

Generating a “Community of Practice”

Evaluation of an Innovative Learning Community in an Academic Teaching Hospital

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Rationale & Purpose

Expansion of Resident training in Ambulatory setting created new challenges for the Preceptors

- ▶ Are clinical faculty effective teachers?
- ▶ What is required for effective teaching?

Literature Review:

- ▶ Meta-analysis of 111 Faculty Development studies:
 - ▶ new programs should focus on promoting workplace learning, and fostering "communities of practice".

Rationale and Purpose

The purpose of our study is to evaluate an innovative "community of practice" designed for Primary Care teaching faculty in a diverse, urban VA setting in order to improve medical trainees' educational outcomes.

Approach & Methods

- ▶ Situated Needs Assessment with faculty members and trainees.
- ▶ All Primary Care teaching physicians recruited for two years.
- ▶ Stanford Education Framework was adopted.
- ▶ Two all-day workshops were conducted:
 - ▶ Learning Climate
 - ▶ Control of Session
 - ▶ promotion of understanding and retention,
 - ▶ Evaluation,
 - ▶ Feedback
 - ▶ promotion of self-directed learning
- ▶ Workshops were implemented and followed by a voluntary “Community of Practice”

Example of Monthly Meetings

- ▶ Film an interaction between a faculty member and trainee based on one component of framework
- ▶ Show video in face to face interaction, followed by open, non-judgmental discussion
- ▶ Form small groups for further practice and discussion
- ▶ Discuss how to incorporate what is learned, what are the obstacles and how to overcome the obstacles

Example of Video Encounters

- ▶ <https://www.youtube.com/watch?v=XZjxDKK6R7I&list=LLElrShAtmAlfz5U135b6bRA>

Evaluation

- ▶ A prospective pretest-posttest design to evaluate the program via a survey with five-point Likert Scale (1= no impact to 5= strong impact), administered prior to the workshop and after eight months
- ▶ Open-ended responses elicited
- ▶ We conducted an independent samples t-test to detect differences between pre and post intervention surveys. As the surveys were anonymized, we were unable to match the responses. Results should be interpreted in this context. P values for significance were set at .05.

Results: Demographic Data

Total Respondents: (pre-15, post-12)

- ▶ Assistant Professors (6 vs 5); Associate Professor (1 vs 2) Full Professor (5 vs 1); Clinical Teacher (0 vs 1)
- ▶ Mean age = 49.9 years (N = 9) vs 42.8 (N=11)
- ▶ Males = 7 males; Females = 5 (N = 12) vs males 4; females 7 (N = 11)
- ▶ Average teaching experience = 12.9 vs 9.2 years
- ▶ Specialty: All IM except one is Med/Peds

Results/ Quantitative

Stanford educational Framework components	Sample questions/ rate level of your teaching performance	Result after first workshop retro/pre/posttest	Result after 8 months of CoP
Learning climate	Your ability to create a positive learning climate	Improved	No change
Control of session	Your ability to control the teaching session effectively	Improved	Improved
Communication of goals	Your ability to communicate goals to learners effectively	Improved	Improved
Promotion of understanding and retention	Your ability to promote understanding and retention of content	Improved	Improved
Feedback	Your ability to give feedback trainees' knowledge/skill/attitude	Improved	Improved
Evaluation	Your ability to evaluate trainees' knowledge/skill/attitude	Improved	Improved
Self- directed learning	Your ability to promote trainees" self-directed learning	Improved	No Change

Please rate the level of your teaching performance in the following areas after participating in the workshop (1-5, no impact- strong impact)

Results/ Quantitative

Stanford educational Framework /overall	Sample questions/ Please rate the impact of training on	Result after first workshop retro/pre/posttest	Result after 8 months of CoP
Way of teaching	The way you think about your teaching	Improved	No change
Philosophy	Your philosophy about teaching	Improved	No change
Attitude	Your attitude about the importance of clinical teaching	Improved	No change
Enthusiasm	Your enthusiasm for being a clinical teacher	Improved	No change
Overall framework	Your use of the educational framework in analyzing your teaching	Improved	Improved
Knowledge	Your knowledge of principles of effective teaching	Improved	No change

Please rate the level of your teaching performance in the following areas after participating in the workshop (1-5, no impact- strong impact)

		Sig (2-tailed)
WkshpImpactPHILOS	Equal variances assumed	0.5
	Equal variances not assumed	0.516
WkshpImpactATTITUDE	Equal variances assumed	0.533
	Equal variances not assumed	0.547
WkshpImpactENTHUS	Equal variances assumed	0.8
	Equal variances not assumed	0.801
WkshpImpactWAY	Equal variances assumed	0.348
	Equal variances not assumed	0.333
WkshpImpactFRAMEWORK	Equal variances assumed	0.704
	Equal variances not assumed	0.695
WkshpImpactKNOWL	Equal variances assumed	0.607
	Equal variances not assumed	0.6
TeachPerfLevelbeforeOVERALL	Equal variances assumed	0.023
	Equal variances not assumed	0.031

Results/Quantitative Data

		sig (2-tailed)
TeachPerfLevelABILITY_LECT	Equal variances assumed	0.33
	Equal variances not assumed	0.316
TeachPerfLevelPOSITIVE	Equal variances assumed	0.324
	Equal variances not assumed	0.312
TeachPerfLevelCONTROL	Equal variances assumed	0.034
	Equal variances not assumed	0.036
TeachPerfLevelCOMMINC	Equal variances assumed	0.046
	Equal variances not assumed	0.051
TeachPerfLevelUNDERSTAND	Equal variances assumed	0.038
	Equal variances not assumed	0.033
TeachPerfLevelEVALUATE	Equal variances assumed	0.021
	Equal variances not assumed	0.018
TeachPerfLevelFEEDBK	Equal variances assumed	0.023

Results/ Qualitative

Sample questions	Responses
Considering the definition of CoP (definition given) do you consider our monthly meeting to be a CoP? Yes, or No. Please explain?	1- Yes, I think it is a good idea and keeps attention and focus 2- I think it's the beginning of a process, I think we all are thinking a little more thoughtfully about teaching, I think it will progress
Have you learned a new teaching strategy that has helped you in your practice?	1- SNAAP 2- One minute Preceptor 3- I learned in order to give better feedback I need to set the goals for the teaching session
What are your overall expectations of our monthly meetings?	1- Increased interaction 2- Idea exchange 3- Problem solving by focusing on barriers that prevent us to use these teaching skills
Are there any specific issues you would like us to discuss as part of our monthly meetings?	1- Discussing how others implement these teaching models? 2- More defined conversations around challenging situations 3- Handouts/ Standardized practice considerations
What is your reason for participating in the monthly meetings?	1- It is nice to sit together and talk about teaching for an hour 2- Good interaction with other clinical educators 3- To learn new teaching skills
What meetings did you find more useful?	1- The meetings with our faculty interactive videos with the trainee 2- All of them due to their nature of being interactive 3- Double tree workshops/ we were able to obtain the expert opinion

Discussion

- ▶ Positive influence of "communities of practice" in a longitudinal, continuous effort to improve medical trainees' learning in the workplace.
- ▶ Significant differences on performance variables indicate that for discrete, individual teaching attributes, faculty felt more in control of session, were more comfortable setting goals and giving feedbacks.
- ▶ Data identified areas where improvements are necessary in our intervention as well as larger teaching environment

Significance

Communities of Practice in medical learning environments provide can be successful in:

- ▶ supporting continuous workplace learning based on non-judgmental feedback during faculty interaction
- ▶ providing motivation and collegial support to attain best educational practices

References

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- ▶ Skeff, K., Stratos, G.A., Berman, J. 1992. Improving Clinical Teaching: Evaluation of a National Dissemination Program; *Arch intern Med*. 1992;152(6):1156-1161
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References

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