

# Key Steps for Managing Changes in the Curriculum

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Advancement in medical education research promotes continuous change to the medical curriculum. Moreover, the changing landscape of the disease pattern, increased awareness about patient rights and law suits against doctors emphasises the addition of themes of professionalism and ethics to the curriculum. "Change" has a protocol of "best practice" developed by "change managers" that should be applied when evolving the medical curriculum. In Pakistan, as in some other nations, the surge of private medical colleges are quick to respond to innovative changes, and put public medical colleges under pressure to continue to provide high quality teaching and learning facilities. Furthermore, the increasingly high levels of patient and community care drives modifications to the medical curriculum in order to meet the challenges of improving patient care.<sup>1</sup> The changes create a demand for improved standards of professionalism from healthcare professionals.<sup>2</sup>

Change is difficult to accept and may be resisted by some stakeholders. The difficulties may be diminished by adopting the principles of change-management theory. By recognising the value of appropriate protocols, curriculum managers can be effective in implementing changes in an organization's, behaviours, skills, technologies, laws, and strategies.<sup>3</sup> Although the curriculum has its own learning outcomes and objectives which should be continuously revised, the basic principles of change-management theory applies to all aspects of curriculum change, and are as follows.

**Stimulus for change and situational analysis:** The stimulus for change can either be external from global changes, government pressure, and pressure from community or it can be internal from leadership and senior management for improving the quality of students' learning. The change management theory stresses on leaders to define mission, goals and strategies for change.<sup>3</sup> A situational analysis is required for the needs and type of changes in the curriculum for example, a competency-based, hybrid, or outcome-based curriculum.

The analysis of the ethos of organization and climate building will help in determining the magnitude and the type of change.<sup>3</sup> The initial feasibility and applicability report will identify the resources required for the change. A force field, cost-benefit, and SWOT analysis needs to be done beforehand.

**Communication with stakeholders:** One of the keys for a successful curricular change is the extended communication between public and private sector.<sup>4</sup> After the initial analysis, establishment of in-depth communication with internal and external stakeholders through workshops, seminars, presentations about curriculum change, academic articles and evidence based medicine is required.<sup>4</sup> The aim is to deal with fears, clarify confusions and lower down the resistance to change.<sup>3</sup> The staff and stakeholders need to be motivated for the change.<sup>3</sup>

**Planning phase:** Clear, SMART objectives are required to achieve the mission goals. The analysis of expected outcomes will enable the change team to further improve their objectives. The curriculum change team can seek advice from sister organizations who have undergone curricular reforms.<sup>4</sup> The addition of public representatives in the curriculum change team may help in identifying the health needs of the community.<sup>4</sup> The change team need to encourage collaboration, integration, joint planning, and communication between departments.<sup>3</sup> A team of faculty members from each department can act as change agents and specialists can be hired, if required. The focus of the change team should be development of the staff skills.<sup>5</sup> The tasks need to be explicitly allocated for example, collecting the learning outcomes from respective departments. The themes of the modules requires careful planning, keeping in view the time constraint and where necessary, contingency plans need to be made. The in-depth planning will require time allocation to number of lectures, PBLs, practicals, community visits per week, hospital visits, time for self-study, student selected component time, and other adjustments.

**Implementation:** The implementation of the new teaching, learning, and assessment strategies require coordination and increased input from the faculty members, students, and other stakeholders. The harmonisation between different teams require increased communication at multiple levels.<sup>6</sup> The implementation stage also requires mobilization of human and financial resources, and multiple tasking for some team members.<sup>6</sup>

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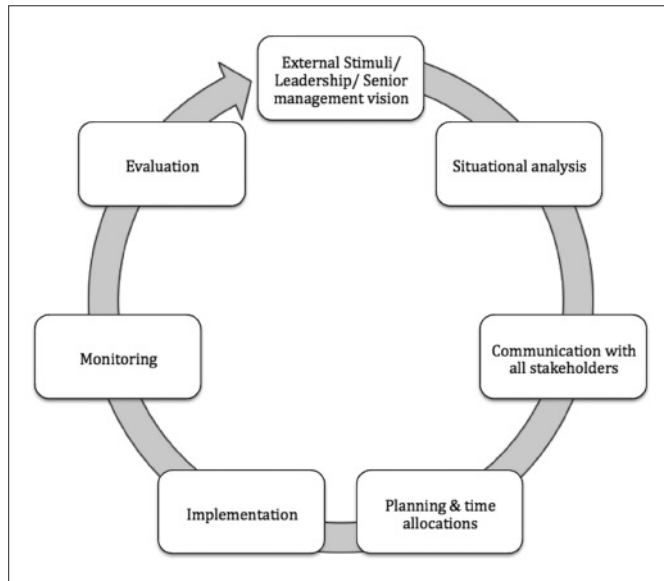


Figure 1: Framework for the curricular change.

**Monitoring/ transition management:** The monitoring phase deals with unpredictable and uncertain situations. There can be a performance dip due to transition from one system to another. Performance dip is the period of decline in organizational performance, usually associated with implementation of a new programme.<sup>4</sup> It can be overcome by responding to the needs of the stakeholders, celebrating successes, making adjustments in the process, motivating the staff and students, and monitoring progress toward organizational goal.<sup>4</sup> The curricular change team should adjust both short term and long-term plans depending on deviations or unpredictable situations. This will require frequent meetings of senior and junior faculty to cope with uncertain situations. Moreover, the faculty have to look for areas of improvement as new ideas arise during the implementation stage.

**Evaluation:** The evaluation of the programme requires feedback from students, faculty, and other stakeholders. The evaluation of the process is necessary for accreditation and quality assurance. Multiple methods of evaluation and assessment can be employed to review the performance of the new changes at different levels, such as organizational, programme, inter-personal, and individual level. The educational strategies employed at different levels may include, DREEM, Kirkpatrick, Millar's pyramid, principles of assessment, and curricular

blueprinting.<sup>7-9</sup> The post-project review is required to update the curriculum.

Figure 1 shows a model which can be followed to change the curriculum in medical colleges.

The change-management theory looks from multiple perspectives i.e. from simple to complexity adoptive theory and most theories work well, if appropriately matched to the local situation. The magnitude of change also defines the amount of input, resources and time i.e. bigger change will demand more input in terms of human resource development, planning and time.<sup>4</sup> The key factor in bringing change is the support from the leadership and 'change team' to overcome the resistance to change.<sup>4</sup> Planning stage is important for proper use of resources, keeping in view the needs assessment. Communication with all the stakeholders is important to create a co-operative climate.<sup>4</sup> The process of curricular change requires a robust evaluation system for further improvement in the next cycle.

## REFERENCES

1. Jones R, Higgs R, de Angelis C, Prideaux D. Changing face of medical curricula. *Lancet* 2001; **357**:699-703.
2. O'Sullivan H, van Mook W, Fewtrell R, Wass V. Integrating professionalism into the curriculum: AMEE Guide No. 61. *Med Teach* 2012; **34**:e64-e77.
3. Elearn. Techniques for sustainable change. In: Elearn, editor. *Change management*. Oxford: *Pergamon*; 2007.p. 89-117.
4. Bland CJ, Starnaman S, Wersal L, Moorhead-Rosenberg L, Zonia S, Henry R. Curricular change in medical schools: how to succeed. *Acad Med* 2000; **75**:575-94.
5. Steinert Y, Cruess S, Cruess R, Snell L. Faculty development for teaching and evaluating professionalism: from programme design to curriculum change. *Med Educ* 2005; **39**:127-36.
6. Nilakant SR. Mobilising support. *Change management: altering mindsets in a global context*. New Delhi: *Sage Publications India Pvt Ltd*; 2006.
7. Roff S, McAleer S, Harden RM, Al-Qahtani M, Ahmed AU, Deza H, *et al*. Development and validation of the Dundee ready education environment measure (DREEM). *Med Teach* 1997; **19**:295-9.
8. Miller GE. The assessment of clinical skills/competence/performance. *Acad Med* 1990; **65**:S63-7.
9. Van der Vleuten C, Schuwirth L, Scheele F, Driessen E, Hodges B. The assessment of professional competence: building blocks for theory development. *Best Pract Res Clin Obstet Gynaecol* 2010; **24**:703-19.

