# Enacting Pedagogy in Curricula: On the Vital Role of Governance in Medical Education

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## Abstract

Managing curricula and curricular change involves both a complex set of decisions and effective enactment of those decisions. The means by which decisions are made, implemented, and monitored constitute the governance of a program. Thus, effective academic governance is critical to effective curriculum delivery. Medical educators and medical education researchers have been invested heavily in issues of educational content, pedagogy, and design. However, relatively little consideration has been paid to the governance processes that ensure fidelity of implementation and ongoing refinements that will bring curricular practices increasingly in line with the pedagogical intent. In this article, the authors reflect on the importance of governance in medical schools and argue that, in an age of rapid advances in knowledge and medical practices, educational renewal will be inhibited if discussions of content and pedagogy are not complemented by consideration of a governance framework capable of enabling change. They explore the unique properties of medical curricula that complicate academic governance, review the definition and properties of good governance, offer mechanisms to evaluate the extent to which governance is operating effectively within a medical program, and put forward a potential research agenda for increasing the collective understanding of effective governance in medical education.

Academic governance includes the process by which curricular decisions are made and implemented. This involves not only the structure of decision-making groups but also the formal and informal relationships among these groups and with the individuals responsible for implementation. Institutions of higher education are facing increased complexity related to governance. They must address a growing variety of priorities and demands: to engage the community, business, and industry; to prepare a diverse student body; to generate cutting-edge research; and to solve social problems. Yet they are expected to do so with fewer funds, more students, and an increasingly complex legal environment.[1]

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## The Unique Governance Challenges of Undergraduate Medical Curricula

Academic medicine, in particular, is faced with a set of intricate issues that make governance distinctively complex relative to many other parts of the academic institution. First, undergraduate medical education programs exist not only within a university but also within a health care system and within a self-regulated professional structure. Thus, there exist complex institutional interdependencies that do not manifest in other parts of the academic institution. Further, a variety of stakeholders (governmental ministries, professional organizations, professional regulators, accreditation bodies, health systems, hospitals, and the public) all feel they have a stake in the "production" and in the "final product" of health professions training programs.

Second, the complex interaction between the high-level leaders who oversee the curriculum, the course directors who coordinate the curriculum, and the teachers who enact the curriculum on a day-to-day basis presents unique logistical challenges. A variety of issues including pedagogical approach, course content, assessment strategies, and definitions of a successful outcome must all be addressed not only at the course level but also at a program level. Thus, these issues must be negotiated and coordinated across courses and across years within the program. Even within courses, content delivery is often the responsibility of a large number of faculty rather than a single individual, again requiring additional coordination.

Further, the teachers within these courses are often not employees of the university per se but, rather, are clinicians who are mostly volunteers and are sacrificing clinical time and income to be part of the academic enterprise and fulfill their commitment to train the next generation of physicians. In fact, clinical compensation and job duties may be determined by the affiliate teaching hospitals that may place pressure on clinicians to spend *less* time on activities that are not immediately revenue generating. Thus, curriculum leaders may have little leverage on the teaching faculty in a medical school, who are free (and may even be pressured) to stop participating in the teaching enterprise at any time, usually with few or no personal repercussions. Moreover, despite their volunteer status, these individuals are often highly dedicated to excellence in teaching and are often quite creative in their introduction of new approaches and new content to their teaching activities. Yet they are unlikely to know much about other aspects of the curriculum in which they are participating and to which they are contributing their novel pedagogical and content innovations.

In the context of all this complexity, undergraduate medical curricula are continuously dynamic and evolving entities. Whether at the level of individual teachers, individual courses, or the curriculum overall, pedagogical innovations and new content are being proposed and introduced frequently. This often ad hoc and haphazard addition of content, technologies, and assessments to the curriculum, without proportional deletions, results in progressive curricular bloating, as well as unnecessary repetition or even contradictory presentation of content. Yet, even when efforts are made to formalize decisions about content and pedagogy, it often involves simultaneous advocacy for the "new" and vigorous defense of the "current," with nobody feeling authorized to remove aspects of the curriculum, so these problems are not avoided.

This combination of factors raise questions regarding how decisions are made about important issues and how they are implemented: Through what structures, processes, rules, and regulations are decisions made? How is it determined who is involved, who has a voice, where accountability resides, how outcomes are defined, and how information is communicated? If a multiyear, high-stakes program such as medical training is to function effectively, these questions must be carefully considered. And the answers, we propose, are found not in the realm of educational theories and practices but, rather, in the realm of good governance.

Although governance may be implicit in many institutional discussions about undergraduate medical education curricula, it tends not to be explored or articulated well. For example, when issues of governance are raised, they are often subsumed or overridden by discussions of educational content, delivery, integration, and continuity. People tend to focus mostly on the educational aspects of the problem at hand, rather than on the decision-making processes that may be underpinning the problem. Moreover, when discussions about governance actually *do* occur, there is a tendency to focus on the structure and to overlook the very important functional aspects of decision making, authority, and accountability. There is a tendency to worry more about creating and connecting the organizational "boxes" than about understanding the intricate processes, both formal and informal, of decision making and the relationships between and among the groups and individuals responsible for these decisions.

Governance in undergraduate medical education has also received scant attention in the literature. A number of case studies and descriptions of various curricular governance structures and models have been published.[2–9] Recently, Stoddard and colleagues[10] have illustrated several governance problems and related issues that are commonly associated with medical school curriculum committees, and describe a number of innovative governance changes implemented at the time of a major curricular change. However, few publications have provided critical analyses of any models' strengths, weaknesses, and relative efficacy; and, in general, there is a paucity of discussion of more theoretical, conceptual frameworks. As several authors have suggested,[9,11] focusing on curricular change and program evaluation while ignoring the processes of change (the mechanisms of decision making and implementation) is one of the key mistakes that lead to failed change efforts.*Hence, medical educators should be curious about their medical school decision-making processes beyond the underpinning organizational structure.[12]

The focus of this article is on how decisions are made in the management of undergraduate medical education curricula and programs. We reflect on the importance of governance in medical schools and argue that efforts at educational renewal will be inhibited if discussions of content and pedagogy are not complemented by considerations of a governance framework capable of enabling change. The ideas we present may well be relevant at the level of government bodies, the university board of trustees, the university senate, or health systems that are involved in health professional education; however, in this article we will focus specifically on governance issues as they manifest in the management of undergraduate medical curricula.

*Kazar also argues that competent leadership is very important in effecting change, but a treatment of individual leadership competencies is beyond the scope of this article.

## Characteristics of Good Governance

Governance has been defined as "the process of decision-making and the process by which decisions are implemented (or not implemented)."[13] Governance encompasses the processes whereby organizations make their important decisions, determining who has a voice and who should be engaged in the process. The Institute on Governance (Ottawa) proposes a working definition of governance that includes the three dimensions commonly found in the literature: authority, decision making, and accountability.[14] Governance determines who has power, who makes decisions, how other players make their voices heard, and how account is rendered.

The principles that underpin good governance have been articulated in the literature (see List 1). As stated by the United Nations Economic and Social Commission for Asia and the Pacific, "Good governance is participatory, consensus oriented, accountable, transparent, responsive, effective and efficient, equitable and inclusive and follows the rule of law. It assures that corruption is minimized, the views of minorities are taken into account and that the voices of the most vulnerable in society are heard in decision-making. It is also responsive to the present and future needs of society."[13] For undergraduate medical education (at least in North America), many of these principles are embodied in a variety of accreditation standards determined by the Liaison Committee on Medical Education[15] and the Committee on Accreditation of Canadian Medical Schools (CACMS).[16] These accreditation standards deal with organizational structure and functions, how decisions are made, and by whom and where accountability resides. Thus, through the expectations articulated therein, the accreditation process is intended to promote transparent, inclusive, equitable, responsive, efficient, and effective institutional and program governance.

In practice, good governance exists where those in positions of power are perceived to have acquired their power legitimately, there is clarity on when and how input can be provided, the system is responsive to broader input, processes are perceived to be transparent and fair,

List 1
**Indicators of Good Governance Practices in a Medical School Environment**

- There are mechanisms in place to ensure that there is effective, up-and-down communication and dialogue at the interfaces among the administrative leadership, the committees, and the teaching faculty, allowing for competing goals and interests to be aired and resolved before important decisions are made and ensuring that the voices of those who will be implementing and enacting decisions made higher up are being heard.
- People understand and accept how decisions are made, who has authority to make what decisions, who is responsible for implementing those decisions, and where final accountability resides.
- Practical authority for decisions, delegated or not, resides with those accountable and responsible through the formal organizational structure, according to policies and procedures, and not somewhere else.
- Conflicting interests, priorities, and values are allowed to emerge, and it is easy to see not only who has a voice, but also that input from stakeholders has been taken into consideration and influenced decisions.
- Decision-making processes around curricular changes are perceived to be transparent, fair, and effective, reflecting the processes outlined in written policies.
- Committees have clarity of purpose, mandate, composition, scope of responsibility, authority for decision making, decision-making mechanisms, and final accountability. These are explicit and easily understood.
- Committees are of a size that balances participation with efficiency and effectiveness, considering needed representation as well as needed expertise.

there are clear decision-making rules, and communication flows up and down the authority lines.

Thus, good governance is not determined purely by the efficacy of the decision-making process. Rather, to be effective, governance must be perceived as legitimate: understood and accepted not just by the administration but also by the community affected by those decisions. People throughout the organization are central to the process, which means that influence and informal relationships are important in the development of policy.[17] Even when governance looks good on paper, if the characteristics described above are not apparent to the stakeholders, then it will not work in practice. People will circumvent the system so they can feel empowered, and arbitrary decisions will be made in the periphery, outside the formal structures and expected lines of accountability.

## Indicators of Problematic Governance

Although the concepts of governance are often understood in theory, there are many common phenomena that provide evidence that an organization's governance process is weak in practice. Some programs may experience a situation in which certain faculty members seem to find a way of implementing curricular changes within their area of influence, circumventing the central management process, while others, faced with uncertainty and frustration about the process, simply give up. For example, a faculty member wanting to introduce more content about "domestic violence" in the curriculum may find it hard to identify where decisions are made, who are the right people to bring to the table to discuss this particular initiative, as well as the appropriate route to take the proposal through. Yet, an anatomy course director may be able to make significant changes to learning objectives, teaching modalities, and assessments methods without consulting broadly or seeking higher approval. This phenomenon would suggest that the process for implementing curricular change is not well defined, openly communicated, and applied in a consistent manner. As a result, the approval path is not clear or even accessible to some who want to innovate and enhance the curriculum. And if rules are applied inconsistently across the system, it creates inequities, unfairness, and disparate outcomes.

Another manifestation of poorly implemented governance is evidenced by badly functioning committees. For example, over time the membership of a curriculum committee might grow beyond a reasonable size for effective decision making as an increasing number of stakeholder groups insist on "representation" at the committee table. When this happens, meeting time may be taken up by reporting from various groups and subcommittees. No authentic discussion takes place and no substantial decisions are made. When recommendations are made, no one is clearly assigned the responsibility for action, and usually there is no follow-up. Thus, the committee's role will have functionally been relegated to that of an information-sharing forum and to rubber-stamping decisions that are made by others and that may not be aligned with program objectives or with the rest of the program.

When governance is not well defined, delineations of scope of responsibility, authority for decision making, and accountability are unclear, often resulting in an environment where practical authority and decision making reside within silos not accountable to a higher power, becoming an impediment to strategic and programmatic decision making. This promotes fragmentation and a culture where, for example, influential fiefdoms may develop and coexist with ineffectual, moribund committees. When people fail to see the relevance of membership on such committees, participation suffers because if the perception is that their input does not matter, they become passive observers or simply do not turn up for meetings. In a medical education program where the processes leading to important decisions are not perceived as transparent, participatory, and consensus oriented, frontline individuals contributing to the curriculum do not feel ownership of the content they teach, and this leads to frustration and disengagement. When people see that their input has altered decisions or been taken into consideration, they feel that their involvement is legitimate, and this leads to greater involvement, also enhancing long-term effectiveness and efficiency.[18] Thus, these phenomena are some of the signs indicating that governance may be inadequate and that there is a need to look at how decisions are made and implemented (or not) by individuals and groups.

## Strategies to Test and Enhance Governance Processes in Practice

Although these concepts may seem largely self-evident in principle, whether or not a governance structure is functioning well can only be evaluated in its application to specific situations and people. With the

understanding that there is no consensus about the criteria for measuring good governance,[19] we suggest that to understand how governance really works in a given institution, it is necessary to look at the intersection between policies and practice. We propose three strategies to achieve this: applying case studies to one's governance system to understand in real time how it functions and where the gaps are; reviewing the structure and function of committees, focused not around issues of "lines of reporting" but around scope of authority and decision making processes; and surveying key stakeholders to learn how they understand and perceive the functional decision-making processes and when and how they can engage with the system.[20,21]

### Applying test cases to the governance system

One mechanism to assess the effectiveness and transparency of a governance structure is to submit to the process test cases that require decisions to be made and see whether there are clear, explicit structures; fair, impartial policies; and effective processes for handling these decisions. By plotting how the "case" would move along the decision-making process, from the top down or from the bottom up and then back down again, potential flaws, gaps, and misunderstandings in the process can rapidly be made apparent. Box 1 offers three cases with some attendant questions that could be used as examples, but these are not meant to be exhaustive, and we would encourage further cases and questions to be developed or modified for local purposes.

### Examining the structure and functions of committees

In a university environment, committees are at the core of policy development as well as strategic and tactical decision making. Thus, ensuring clear descriptions of exactly how committees function is defining the core functions of a governance system. But a focus on committees does not mean moving the boxes around to tinker with the organizational reporting structure. It involves getting inside the boxes with a candle and shining a light into the dark corners. Thus, there must be proper attention paid to the details of purpose, authority, lines of accountability, responsibilities, membership, appointment process, quorum, decision-making processes, and lines of communication. Here again, the critical questions must organize themselves around information flow, decision making, and accountability.[21] List 2 offers a preliminary set of questions that must be understood by members of a committee if it is to effectively interface with the rest of the governance structure and fulfill its function effectively.

### Surveying key stakeholders

Finally, given the extent to which innovations in medical education curricula come from grassroots educators and teachers, it is important to have not merely a functioning process but also a community of practitioners who are aware of the processes and understand how they are to engage with the system. Therefore, having an appreciation for the stakeholders' understanding of the mechanisms for their participation in decision making is critical. However, approaching stakeholders and learning how they perceive and experience governance is not just about the process. It is about the perception of legitimacy, fairness, and transparency. List 3 offers a set of possible questions with which one could approach key stakeholders (faculty, staff, and students) to determine how they understand and whether they support the decision-making process.

## Box 1

**Sample Test Cases to Apply to a Governance System to Determine How Effectively and Transparently Decisions Are Being Made in Real Time**

**Case 1. The addition of non-course-specific curricular content**

A faculty member recently obtained a master's of business administration degree with a focus on health care administration. She has developed a new appreciation for the importance of instilling leadership skills early in medical students and is proposing a longitudinal, progressive, mostly experiential course that would span the four years from admission to graduation. Although this is an interesting idea, there are numerous decisions that will need to be made about content, pedagogy, assessment, resources, placement into and integration with the rest of the curriculum. In your governance process:

- Who should that person talk to; what information would that person need to produce?
- Who would be able to make a decision; what would the individual or committee need to know; who would they have to consult with before making a decision?
- Who would they need to inform before the decision is implemented?
- At what level could somebody simply say "yes," implement it down and inform up?

**Case 2. Course-level changes to assessment protocols**

A clinical departmental wants to make significant changes to the end of clerkship assessment by eliminating their difficult-to-maintain in-house multiple-choice exam and replacing it with a summative oral exam. In your governance process:

- Can this decision be made at the departmental level, or does it require central authorization?
- How does a request of this nature enter the governance system?
- How does it make its way up and down the decision-making and implementation structure?

**Case 3. The intersection of philanthropy, pedagogy, and curricular resources**

A course director has persuaded a local benefactor to donate e-tablets for each first-year student, but the funds will be released only if the devices are incorporated into problem-based learning sessions. Other faculty members feel strongly that the use of electronic devices during the sessions is unnecessary, that it will be distracting, and that everything students need is included in the paper case. In your governance process:

- Who (if anyone) should the course director have approached before engaging with the donor?
- Who should the course director be approaching now that the donation has been made?
- Who has to be consulted to ensure that the decision about whether to move forward with the option is transparent and fair?

## Concluding Remarks

Governance questions are often overlooked when thinking about curricula in medical education. Yet the feasibility,

## List 2

**Sample Questions to Ask About Governance Committees to Ensure That They Interface Well With the Governance Structure and Function Effectively in Their Decision-Making Role**

- How was the size of the committee determined, and what is the balance between appointed representatives of stakeholder groups versus members appointed because of their expertise in relation to the purpose of the committee?
- Could the committee size be decreased by consolidating representation (e.g., one person, on a rotating basis, represents all sites where a specific course is delivered)?
- What types of decisions are the exclusive right and responsibility of the committee to make?
- How should the committee make decisions and resolve discrepancies of opinion (e.g., consensus, secret ballot, simple majority)?
    - What qualifies as quorum?
    - What qualifies as a sufficient percentage of members present to affirm a critical/major/potentially controversial decision?
- By what mechanisms does the committee stay aware of modifications to curriculum and policy that are relevant to and should/may affect the decisions they make?
    - Who is accountable for bringing such information forward to the committee, and how is it effectively disseminated to committee members?
- By what mechanisms does the committee disseminate decisions for which it is responsible to other committees and stakeholders?
    - Who is accountable for ensuring that this happens?
- By what mechanism(s) and under what circumstances can/should stakeholders address the committee and make a case for a requested decision?
- How should the committee monitor the implementation and consequences of a decision to ensure that:
    - the best decisions are made;
    - the decision is being implemented as intended;
    - the decision is having the intended impact and outcome on the curriculum;
    - the decision is not adversely affecting other aspects of the curriculum?
- By what mechanisms is the committee held accountable for:
    - making timely decisions;
    - making informed, effective, and appropriate decisions;
    - ensuring that the decisions are effectively communicated to other relevant committees and stakeholders;
    - ensuring that the decisions are effectively enacted?

success, and sustainability of a curricular change and renewal depend very much on a clear collective understanding of when, where, by whom, and how decisions are made. This, in turn, depends on the existence of key principles governing how decisions are made and implemented. Key principles, policies, procedures, and organizational structure should be included in a governance framework to guide and direct how people and committees interact and make decisions.

We suggest that a governance framework that will support change and sustainability in times of transformation and added complexity should incorporate easily understandable characteristics of good governance. Policies, structures, and processes should be well aligned with these characteristics. Whatever the organizational structure, it should be a means to enable effective leadership, as well as encourage transparency and clarity of roles, decision-making processes, and accountability. The governance framework should make clear the mechanisms to access the decision-making process, where accountabilities and responsibilities lie, and how progression and resolution take place. Finally, the framework should include the development and implementation of a communication strategy to ensure that all stakeholders have easy and timely access to information on governance, recognizing that effective communication flows in more than one direction.

## List 3

**Sample Questions to Ask of Stakeholders to Determine How They Understand When and How to Engage the Decision-Making Process at Their Institution**

- Have you ever tried to make changes to the curriculum?
    - If yes, were you already aware of what process to follow to achieve curricular change?
    - Were you successful in making the desired change?
    - If not, were you satisfied with the reasons as to why the desired change was not possible?
- Is it clear to you how decisions are made regarding the curriculum?
- If you wanted to develop new or modify existing course content, would you know the process to follow?
- If you wanted to make a change to the way students are assessed, would you know the process to follow?

In this article we have proposed a way to assess governance in practice by applying test cases to the governance system, examining the structure and function of committees, and surveying key stakeholders. The knowledge gained through this self-assessment will enhance the understanding of how well, or not, the characteristics of good governance are applied and align within a particular system. Obviously, the next questions are how to move from better understanding to better governance, and what are some of the anticipated barriers one might encounter?

It is important to realize that moving the governance of an institution or a program in this direction is itself an act of governance, so it must be enacted with the characteristics of good governance in mind. One cannot simply "impose" good governance; by definition, such an act is not good governance. Thus, it is not possible to provide prescriptive answers to solve specific governance issues. Specific solutions will be context dependent; some situations may call for rapid, broad changes, while in others gradual governance changes may be more appropriate.

It is also worth recognizing that often what is required is not just a clarification of decision-making "power" but a redistribution of power (democratization). This means that those who currently have power (not just formal decision makers but also

those in the system with autonomy and/or connections to uniquely influence activities) are likely to resist and look for ways to maintain that autonomy and power. Enhancing governance (by changes big or small) requires a will to change how decisions are made as well as a shift in culture. Anticipated barriers are resistance to change, a need for a sustained commitment to keep looking at, and working on, governance issues over the long term, and acceptance that enhanced consultation with stakeholders builds trust yet creates redundancies and a certain degree of inefficiency.

It is our hope that this article fosters the discourse and promotes the development of scholarship around issues of governance in medical education. For example, how to enhance relationships among the visionaries, the administrators, and the enactors of the curriculum in a faculty of medicine; how to promote effective consultation and joint development of initiatives; how to determine when radical changes in governance, which can send an institution spinning and usually take years to show desired results as well as unintended consequences, are the most desirable option; and how to identify key strategies to achieve maximum change with minimal disruption.

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