Role of Service Learning in Medical Students’ Clinical and Professionalism Competencies

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What is service learning?

- Course-based, credit bearing educational experience
- Participate in an organized activity that meets specific learning objective criteria
- Reflect on the service activity
  - Greater understanding of course content
  - Enhanced sense of civic responsibility
- Two goals: meet educational objectives and benefit community stakeholders
Service learning is designed to provide opportunities to engage in experiential learning which

- Is task and problem specific
- Improves clinical skills
- Demonstrates the benefits of altruistic behavior
John Dewey (1938)

Dewey established the foundation to maximize potential for inquiry-based learning

- Generate interest in the learner
- Be intrinsically worthwhile to the learner
- Present problems that awaken new curiosity and create a demand for information
- Occur over time and be capable of fostering development over time
TCOM Student Service

- Tradition originated at founding of school
- Today, majority coordinated through student organizations
- Nearly 1/3 of all service records were at a local indigent clinic
- 10 hours required each of first four semesters
- Meet specific criteria
  - Medically related
  - Low or no cost service to the community
  - Have supervision appropriate for the service
Electronic Reporting of Service

- New opportunity to examine data systematically
- Self report on service activity/event
  - Assessments using Likert-like scale
  - Free text descriptions and comments
  - Written reflections
Items rated using Likert-like scale

- Overall satisfaction with the experience
- Whether it met health promotion/education/prevention objective
- Whether it met using clinical skills objective
- Whether it met working in collaborative teams objective
Also asked but not included in this analysis

Whether it promoted UNTHSC Values, including

- serving others first and demonstrating compassion
- integrity, honest, trustworthy, dependable
- respect, treat others with dignity, build trust
- collaboration, combining strengths, recognizing others
- being visionary, create, innovate, navigate change

Comments on what they learned
Results
preliminary, one semester

- Focus on descriptive statistics
  - 1566 individual service records
  - 458 students
  - Two classes
120 discrete events/activities
Organized into 11 categories

- Indigent clinics
- Homeless Services
- School and Sports Physicals
- Health Education and Safety
- Health Fairs
Results, cont.

More categories
- Screenings for Research Studies
- Health careers Promotion
- Mission trips
- Senior Services
- On-Campus Clinical Skills Training with Volunteer Patients
- Sports Events
Highest Ratings, Overall Experience by Service Type

- 89.7% strongly agreed for health career promotion
- 88.7% strongly agreed for homeless services
- 83.3% strongly agreed for sport and school physicals
Histogram for Overall Experience
Activities Rated Highest
For meeting health education objective

- 100% strongly agreed for a mission trip
- 96.2% strongly agreed for homeless services
Histogram for Health Education Objective
For meeting clinical skills objective

- 94.3% strongly agreed for homeless services
- 81.3% strongly agreed for school and sports physicals
Histogram for Clinical Skills Objective
Activities rated highest
For meeting collaboration objective

- 98.1% for homeless services
- 97.9% for school and sports physicals
- 94.5% for health fairs
Histogram for Collaboration Objective
For significant differences among the various types of services, in their overall rating, meeting the health promotion objective, clinical skills objective and collaboration objective.

- Two-sided t-tests using z scores
- No significant differences between any of the pairs of activities for overall experience or the collaboration objective
Services rated higher for meeting health education objective

- Health fairs
- Health education and safety for children
- Health careers promotion
Services rated higher for meeting clinical skills objective

- On-campus clinical skills training with volunteer patients
- Homeless services
- Indigent clinics
- School and sports physicals
Overall ratings of service by learning objective

- Health education/promotion rated highest
- Followed by working in collaborative teams
- Followed by exercising clinical skills
Three-way comparison

11 service categories collapsed into 3
- Service designed to exercise clinical skills
- For health education/promotion
- For health careers promotion

Compared positive ratings for 3 learning objectives
- Only significant difference found for clinical skills objective
- Rated highest for clinically related service
- Rated lowest for health education service
Despite skewedness, discernable differences exist between types of activities meeting various learning objectives.

Ratings ran in expected directions:
- Activities promoting health and health education rated highest for that learning objective.
- Activities exercising clinical skills rated highest for that learning objective.
Future analyses

As the database expands, we will be able to look at specific service activities within each of the categories.

For example, do students rate service activities that exercise specific EPAs such as conducting a history and physical higher than those that do not include these elements?

Which types of service promote which values?
I was able to implement OLDCARTS while interacting with actual patients as opposed to the actor patients in Clinical Communications. I had the chance to use the otoscope and learned how to do a blood glucose test. Since a lot of the patients were Spanish speaking I also learned how to communicate with the patient via an interpreter.

I learned so much! I saw so many patients with neurologic complaints and disease processes (headaches meningitis brain cyst strokes altered mental status etc.) that reinforced what I was studying at the time.

I have been working at this clinic for awhile. I continue to learn from the knowledge of the physicians and their constant patience and kindness with each patient they see.

This clinic promotes integrity and honesty.

I learned that there is a community that needs medical care and is very appreciative of the care they received.
This experience showed me the importance of interprofessional teamwork. It was amazing to see physicians, pharmacists, RNs, nurse practitioners, office staff, and medical students work side by side to provide patients with the best possible care.

This experience was truly great! It was a fantastic way to learn about various individuals who use the homeless shelter. There should never be any prejudice regarding individuals whom utilize these services.

I learned how to guide a first year through a physical exam with my own prior knowledge and experience.

I learned new OMM techniques and somatic dysfunctions and was able to apply these techniques to an actual patient.

I was a middle school teacher prior to medical school and this activity reminded me how much I love kids.

I learned more in depth and had real experiences in the lives of Type 1 Diabetic Children. I was able to learn more about their disease and how to live a normal life in camp.
I have done this activity a couple of times already and each time I really enjoy interacting with the students. They get really excited to participate and provide great answers to our questions. It is a good learning experience to use what we learn in the classroom and share that knowledge with the students. Additionally it is a great opportunity to go outside of UNTHSC and learn a little more about our community.

Importance of making medical care affordable and accessible to all members of a community.

I learned the importance of serving members of the community through volunteerism.

A hands-on project can spark interest and capture the imagination of young people.

I learned that there is no limit to what handicapped athletes are capable of. There were many racers that were in better shape than I will ever be in.

I learned how important it is to uplift and encourage those with recent disabilities to engage in enjoyable health-promoting activities. As these people see that they can break through barriers their confidence is dramatically boosted.
I learned that I love to work with people in wheel chairs or with other handicaps. They have a great outlook on life. Their disability seems to me like such a burden but they turn it into a positive and amaze me with their sense of humor and good nature.

I learned that just listening to people can bring so much healing. It is always great to just sit and listen to stories and about the life of elderly people.

That taking care of the patient's family is just as important as taking care of the patient themselves.

Be more compassionate towards future patients.

I learned more about the sacrifice of being a medical professional and especially a first responder.
Contact

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