



June 2018

Faculty Development Initiatives: A prerequisite for capacity building and enhanced productivity in a medical institution

Rehana Rehman

Aga Khan University, rehana.rehman@aku.edu

Hassan Mehmood

Aga Khan University, hassan.mehmood@aku.edu

Syeda Fatima

Aga Khan University, sadia.fatima@aku.edu

Irfanullah Baig

Aga Khan University, irfan.baig@aku.edu

Zohaib Rana

Aga Khan University

See next page for additional authors

Follow this and additional works at: https://ecommons.aku.edu/pakistan_fhs_mc_bbs



Part of the [Educational Assessment, Evaluation, and Research Commons](#), [Medical Education Commons](#), and the [Other Teacher Education and Professional Development Commons](#)

Recommended Citation

Rehman, R., Mehmood, H., Fatima, S., Baig, I., Rana, Z., Iqbal, M. (2018). Faculty Development Initiatives: A prerequisite for capacity building and enhanced productivity in a medical institution. *JPMA. The Journal of the Pakistan Medical Association*, 68(6), 848-851.

Available at: https://ecommons.aku.edu/pakistan_fhs_mc_bbs/357

Authors

Rehana Rehman, Hassan Mehmood, Syeda Fatima, Irfanullah Baig, Zohaib Rana, and Mohammad Iqbal

Faculty Development Initiatives: A prerequisite for capacity building and enhanced productivity in a medical institution

Rehana Rehman, Malik Hassan Mehmood, Syeda Sadia Fatima, Irfanullah Baig, Zohaib Rana, Mohammad Perwaiz Iqbal

Abstract

Objective: To determine the contribution of teaching, learning and assessment forum's initiatives on professional development of faculty and staff.

Methods: This retrospective study was conducted at the Department of Biological and Biomedical Sciences, Aga Khan University, Karachi, from July to December 2016, and comprised teaching, learning and assessment activities carried out from 2012 to 2015. The responses acquired from feedback evaluation were recorded at the end of activity on a Likert-type scale ranging from 1-5. Positive responses were presented for each variable with respective activity type across the study years. The association of the effectiveness of teaching, learning and assessment between type of event and yearly outcome was also assessed.

Results: A total of 66 activities were held during the study period. Of them, 49(74.24%) were workshops/human resource trainings, 5(7.57%) were courses and 12(18.18%) were seminars. Together, they involved over 500 participants. Objectives, disclosure statement, contents, level of interaction, acquired knowledge, time management, queries responded, organisational activity, course material and overall assessment showed consistent positive response across the years, but the acquisition of new knowledge differed significantly ($p < 0.05$) through the study years.

Conclusion: Teaching, learning and assessment initiatives, play a positive role in professional development of faculty and staff.

Keywords: Teaching, Learning, Assessment, Faculty development, Medical education excellence, Professional development. (JPMA 68: 848; 2018)

Introduction

In the recent past, auxiliary focus has shifted towards research in medical education to develop new techniques for knowledge dissemination.¹ Various strategies are proposed and practised in routine, but the most common ones implemented for promoting educational transformation are based on the principle that an individual or a team of individuals develops and tests instructional strategy and then disseminates it to an audience both at the parent institution and at global level. These activities usually are offered in the form of large scale talks/seminars, workshops, and courses etc. and have proved successful for better research and productivity.^{2,3}

With this background, the teaching, learning and assessment (TLA) forum was introduced in the Department of Biological and Biomedical Sciences (DBBS), Aga Khan University (AKU), in 2012 to organise workshops, seminars and courses to stimulate deep

.....
Department of Biological and Biomedical Sciences, The Aga Khan University Medical College, Karachi, Pakistan.

Correspondence: Malik Hassan Mehmood. Email: hassan.mehmood@aku.edu

learning, promote capacity building (CB) and professional development (PD) of both facilitators and the participants. The current study was planned to determine the contribution of TLA forum's initiatives (workshops, courses, seminars) on CB and PD of faculty and staff, and to identify areas of improvement.

Subjects and Methods

This retrospective study was conducted at the Department of Biological and Biomedical Sciences, AKU, Karachi, from July to December 2016. After taking approval from the institutional review board, evaluation of TLA activities carried out from January 2012 to December 2015 was done. Participants and facilitators within DBBS or any other department of AKU (who had attended/conducted at least two activities during the study period) were included. Participants and facilitators who had attended/conducted less than two activities were excluded. Data was assessed through desk records. Portfolios of facilitators, names and email addresses of the participants and facilitators were retrieved. Written informed consent was obtained from the study participants. Data was generated from the summary report of feedback evaluation given at the end of activity forms that were pre-tested and practised in all

institutional continuing professional educational activities. These feedback evaluations completed by the participants were on a set criterion and were assessed on a Likert-type scale ranging from 1-5, where 5=excellent, 4=very good, 3=good, 2=fair and 1=poor. The variables of the evaluation forms included; Are objectives of the activity well defined?; Has disclosure statement been shared?; Have the contents been covered as per objectives?; Was the overall presentation at the level of the participants' understanding?; Was there adequate level of interaction?; Has the new knowledge been covered/shared?; Was the time management good?; Were the queries adequately responded?; Was the organisation of activity fairly good?; Was the course material (if provided) of appropriate quality?; Was the overall assessment of activity obtained?

Responses 'excellent', 'very good' and 'good' were

clustered as a "positive response" and responses 'fair' and 'poor' were grouped as a "negative response". To see the association of effectiveness of TLA between type of event and yearly outcome, Pearson Chi square test was used. The results of study years were compared and considered significant with $p < 0.05$.

Results

During the study period, 66 activities had been conducted. They comprised 49(74.24%) workshops/human resource trainings, 5(7.57%) courses and 12(18.18%) seminars. TLA initiatives were categorised into themes of research, teaching and learning, and medical education. Over 500 participants were entertained in these activities. The overall percentage of positive responses of workshops on different variables were found consistent throughout the years, except for the time management and queries responded (Table). The

Table: Affectivity of TLA initiatives in terms of % positive response of the participants against feedback variables during years 2012 to 2015.

Variables of feedback evaluations forms	Event type	Positive responses (%)				*P-value
		2015	2014	2013	2012	
Objective of the activity defined	Workshop	97.7	98.1	100.0	97.2	0.95
	Seminar	94.8	98.2	95.8	-	0.06
	Course	90	-	-	100	0.57
Disclosure statement	Workshop	92.7	99.0	100.0	92.3	0.52
	Seminar	91.4	99.1	89.9	-	0.30
	Course	80	-	-	100	0.59
Content covered as per objectives	Workshop	98.9	99.1	96.4	93.0	0.79
	Seminar	92.9	99.0	99.0	-	0.47
	Course	70	-	-	100	0.54
Overall presentations were at the level of participants understanding	Workshop	97.7	99.1	96.6	98.6	0.98
	Seminar	93.8	99.1	98.0	-	0.18
	Course	80	-	-	100	0.63
Level of interaction	Workshop	93.1	99.1	100.0	91.7	0.92
	Seminar	92.6	98.1	95.9	-	0.84
	Course	80	-	-	100	0.72
Acquired new knowledge	Workshop	95.3	97.2	100.0	94.4	0.04
	Seminar	94.7	97.2	96.0	-	0.16
	Course	77.8	-	-	100	0.76
Time management	Workshop	89.8	99.1	100.0	93.1	0.80
	Seminar	92.6	99.1	94.9	-	0.24
	Course	40	-	-	100	0.90
Queries responded	Workshop	95.3	100.0	96.6	90.3	0.97
	Seminar	94.4	100.0	98.0	-	0.99
	Course	90	-	-	100	0.77
Organisation of activity	Workshop	97.7	99.1	100.0	95.8	0.68
	Course	90	-	-	100	0.13
Course material, if provided was of appropriate quality	Workshop	93.0	93.5	100.0	95.7	0.92
	Course	70	-	-	100	0.47
Overall assessment of the activity	Workshop	96.3	99.0	100.0	97.1	0.91
	Course	77.8	-	-	100	0.70

* $p < 0.05$ was considered significant using Pearson Chi Square test.

TLA: Teaching, learning and assessment.

objectives, disclosure statement, contents, level of interaction, acquired knowledge, time management, queries responded, organisational activity, course material and overall assessment activity showed consistent positive response through the years in all TLA activities, but the acquisition of new knowledge differed significantly ($p < 0.05$).

Discussion

It is a known fact that spending energies and resources on CB and PD of the human resource result in sustainable success and achievement of organisational goals to meet the challenges of the competitive world.^{4,5} The role of these TLA initiatives in building capacity, research and productivity is well defined across the world.^{6,7} It is further believed that; "The goal of the millennium generation is the production of a capable doctor with the cardinal ability of being able to unlearn what has been learned before and relearn".⁸ There is thus an urgent need for well-designed structured PD programmes at Pakistani universities to equip teachers as per learning needs of the students.⁹

Literature has proved that these initiatives lead to departmental/institutional high success and productivity.¹⁰ In a study, an in-house research training to physicians model strengthened CB and reduced increasing problems of 'brain drain'.¹¹ We have observed that short courses helped in improvement of proficiencies and skills of the participants. Similar to this, short course in another study improved medical writing skills in doctors.¹² The participants of various activities interacted with each other and acquired new knowledge. The peer pressure motivates and encourages faculty members to take active part in discussion and acquire new knowledge. The results are comparable to training workshop with mandate of small number of students that enhance level of interaction and impact of training.¹¹ The interaction during hands-on activities enabled them to acquire new skills as has been reported earlier.¹² The participants valued and acknowledged TLA activities to be informative, interesting and contextual. Though there was an impression that each initiative of TLA activities is working very well against all variables of evaluation form, the data indicted a significant difference in the acquired new knowledge section of workshops during study years. These findings drag attention of TLA forum and the workshop directors to think critically while designing the contents of workshop. Such pro-active measures in the design and delivery of the effective workshops by incorporating newer and innovative contents may fulfil the expectation of the participants in terms of acquired new knowledge.

The growth and improvement of a medical institute requires proficient and compassionate institutional leadership, and training programmes for faculty development and modifying workplace policies surrounding writing and publishing.¹³

In some of the workshops repeated every year, participants shared the application of learnt knowledge and skills at their workplaces and shared improvement in their assigned tasks. This showed that TLA activities have been designed nicely with an ultimate goal to accelerate the faculty and staff performance and to fulfil the learning needs of participants as is proposed by others.⁹

The study did not examine the outcome and impact of training of participants in their respective settings. Nonetheless, results of the study provide the guidelines to initiate faculty development programmes for CB and PD activities in other institutions.

Conclusion

Most initiatives over a period of three years played a positive role in PD of faculty and staff which was evident by satisfaction of most of the participants. However, a need for workshops on innovative concepts was highlighted to meet learner needs. It is imperative that such initiatives should be continued and periodically reviewed for their impact on medical education at institutional and national levels.

Acknowledgement

We are grateful to former Chair, Professor Naveed Ahmed Khan, of the AKU Department of Biological and Biomedical Sciences, who envisioned the TLA forum. We also acknowledge the contribution of faculty and staff members who have been involved in the conceptualisation of the forum and in the designing and delivery of TLA activities offered during 2012-15.

Disclaimer: Abstract was presented as Oral Presentation in "Association for Excellence in Medical Education (AEME) 2017" held at AKU from March 3 to 5, 2017.

Conflict of Interest: None.

Sources of Funding: None.

References

1. Rehman R, Razi MS, Syed S, Sultan T. Impact of alterations in teaching methodologies on learning capabilities. *J Pak Med Assoc* 2011; 61: 982-6.
2. Seymour E. Tracking the processes of change in US undergraduate education in science, mathematics, engineering, and technology. *Sci Educ* 2002; 86: 79-105.
3. Ward JP, Gordon J, Field MJ, Lehmann HP. Communication and information technology in medical education. *Lancet* 2001; 357: 792-6.

4. Miles KH, Odden A, Fermanich M, Archibald S. Inside the black box of school district spending on professional development: Lessons from comparing five urban districts. *J Educ Finance* 2004; 3: 1-26.
 5. Poncelet JL, de Ville de Goyet C. Disaster preparedness: institutional capacity building in the Americas. *World Health Stat Q* 1996; 49: 195-9.
 6. Ferik Savec V, Wissiak Grm KS. Development of chemistry pre-service teachers during practical pedagogical training: self-evaluation vs. evaluation by school mentors. *Acta Chim Slov* 2017; 64: 63-72.
 7. Boudah DJ, Blair E, Mitchell V. Implementing and sustaining strategies instruction: Authentic and effective professional development or "business as usual"? *Exceptionality* 2003; 11: 3-23.
 8. Sabzwari S, Kauser S, Khuwaja A. Experiences, attitudes and barriers research amongst junior faculty of Pakistani medical universities. *BMC Med Educ* 2009; 9: 68.
 9. Raza SA, Majid Z, Zia A. Perceptions of Pakistani University Students about Roles of Academics Engaged in Imparting Development Skills: Implications for Faculty Development. *Bull Educ Res* 2010; 32: 75-91.
 10. Von Isenburg M, Lee LS, Oermann MH. Writing Together to Get AHEAD: an interprofessional boot camp to support scholarly writing in the health professions. *J Med Libr Assoc* 2017; 105: 167-72.
 11. Dodani S, LaPorte RE. Ways to strengthen research capacity in developing countries: effectiveness of a research training workshop in Pakistan. *Public Health* 2008; 122: 578-87
 12. Jawaid M, Masood Z, Alam SN, Jawaid SA. An analysis of interactive hands-on workshops on medical writing. *J Pak Med Assoc* 2011; 61: 66-70.
 13. Rehman R, Rehan R, Usmani A. Journal Club presentation in research orientation at Bahria University Medical & Dental College. *Pak J Med Sci* 2015; 31: 136-9.
-