

Kirkpatrick's Approach to Build Faculty Development Programs in Medical Education

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ABSTRACT

This article demonstrates how to create, manage, and administer a comprehensive faculty development programme utilising the Kirkpatrick model. The academic literature lacks discussion and analysis of how faculty development might improve healthcare faculty in all academic domains. This study shows that the Kirkpatrick model may be used to create and manage institutional faculty development programmes, filling a gap in the academic literature. If medical schools priorities staff development in line with their mission, they can become more competitive and serve their students better. Healthcare students will benefit from this.

Place of Study: Rai Medical College Sargodha

Study Duration: June 2021 to February 2022

Study Design: Empirical research

Conclusion: This article suggests that faculty development should be done methodically and to fit the needs of various faculty groups. It also suggests that the educators' ultimate purpose is to train medical business executives who can handle the challenges of modern medicine on their own. Medical education programmes must adapt to changing stakeholder needs, focusing on outcomes rather than instruction.

Keywords: Faculty Development Program, Medical Education, Kirkpatrick's Model, Teaching Performance, Effectiveness

INTRODUCTION

Kirkpatrick's model is a widely used framework for evaluating the effectiveness of training programs. The model was developed by Donald Kirkpatrick in the late 1950s and has since been revised and updated to reflect changes in the field of training and development.

The Kirkpatrick model consists of four levels of evaluation, each building upon the previous level. The four levels are as follows:

- Level 1: Reaction** - This level measures how participants in the training program react to the training. This includes feedback on the training materials, the instructor, and the training environment.
- Level 2: Learning** - This level measures how much participants have learned from the training. This includes assessments of knowledge and skills gained during the training.
- Level 3: Behavior** - This level measures how well participants are able to apply what they learned in the training on the job. This includes observations of job performance and interviews with supervisors.
- Level 4: Results** - This level measures the impact of the training program on organizational goals. This includes metrics such as increased productivity, improved customer satisfaction, and reduced costs.



Importance of Faculty Development: Medical faculty development is critically important for several reasons:

- Ensuring High-Quality Medical Education:** Effective faculty development programs help to ensure that medical educators have the knowledge, skills, and resources they need to provide high-quality medical education. This includes not only knowledge of the latest medical research and techniques but also teaching methods and instructional technologies.
- Promoting Professional Growth:** Medical faculty development programs also provide opportunities for faculty members to improve their own professional skills and to stay up-to-date with the latest research in their field. This can lead to increased job satisfaction, better performance, and a more fulfilling career.
- Enhancing Patient Care:** Well-trained and knowledgeable faculty members are better equipped to provide the best possible patient care. This is because they are better able to train medical students and residents to provide quality care, and they themselves are more capable of making informed decisions about patient care.
- Improving Institutional Reputation:** A medical school's reputation is closely tied to the quality of its faculty members. Faculty development programs help ensure that a school's faculty members are well-respected experts in their field, which can enhance the institution's reputation and attract top students and faculty members.
- Keeping Pace with Changing Demands:** Medical education is constantly evolving, with new discoveries and technologies being introduced regularly. Faculty development programs help ensure that faculty members are able to keep pace with these changes and adapt their teaching methods and curriculum to meet new demands.

Overall, medical faculty development is critical to ensuring that medical schools provide high-quality education and produce knowledgeable, skilled, and compassionate medical professionals who are able to provide the best possible care to patients.

Effect of Faculty Development on Career Development: Medical faculty development can have a significant impact on the career development of medical professionals. Faculty development programs can provide opportunities for medical professionals to enhance their skills, knowledge, and competencies in various areas, such as teaching, research, and leadership.

Here are some potential effects of medical faculty development on career development:

1. **Improved teaching skills:** Medical faculty development programs can help medical professionals improve their teaching skills, including instructional design, assessment, and evaluation. As a result, medical professionals can become more effective educators, leading to positive student outcomes and enhanced reputations as educators.

2. **Increased research productivity:** Medical faculty development programs can help medical professionals enhance their research skills, including research design, methodology, data analysis, and manuscript writing. As a result, medical professionals can become more productive researchers, leading to increased funding, publications, and recognition.

3. **Expanded leadership opportunities:** Medical faculty development programs can help medical professionals develop leadership skills, including communication, conflict resolution, and strategic planning. As a result, medical professionals can become effective leaders in their institutions, leading to expanded opportunities for promotion and advancement.

4. **Enhanced job satisfaction:** Medical faculty development programs can help medical professionals feel more engaged and satisfied in their careers. By providing opportunities for professional growth and development, medical faculty development programs can help medical professionals find meaning and purpose in their work.

Overall, medical faculty development can have a positive impact on the career development of medical professionals, leading to improved teaching skills, increased research productivity, expanded leadership opportunities, and enhanced job satisfaction.

Application of Faculty Development Programs in Medical Schools: Faculty development programs are crucial for medical schools to enhance the quality of education, research, and clinical services they provide. Here are some of the applications of faculty development programs in medical schools:

1. **Improving teaching skills:** Faculty development programs help medical educators to enhance their teaching skills and promote a learner-centered approach. This includes developing teaching strategies, incorporating new teaching technologies, and creating interactive learning environments.

2. **Enhancing research capabilities:** Faculty development programs provide opportunities for medical educators to develop their research skills, including grant writing, statistical analysis, and research methodology. This enables them to conduct high-quality research that can contribute to medical knowledge and patient care.

3. **Promoting interprofessional collaboration:** Medical schools require collaboration between different healthcare professionals to provide comprehensive patient care. Faculty development programs can help to promote this collaboration by providing opportunities for interprofessional education and team-based learning.

4. **Developing leadership skills:** Faculty development programs can help medical educators to develop leadership skills that are essential for effective academic administration. This includes skills in management, communication, conflict resolution, and strategic planning.

5. **Promoting diversity and inclusion:** Medical schools have a responsibility to ensure that their educational and clinical programs are inclusive and promote diversity. Faculty development programs can help to raise awareness of cultural differences and biases, and provide strategies for promoting a welcoming and inclusive environment for all students and patients.

In summary, faculty development programs are critical for medical schools to enhance the quality of education, research, and clinical services they provide. By improving teaching skills, enhancing research capabilities, promoting interprofessional collaboration, developing leadership skills, and promoting diversity

and inclusion, faculty development programs can help medical schools to create a positive impact on the healthcare sector.

New Suggestions for a Faculty Development Program

1. **Interprofessional Education:** Provide training and workshops to faculty members on how to effectively integrate interprofessional education into their teaching practices. This can include sessions on team-based learning, collaborative practice, and communication skills.

2. **Evidence-Based Medicine:** Offer workshops on evidence-based medicine that help faculty members incorporate the latest research and best practices into their teaching and clinical practice. This can include sessions on critical appraisal, systematic reviews, and meta-analyses.

3. **Simulation-Based Education:** Provide training and workshops on simulation-based education that help faculty members use simulation to improve the safety, quality, and efficiency of patient care. This can include sessions on scenario development, debriefing, and assessment.

4. **Patient-Centered Care:** Offer workshops on patient-centered care that help faculty members incorporate the patient's perspective into their teaching and clinical practice. This can include sessions on shared decision making, health literacy, and cultural competency.

5. **Well-being and Resilience:** Provide training and workshops on well-being and resilience that help faculty members develop strategies for managing stress, preventing burnout, and promoting self-care. This can include sessions on mindfulness, relaxation techniques, and time management.

Critiquing the Use of the Kirkpatrick's Model: Kirkpatrick's model is a widely used framework for evaluating the effectiveness of training programs. The model consists of four levels: reaction, learning, behavior, and results. While the Kirkpatrick's model can provide a structured way to evaluate training programs, it has some limitations and potential issues that should be considered:

1. **Focus on outcomes:** The Kirkpatrick's model primarily focuses on measuring the outcomes of training programs, such as changes in behavior or results. However, it doesn't consider other factors that can influence the effectiveness of a training program, such as the quality of the training content, the delivery methods, or the learning environment.

2. **Difficulty in measuring levels:** Measuring the higher levels of the Kirkpatrick's model (behavior and results) can be challenging and time-consuming. It may require collecting data over an extended period and conducting follow-up surveys or interviews with participants. Additionally, it may be difficult to attribute changes in behavior or results solely to the training program, as other factors can also play a role.

3. **Lack of focus on individual learning:** The Kirkpatrick's model does not provide a detailed analysis of individual learning, as it focuses more on group-level outcomes. This means that it may not be suitable for evaluating the effectiveness of training programs for specific individuals or small groups.

4. **Limited scope:** The Kirkpatrick's model only evaluates the effectiveness of training programs and does not consider other types of learning, such as on-the-job training or informal learning.

Overall, while the Kirkpatrick's model can be a useful framework for evaluating the effectiveness of training programs, it should be used with caution and in conjunction with other evaluation methods. Organizations should consider the limitations of the model and adapt it to suit their specific needs and goals.

Implementing an Effective medical Faculty Development Program in Pakistan:

The evaluation of educational outcomes in this research is based on Kirkpatrick's method. McLean et al. noted the need most faculty development focuses on teaching without establishing and giving mechanisms for faculty members to apply what they've learnt and get feedback. Instead, these programmes should encourage instructors to use higher-order thinking, which involves applying knowledge and being graded on it. When starting a faculty development programme, consider all three stages.

Implementing an effective medical faculty development program in Pakistan requires a comprehensive approach that considers the specific needs and challenges of the local context. Here are some steps you can take to design and implement a successful program:

1. Assess the needs of medical faculty in Pakistan. Conduct a needs assessment to identify the specific skills and knowledge gaps that need to be addressed. This can be done through surveys, focus groups, or interviews with faculty members and other stakeholders.
2. Develop clear goals and objectives for the program. Based on the needs assessment, establish specific, measurable, achievable, relevant, and time-bound (SMART) goals that align with the overall mission and vision of the institution.
3. Design the curriculum of the program. Use a variety of teaching and learning methods that are appropriate for the local context, such as case-based learning, problem-based learning, simulation-based training, or online learning. Incorporate both theoretical and practical components that allow participants to apply what they learn in real-life situations.
4. Ensure that the program is culturally sensitive and relevant to the local context. Use local examples and case studies that resonate with the experiences of medical faculty in Pakistan. Consider the social and cultural factors that may impact the effectiveness of the program, such as gender, language, and religion.
5. Provide ongoing support and mentoring to program participants. Offer opportunities for faculty members to receive feedback and guidance from experienced mentors or coaches. Encourage peer-to-peer learning and collaboration to foster a sense of community and mutual support.
6. Use evaluation and feedback to continuously improve the program. Use the Kirkpatrick model to evaluate the program at each level, from participant reactions to long-term impact. Use feedback from faculty members and other stakeholders to make improvements to the program over time.
7. Ensure sustainability of the program. Develop a plan for sustaining the program beyond the initial funding period, such as securing additional funding, incorporating the program into the regular training curriculum, or establishing partnerships with other institutions.
8. Foster a culture of continuous learning and improvement. Encourage faculty members to continue their professional development beyond the program through ongoing learning opportunities, such as conferences, workshops, and online courses. Create a supportive environment that values and rewards ongoing learning and professional growth.

Planning Stage: This Study explains the three crucial stages of faculty development programme construction. Determine the problem and the institution's needs first. This includes considering internal and external resources, the ideal timing to implement the programme, its cost-effectiveness, and the optimal intervention activity. The second part involves researching your target's needs. Classifying lecturers into three groups senior, junior, and new achieves this purpose. After problem identification and needs assessment, the third phase will set appropriate goals and precise quantifiable results. Information from the previous phase will define these. These aims and objectives should reflect administrators' and faculty's greater expectations for improving student involvement and instruction. To quantify results, each objective must have quantifiable outcomes and an appropriate instrument.

Implementation Stage: planned activities and interventions are put into action. This stage follows the planning and design phase, where the objectives and strategies for faculty development are determined. During the implementation stage, faculty development programs are designed and executed based on the identified needs and goals. This stage involves creating and delivering workshops, seminars, courses, and other activities to enhance the knowledge, skills, and attitudes of medical faculty. The implementation stage requires close monitoring and evaluation to

ensure that the faculty development activities are effective in achieving the intended outcomes. This may involve collecting feedback from participants, measuring changes in knowledge or behavior, and assessing the impact of the interventions on teaching and learning. The implementation stage is crucial to the success of medical faculty development programs. Effective implementation requires a well-planned approach that considers the needs of the faculty and the resources available to support the activities. Continuous evaluation and feedback are essential to ensure that the activities are meeting the intended objectives and making a positive impact on the faculty and the students they serve.

Evaluation Stage: Kirkpatrick's model of the four levels of learner outcomes is used to evaluate the results of a faculty development programme. The evaluation stage in medical faculty development refers to the process of measuring the effectiveness and impact of the faculty development program. This stage involves assessing the outcomes of the program and determining whether the objectives have been achieved.

There are several evaluation methods that can be used in medical faculty development, such as:

1. **Surveys and questionnaires:** These can be used to gather feedback from participants on the quality and relevance of the program. They can also be used to measure changes in attitudes, knowledge, and skills before and after the program.
2. **Observation and feedback:** Faculty members can be observed while they are teaching to assess changes in their teaching behaviors and practices. Feedback can be given to help them improve their skills and effectiveness.
3. **Assessment of student outcomes:** The impact of the faculty development program on student outcomes can be assessed by analyzing changes in student performance on exams or assignments.
4. **Focus groups and interviews:** These can be used to gather more in-depth feedback from participants on the effectiveness of the program and to identify areas for improvement.

The evaluation stage is an essential part of medical faculty development as it helps to ensure that the program is meeting its goals and objectives. The feedback obtained during the evaluation stage can be used to make improvements to the program and to guide future program planning. It is important to conduct the evaluation stage on a regular basis to ensure that the faculty development program remains relevant and effective in meeting the needs of the faculty and the students they serve.

Filling a Gap in Faculty Development Literature: There are various gaps in the medical faculty development literature that can be addressed to improve the quality of faculty development programs. One area of opportunity is to focus on the use of technology in faculty development. With the increasing prevalence of online teaching and the integration of technology in medical education, there is a need to explore the effectiveness of technology-enhanced faculty development programs. Another gap in the literature is the need to explore the impact of cultural competence training on medical faculty. As medical schools strive to promote diversity, equity, and inclusion in their curriculum and faculty, there is a need to explore the effectiveness of cultural competence training for faculty. This would involve investigating how to design and implement cultural competence training that is effective in changing attitudes, improving knowledge, and enhancing skills among faculty members. Furthermore, there is a need to explore the impact of faculty development on interprofessional education. Interprofessional education is an essential component of medical education, and there is a need to investigate the impact of faculty development programs on promoting interprofessional collaboration and teamwork among healthcare providers. Finally, there is a need to explore the impact of faculty development on medical education research. While medical faculty are expected to engage in research activities, there is limited research on the impact of faculty development programs on research productivity and the ability to secure funding for

research. By filling these gaps in the medical faculty development literature, faculty developers can create more effective programs that address the needs of faculty members and contribute to the overall improvement of medical education.

CONCLUSION

The ideas in this article allow faculty development to be done methodically and to fit the needs of various faculty groups. As a result of the entire work, this ought to be the case. This also suggests that the educators' ultimate purpose is to train medical business executives who can handle the challenges of modern medicine on their own. Medical education programmes must adapt to changing stakeholder needs. This means medical education programmes should focus on outcomes rather than instruction. This change can be made through creating a learning environment, forming collaborative teams, and working together across divisions.

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