to be displayed publicly at Duke University.



- Visit this historical document https://medspace.mc.duke.edu/sites/default/files/dumca_7979.pdf and find locations where male and female patients of **Duke Hospital** were segregated by race (see image). Identify the floor and zone where at least ONE unit of segregated in-patient beds was established, according to the 1927 floor plans. **Take a short walk as a team and see for yourselves the present configuration of the former segregated ward that you selected.**
- When did Duke Hospital **end racial segregation** of in-patients?
- Who is **Jean Spaulding** and what did she achieve at Duke University in 1972?

SUMMARY AND CONCLUSIONS

- ✓ All teams completed the application worksheet with accurate findings; faculty noted a high degree of learner engagement and feedback indicated a highly formative learning experience.
- ✓ While orienting learners to TBL for health professions education, applications can be designed that serve larger programmatic purposes. In this application, students were ...
 - challenged to confront our historic discriminatory practices, to recognize their present legacy, and to reflect on our stated institutional values of diversity, inclusion, and teamwork;
 - directed to create a journal entry that captures authentic thoughts, feelings, and reactions; and
 - prepared for ongoing, deliberate discourse throughout the MBS curriculum on race and its impact on patient care and health outcomes.
- ✓ Similar applications could be deployed across the Duke Health Enterprise in interprofessional teams of learners to achieve goals that are common among the health professions.