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## Barriers or costs? Understanding faculty resistance to instructional changes associated with curricular reform Obstacles ou coûts? Pour mieux comprendre la résistance du corps professoral aux changements pédagogiques liés à la réforme des programmes d'études

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Over the past century, there have been recurrent calls for change to our methods of education in the health sciences. However, despite repeated efforts at curricular reform, many authors have suggested that there has been surprisingly little meaningful impact on the learning experience of students in the health sciences.<sup>1,2,3</sup> This cycling between calls for change and ineffective curricular reform has been coined the “carousel of change”<sup>4</sup> and there has been recent interest regarding what it may take to get off this carousel.<sup>2,3,4</sup> Bridges and Bridges<sup>5</sup> have suggested that educational changes of any sort, regardless of their conceptual soundness, ultimately succeed or fail based on whether individual instructors, students, and administrators do things differently. This has led some to speculate that making curricular changes without effectively supporting instructors to enact these changes on the ground may be one of the reasons we continue to cycle between calls for change and subsequent ineffective efforts at curricular reform.<sup>3</sup>

The primary means by which instructors have traditionally been supported to implement the change to their own teaching practices (usually after the new curricular design has already been determined) has been through faculty development. This form of support has typically manifested as an educational process: didactic sessions about the conceptual framework that underpins the new curricular model and the elements of effective teaching to support learning, combined with skills-based workshops

offering practice in the techniques and tools that instructors can apply in their teaching environments. In this sense, faculty development has provided the “why, what and how” of teaching and learning, on the assumption that this will be sufficient to support change in teaching practices. Yet despite these efforts, instructors have often failed to adapt their teaching, and the proposed curricular change struggles.<sup>6</sup> In response, faculty developers and administrators have attempted to further support change by identifying and resolving external factors or “barriers” to change, such as insufficient time or administrative supports. For some, addressing these barriers is sufficient to allow them to make changes to their teaching. For others, however, the expected change still does not seem to occur, leading administrators to speculate that many instructors are (perhaps inexplicably, irrationally) resistant to change.<sup>6</sup>

Thus, in order to move forward in the efforts to support instructors in such change, it may be necessary to reconsider our assumptions about change and the supports necessary to enable it. Indeed, the literature on behavioural change informs us that there are several aspects that need to be considered. For example, Kirkpatrick and Kirkpatrick<sup>7</sup> identify four conditions that must be met for individuals to change their behaviour in the workplace: 1) a desire to change, 2) the knowledge of what to change and how to change, 3) a supportive work environment, and 4) reward for embracing change. For the

most part, faculty development, as an educational process to support implementation, has focused heavily on the second condition, and efforts to remove systemic barriers (e.g., time and resources) might be considered an effort to redress the third condition. By contrast, the first and fourth conditions appear to be taken for granted: that instructors will be motivated to change by the knowledge that the new way will improve their students' learning, and will be rewarded for the change by seeing their students thrive. However, these taken for granted assumptions might require further review.

The transtheoretical model of change articulates that, at the individual level, there are pros and cons to any change.<sup>8</sup> The pros can be understood as either instrumental gains for self and others or approval from self and others. By contrast, the cons are instrumental costs to self and others or disapproval from self and others.<sup>8</sup> Whether one is willing to make a change or not involves a weighing of one's own pros and cons (called the decisional balance) and if the perceived costs outweigh the benefits, then change will not occur.<sup>8</sup> Note that this decisional balance, or readiness to change, arises from the individual identifying and weighing their own personal benefits and costs of making the change *to them*. These personal costs and benefits can often be implicit and sometimes not even obvious to the individuals themselves. One example is an instructor's identity as a teacher: how an instructor sees themselves in relation to the teaching/learning process, the material being taught, and the students. The potential cost to one's teaching identity as a result of the change will vary depending on the relative importance of these relationships to one's identity and the perceived impact of the change. For example, if one's identity as an educator is linked to a specific teaching practice or technique, then being asked to change one's teaching practice will incur a cost to identity. Thus, those who identify as excellent lecturers might be some of the strongest opponents of a move to small group learning in which lecturing is replaced with group facilitation. Alternatively, if one's identity as an educator is tied to one's content expertise, then changes designed to reposition the conceptual framing and/or perceived value of that content in the curriculum will result in a cost to identity. Thus, asking basic scientists to frame their content to be "clinically relevant" rather than helping students to understand the material as a basic scientist would, might reasonably be expected to limit some educators' enthusiasm for the change. As a third example, students' adopted learning approaches may be optimized for more teaching-centred activities, such as lecturing, so shifting to

learning-centred approaches may be less popular with students, at least initially. Thus, if one's teaching identity is defined by one's popularity with students, then a shift to educational modalities that are less popular with students may feel threatening to one's sense of self. Finally, transitioning from one's 'optimized' teaching strategy to a new approach will inevitably result in at least a temporary transition from a state of competence to a state of consciously incompetent for a period of time. Thus, any institutionally imposed change in teaching strategies could lead to a potential cost to one's identity as an expert teacher. Importantly, these examples do not represent the traditional conception of "barriers" that can be removed, but rather are costs that must be paid in the face of change.

This focus on individual benefits and costs may help faculty developers in supporting instructors to change because it highlights the need to explicitly address individual instructors' readiness to change. That is, it suggests that rather than taking the motivation to change for granted, we must first *identify* each instructor's readiness to change, so we can "meet them where they are at" and, if needed, help them "tip" the decisional balance in favour of change.<sup>9</sup> Here, Prochaska and colleagues' model of "stages of change" can be of particular value. They suggest that the techniques used to successfully move an individual through each stage of change are quite different.<sup>8</sup> In particular, the processes that promote change at the earlier stages focus more on the subjective aspects of the individual, while processes that focus more on the external environment (e.g., providing time and resources) support change when the individual is in the later stages. Consistent with this assertion, Arbuckle and colleagues found that, in the early phases of organizational change, training sessions that assume participants are in a later stage of change and focus more on external environment support (e.g., skills sessions, removal of barriers to change) tend to be of minimal impact.<sup>10</sup> It is important to note that, even if an instructor is at a later stage of change, the external supports provided need to be in alignment with what is holding them back from making the change. For example, providing instructors with teaching techniques to engage students more actively will not benefit educators who do not have time to implement these techniques (either actual time in the teaching session or development time to meaningfully integrate these into their teaching). However, if a faculty development session is designed as though all participants are at a later stage of change (when many might in fact be at an earlier stage) and employ processes that focus exclusively on the external rather than also addressing the

internal environment, that workshop may not be effective for many participants.<sup>10</sup> Given this, it may be useful for faculty developers to entertain the possibility that many instructors coming into their workshops may be at the earliest stage of change; precontemplative.

When an individual is in the precontemplative stage of change, there is no intention to change one's behaviour in the foreseeable future. It is not uncommon for a person who is precontemplative to be quite familiar with the institutionally "avowed"<sup>11</sup> benefits of the change. However, these avowed benefits are not personal, and therefore, are insufficient to tip the decisional balance in favour of meaningful change in the individual. Moreover, the personal costs of the change may be either "unavowed" (unacknowledged or undeclared) or even "disavowed" (actively denied and discouraged by the profession) making them difficult to openly discuss and address.<sup>11</sup> Thus, an individual who is precontemplative may go along with the change conversation, and may even make superficial changes to their teaching when "the pressure is on" but will revert to their old ways at a later date.<sup>8</sup> Most individuals in this stage will feel coerced into changing their behaviour, and explanations about the benefits of making the change can be perceived as an attempt to persuade or argue for change.<sup>10</sup> This can cause the individual to feel pressured and respond by arguing against the change, ultimately becoming more resistant and moving further away from making the desired change.<sup>10</sup> Thus, the transtheoretical model of change suggests that, particularly in the early stages of change, a more effective approach is to explore the decisional balance of each individual and address the personal and subjective costs and benefits of change.<sup>8</sup>

So, in addition to exploring and responding to external "barriers" to change in our efforts to address instructors' resistance to curricular innovation, it would be valuable expand our consideration to costs of such change. In particular, costs that are more subjective and less obvious on the surface may be particularly important. Indeed, this expanded scope of faculty development is being considered by others. For example, Steinert and colleagues assert that faculty development has focused on providing expertise in teaching and learning without addressing professional identity and contend that it is time to include professional identity as part of the focus of faculty development.<sup>12</sup> Rather than assuming instructors are motivated to change and providing education and instructional techniques, what if we started by exploring

the instructor's readiness to change and offered support from that place? By exploring this, we can not only determine what stage of change the person is at, but what, specifically, is holding them back from making the change. Once these costs and the underlying readiness for change are determined, faculty developers can attune their offerings to meet instructors where they are at with change. While there may be resource implications, by doing this we would be more likely to offer support that fits not only with the instrumental needs of the individual, but also what motivates them, and thus faculty development may finally have the impact it aspires to in supporting teaching change and the subsequent enhancement of the learning experience to our students.

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