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OBSTACLES TO INNOVATION: THE FEAR OF JEOPARDISING A PROFESSORIAL CAREER?

Anne M. Walder, Ph.D.
Professor, Faculty of Education, Université de Montreal, Canada

ABSTRACT: *True springboards for pedagogical innovation, teaching practice support programmes do not hold answer to all the difficulties innovators encounter. This qualitative research explores the obstacles recounted by professors, recipients of an excellence in teaching award from a francophone institution that is strongly committed to research. Results highlight six obstacle types and one major deterrent to innovation. Impact of the institution is borne out and hinges on human and technical aspects. Regulated in this way, is pedagogical innovation not, to the detriment of change, voluntarily held in check by the risk its proponents run in terms of jeopardising their professorial career?*

KEYWORDS: Pedagogical innovation barriers, pedagogical support

OVERVIEW OF THE TEACHING PRACTICE SUPPORT OFFERED TO PROFESSORS

Teaching practice support programmes provide support to all members of the university community in accomplishing their teaching assignments. The programmes' mission primarily entails a drive to valorise teaching and to make skills and resources available to professors that allow them to reflect on their teaching practices in order to promote the provision of quality teaching to students. Four types of support specifically offered through these programmes coexist, depending on the establishment. These are: training in university pedagogy, individual guidance, teaching evaluation and applied research into pedagogy.

What are the foci adopted by the teaching practice support programmes in European and Quebec francophone universities? I note that the teaching practice support programmes seek, through training in university pedagogy, to support all teaching assistants, lecturers and professors. Individual guidance allows a programme pedagogical advisor to assist a professor with their own specific needs and to address a particular teaching case. Pedagogical support centres also offer teaching evaluation, which allows professors who so wish to obtain an external appraisal of their teaching. The last two types of pedagogical support allow the teacher to establish, with the pedagogical advisor, a reflective practice in relation to their teaching and to improve it. Finally, certain teaching support centres, such as that of the Université de Lausanne in Switzerland, conduct, in addition to the three other types of support, applied research in university pedagogy.

I note that the various teaching support centres diverge in their foci. For example, the *Pedagogical Services Office* of the Université Laval emphasises 1) teaching evaluation, remote training, university pedagogy, multimedia production and techno-pedagogical system services, 2) teaching valorisation through financial aid for pedagogical development, a teaching

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valorisation committee, and teaching award and distinction competitions, and 3) further professional training and conference activities.

The *University Pedagogy Unit* of the Université de Namur in Belgium prioritises information about university pedagogy development, designing and evaluating innovative pedagogical plans and publishing the *Internal Review of University Pedagogy*. The following are also available: assistance in designing teaching materials, advice on group management techniques, assistance with assessing student learning, pedagogical innovation support (individual, departmental, faculty), following didactic strategies, student assessment of teaching, coordinating institutional pedagogical projects, information, training, and guidance and support for designing and implementing pedagogical products and plans using Information and Communication Technology (ICT).

The Université du Québec's *Pedagogy and Technology Support Unit* focuses on developing information systems, pedagogical and multimedia support, and technical and network support. It has an additional mandate of facilitating the entire university community's access to technology in order to optimise the efficiency and autonomy of individuals related to teaching, research and university management activities. At the same time, this unit makes computers available to students distributed across a dozen locations, as well as a multimedia production laboratory, granting students access to the central servers for specific needs, a repair service and a personalised portal allowing them to perform operations directly in their university folder. I observe that the Université du Québec focusses its pedagogical support on technological innovation.

In terms of supporting teaching practice, the Université de Montréal has recently instituted the *Teaching Support Services* (SSE). The SSE brings together the *Higher Education Study and Training Centre* (CEFES), the *Teaching and Study Programme Evaluation Office* (BEEPE) and the *Digital Learning Environment Office* (BENA). CEFES's mandate is to promote and further university teaching expertise and facilitate teacher study, reflection and training. CEFES also supports programme modification or creation by offering the services of its pedagogical advisors to teaching teams engaged in such processes. CEFES believes that innovation is not limited to integrating ITC and can also assume other forms, for example, revitalising face-to-face lecturing, work-place learning, etc. For its part, BEEPE's mission is to coordinate teaching evaluation activities and BENA is responsible for offering support to professors using new technologies by guiding them in the use of digital learning environments and providing remote training. BENA demonstrates genuine interest in developing techno-pedagogical innovation and offers three institutional initiatives: the pedagogical and digital learning environment fund, piloted by the Provost's office, the BENA pedagogical project support department, and testing and piloting new technologies for the digital learning environment. Certain faculties at the Université de Montréal have created their own support programmes, specially tailored to their teaching practice. The Université de Montréal Faculty of Medicine stands out for its *Centre for Applied Pedagogy in Health Sciences* (CPASS) which has the mission of *"initiating, promoting and supporting health professionals' skill development, along a training path, in partnership with the patient and their relatives and in response to societal needs"* (CPASS, 2012). It aims to have a significant impact on the quality of pedagogical practice in the health sciences. CPASS advocates pedagogical innovation whether this is technology-based or not. The Université de

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Montréal Faculty of Nursing has, since 2007, been distinguished by its *Centre for Innovation in Nursing Training*. Its central task is to develop, evaluate and roll-out teaching and learning innovation.

Given that today, teaching practice support programmes are ingrained in university tradition, with a kaleidoscope of services promoting the valorisation of teaching, providing pedagogical support to professors and interceding on behalf of pedagogical innovation, the aim of our research is to explore the obstacles that litter a professor's path to integrating pedagogical innovation. More specifically, I will try to respond to the research question: What are the difficulties or obstacles encountered in pedagogical innovation?

OVERVIEW OF THE BARRIERS TO PEDAGOGICAL INNOVATION

Literature on obstacles to pedagogical innovation is rare. Nevertheless, some studies report the different barriers to innovation caused by ICT (Goktas et al., 2009). Surprisingly, a major obstacle boils down to a shortage of equipment and software (Bullock, 2004; Brush et al., 2003). A lack of basic ITC knowledge, as well as its integration, also features in the results of several studies (Schoep, 2004; Brush et al. 2003). This is in addition to a lack of technical support, just like time (Brush et al. 2003; Schoep, 2004) and appropriate administrative support (Schoep, 2004; Moursund and Bielefeldt, 1999). Internal training, and lesson and curriculum content prove to be absent (Schoep, 2004).

One study on obstacles to change carried out among science, mathematics and technology professors in thirty higher education institutions firstly underlines resources, and time and territory conflicts. Next, student fears, peers' resistance to change, a lack of qualified key staff, the faculty/department, a lack of training, difficulty convincing decision makers, the institution, professor promotion and the unavailability of pedagogical equipment transpire from this study (Sunal and Hodges, 1997).

In general, the difficulties encountered by professors who wish to implement pedagogical innovation primarily hinge on the university and its actors. Firstly, the inertia of the university institution generates colossal obstacles to institutional pedagogical innovation (Drummond et al. 1997). Next, I should not omit to add to the preference for research (Ibid.), as opposed to teaching, which puts a damper on the potential momentum of a professor's personal innovation. Brewer and Tierney (2011) assert that each actor, whether academic or political, can promote or, conversely, stifle innovation and that the environment should reward and, above all, avoid thwarting innovators and their initiatives. Evidently, a professor will only be rewarded for an innovative initiative in establishments where student learning is the priority (Hannan, 2005).

Unlike innovators, pedagogical innovation also has detractors, who represent between 8 and 12% of professors (Marsollier, 2003). They are much less welcoming of change (Bertrand and Foucher, 2003). This is understandable, in particular when change engenders unexpected repercussions that could lead to diminished or incomplete teaching quality and cause students to fail their examination (Morris, 1985).

Professors hold differing attitudes vis-à-vis innovation and can be split into three types. Certainly, some professors are systematically interested in pedagogical innovation whilst for others prudence is the order of the day. Finally, resistance drives the last group (Marsollier,

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2003). It is not surprising, therefore, that a strong correlation exists between professors' attitudes and the tools they use (Dawes, 2000).Consequently, in order to appreciate what the difficulties and obstacles encountered are, I will explore the deterrents to pedagogical innovation, according to professors teaching in a university that is strongly committed to research.

METHODOLOGY

This qualitative study employed two data collection methods: individual, semi-structured interviews with 32 professors, all recipients of an excellence in teaching award from the Université de Montréal and one group interview with five of the same professors. The respondents shared the difficulties and obstacles impeding them in their pedagogical innovation projects. The transcript of their discourses amounted to 450 pages of verbatim. I used grounded theory as a data analysis method, an analytical *'process'* (Paillé, 1994, p. 149) with the aim of deepening the object of our research beyond simple descriptive analysis. Extracting the data collected during the individual interviews allows us to centre our analysis on twenty-seven sub-themes related to pedagogical innovation deterrents, according to the interviewed professors. Twenty-four sub-themes arose from extracting the data collected at the group interview in relation to the questionnaire evaluating professors' teaching provision. These are the substantive categories (Glaser and Strauss, 1967) i.e. those that take up the participants' discourses, unmodified. Analysis of the twenty-seven sub-themes related to the pedagogical innovation deterrents, according to the professors interviewed, allowed six recurring themes to emerge from their discourses and highlights the establishment of links between, and the organisation into a hierarchy of, the substantive categories corresponding to Paillé's (1994) fundamental stage of connection. I can establish relationships between the categories by using *"the paradigmatic model indicating the main dimensions of an action category: its causes, its context, its structural conditions, the actions and interactions that it encompasses and their consequences."* (Laperrière, 1997, p. 319-320). I studied internal and horizontal recurrence and their degree of congruence with the *'draft theory'* (Fourez, 1988) of our research, which aims to shed new light on the deterrents to pedagogical innovation, according to the interviewed professors. In our analysis, the formal categories were constructed through the links revealed between the substantive categories and their organisation into a hierarchy within the perspective of our project. All this occurs within a process of comparative and constant data analysis, a kind of continuous shuttling back and forth between the substantive categories taken directly from the lecturers' discourses and those elaborated by the researcher.

The six obstacle types

I propose grouping each of the sub-themes into one of the six formal categories that emerged from analysing the data extracted from the professors' discourses (Table I). I call them *Obstacle Categories*, with each one being different and specific. The first pedagogical innovation obstacle category recounted by the participants interviewed concerns professors, whilst the second is linked to technical aspects. The third is related to student difficulties, whereas the fourth picks up on obstacles connected to the institution. The fifth deals with student assessment problems, while the sixth looks at the discipline. These two obstacle types were not mentioned in the results of Sunal and Hodges' (1997) research study. I note, however, that two professors stated that they had not encountered any obstacles.

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I will now proceed to introduce and analyse the six obstacle categories using discursive suggestions from interview segments and elements of our own interpretation. This is the ordered reconstruction of the professors' discourses, always in keeping with our research question.

Obstacle category related to	Sub-theme	Frequency[1]	Instance[2]
Professors	Professor s' time constraints	51	20
	Professors' fears	3	2
	Investment in terms of professors' energy	6	4
	Professors do not like interaction with students	1	1
	Lack of pedagogical training	1	1
	Teaching resistance	10	10
	Professor solitude	8	6
	Obstacles related to professors	**80**	**44**
Technical aspects	Technical complexity	13	7
	Organisational difficulties	10	5
	Lack of or ageing equipment	1	1
	Need for teaching assistants	5	2
	Problematic technology	10	5
	Too large student groups	6	2
	The pedagogical innovation becomes outdated	2	1
	Obstacles related to technical aspects	**47**	**23**
Students	Absenteeism	8	5
	Student commitment	5	8
	Student resistance	14	5
	Obstacles related to students	**27**	**18**
Institution	National constraints	4	1
	The programme	1	1
	Financial	23	13
	Lack of institutional support	1	1
	UdeM intellectual property	1	1
	Obstacles related to the institution	**30**	**17**
Assessment	Group work assessment	1	1
	In-class assessments	2	1
	Feedback impossible	1	1
	Obstacles related to assessment	**4**	**3**
Discipline	Subject	8	6
	Obstacles related to the discipline	**8**	**6**
	No obstacle	3	2
	No obstacle	**3**	**2**

Table I - The six obstacle types by frequency and instance

Category 1: Obstacles related to professors

The first obstacle category, which is related to professors, encompasses the sub-themes: *Professors' time constraints, Professors' fears, Investment in terms of professors' energy, Professors do not like interaction with students, Lack of pedagogical training, Teaching resistance* and *Professor solitude.* Ten professors noted from their experience of introducing pedagogical innovation projects that their colleagues did not always receive these particularly positively. They shared that they had encountered strong resistance from certain peers, as one speaker said:

"The innovation was not welcome and then, it was as if they (the peers) wanted to dedicate themselves to freezing time, altering the sacred programme was taboo! You shouldn't change

[1] Frequency is the number of segments coded as relating to the sub-theme.

[2] One instance is one interviewed professor participating in our research. Here, this column shows the number of instances (professors) who have one or more segments coded to the sub-theme.

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it, it was tradition, it was something that was innovative in the beginning, but we couldn't change it any more. That was where the innovation ended. I had difficulty in working with the others at that level because I wanted to institute this change (instance 7)*."*Furthermore, six participants brought to our attention the obstacle of professors' solitude in their teaching practice and more specifically when they introduce innovation into this practice. One of them explained the impact of this solitude on implementing a pedagogical project: *"When you are the only one who wants to change things, often it doesn't take very long before you encounter limits imposed by the programme or the framework within which you find yourself* (instance 32)*."*Four interviews highlighted professors' commitment in terms of the energy expended on this activity as an impediment to introducing a pedagogical innovation project. One participant expressed their experience:

"It is a group that is so rich in ideas; our problem is that we need to calm down. But when the notion of patient partner came up we all had to review our agenda and look at things differently. It is a group that is so open to innovation that everyone participates and is ready to innovate. I have rarely seen this in my career! It's extraordinary, but it's tiring (instance 13)*."*Naturally, a certain fear, linked to taking the risks related to introducing pedagogical innovation into teaching, was raised by two participants as a possible deterrent. They expressed the fear of the imbalance that pedagogical innovation could engender and dreaded failure even though they were aware that it could happen. One account explained: *"I was thinking of one of the major deterrents to pedagogical innovation. It's precisely that we're afraid of losing control or not making it, or that it doesn't work and I think that we have to take that risk and it's quite possible that it doesn't work* (instance 5)*."*

Finally, one professor underlined a lack of pedagogical training as an obstacle to innovation and stated: *"Main obstacle? I would say it's the lack of information on pedagogy as I've never had lessons in pedagogy. Probably I couldn't even say exactly what it was before taking lessons* (instance 26)*."*

One participant explained that they did not like the discomfort that interaction might generate both for the students and himself. In fact, he highlighted the possibility that certain professors and/or students hate interaction and the awkwardness that this can cause. He substantiated his remarks with:

"According to those I've spoken to who are capable of doing that, you have to be capable of appreciating silence. So, asking the question and having this great silence, this awkwardness among the students. For my part, I'm not capable of that. I'm quite a motor-mouth. And, at the same time, I find my question artificial, because there are no easy questions (instance 30)*."*
To conclude this obstacle category I recall that it is primarily comprised of time constraints or time required. It also includes the feeling of a certain lack of recognition of the time invested by innovators. Next, this category contains certain colleagues' resistance to pedagogical innovation that innovators may sense. Furthermore, several participants brought to our attention professors' solitude in their teaching practice and more specifically when they integrate innovation into this. They also evoked investment in terms of energy expended on this activity and their fears related to taking risks regarding the use of pedagogical innovation in teaching.

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Finally, there was the lack of pedagogical training and the possibility that certain professors or students do not relish interaction or at least the awkwardness that this can generate.

Category 2: Obstacles related to technical aspects

The second obstacle category, which is related to the technical aspects of pedagogical innovation, contains the sub-themes: *Technical complexity*, *Organisational difficulties*, *Lack of or ageing equipment*, *Need for teaching assistants*, *Problematic technology*, *Too large student groups* and *The pedagogical innovation becomes outdated.* Seven individual interviews revealed *Technical complexity* as an obstacle hampering the progress of a pedagogical innovation. One professor shared his experience of introducing a clicker (student response) system:

"Three years ago, when we did that, suddenly there was interest. What probably deterred people too was the complexity of the system. We have two hour blocks and sometimes it crashed, it wasn't easy. I understand them too; you aren't familiar with it and you're told that sometimes it crashes after half an hour and you'll lose an hour of your lesson. People were put off because of the complexity, the whole technical team had to come out; it wasn't easy. Now that it has become simple I think a lot of people have got on board, purely because the software is easy, it's easy to use, you can do it whenever you want (instance 3)*".*

According to five participants, in addition to these technical difficulties, there are also organisational obstacles that planning certain types of pedagogical innovation causes, for example:

"One of the main difficulties every year is finding a date that suits everyone to bring the students (from several faculties) together. There are programmes that have to compromise. So, now, we plan our dates far in advance. Space problems. Yes, it's always difficult. For the small work rooms, as the dates are known far in advance we manage through our programmes, we manage to have the number of rooms we need. For our first-year activity, as it's classes of fifty, what we do is we hold the activity in the evening (instance 27)*."*

Moreover, five respondents discussed ICT, which, although it is often useful for pedagogical innovation, can cause some adversity among certain students. This primarily concerns the lack of face-to-face meetings due to lessons being dispensed online, as one participant elaborated:
"Someone who had already followed distance classes told me that he didn't feel like he was dealing with real people and that he really appreciated being in a classroom with a professor who sometimes made mistakes or got muddled up in his explanations, and that he identified much more with that than with a finely tuned product which gave a PowerPoint presentation (instance 24)*."*

Two professors evoked *Too large student groups* as an obstacle to pedagogical innovation. They think that the fact that they have many students in a class prevents them from introducing such projects. This seems to contradict the reasons for innovating evoked in the results of this study. In effect, four professors indicated large groups as being one of the reasons compelling them to innovate.

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Two participants said that introducing a pedagogical innovation project requires the participation of people supporting the professor. Engaging a teaching assistant can bring about, according to the respondents, discontent or student absenteeism, for example:
"We realised that the students, when they were matched with a teaching assistant and not their course leader or their professors, didn't attend, because they had the feeling that they would get poorer teaching quality as it was the assistant giving the workshop. But, it was the same workshop; it was the same thing (instance 2)*."*

One professor reported that pedagogical innovation becomes rapidly outdated. What is deemed innovative becomes obsolete, dull and old in a few years. The need for continual renewal was underscored by the respondent who explained: *"The drawback of video is that I find it becomes outdated quickly. It worked well for 3 or 4 years, but after 5 years we found that the content was less modern, less up-to-date, so we stopped using it after 5 years* (instance 2)*".* Finally, still in terms of obstacles to pedagogical innovation, one speaker lamented the lack of equipment or the obsolescence of that which did exist, and stated: *"Limits, obstacles, well, as I said, there was the year when the technology started to be a bit dated and worked less well* (instance 11)*."*

Summarising this obstacle category, it concerns various facets related to the technical complexity of using pedagogical innovation, as well as the organisational difficulties that this engenders. Consequently, although it is often useful for pedagogical innovation, information and communication technology may inspire some adversity among certain students, due to lack of face-to-face meetings as lessons are dispensed online. To conclude the technical aspect-related obstacle category I can add several comments made by the participating professors on this subject: too large student groups, the need for teaching assistance, pedagogical innovation becoming outdated, and the lack of equipment or its obsolescence. The results highlight that professors do not wish to change material and experience difficulty in updating their equipment.

Category 3: Obstacles related to students

The third category, student-related obstacles, is comprised of the sub-themes: *Absenteeism, Student commitment* and *Student resistance*. Five professors cited strong resistance among students towards pedagogical innovation entailing a change in both the teaching and learning method. The professor has usually taken a voluntary decision to innovate, but the student finds themselves with no choice and loses their bearings. One participant shared their feelings:

"I have more difficulties with the baccalaureate because firstly the students resist, I would say it comes down to a lack of overall general epistemological maturity. They need didactic content that they receive as the truth. And if you don't give them that it unsettles them, and then they say: 'You don't give us what… You treat us like children!' That's what's paradoxical! And our training is very focused on didactic content and that's what this knowledge is. So there they become unsettled which means I have to fight against what they want (instance 7)*."*

The interviews showed that this resistance appears to upset professors, as one of them confided in us: *"Personally, what bothers me more is student resistance, because until you've won the students' 'hearts', working isn't pleasant* (instance 20)*."*

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Eight interviews highlighted the significant commitment required from students to their studies and increased class participation. According to the professors, pedagogical innovation generally entails students being active in their learning. One participant exclaimed: *"When I introduce pedagogical innovation, one of the results is that the students always work harder than I do!* (instance 32)*."*

Five other professors underlined that pedagogical innovation can cause a high level of classroom absenteeism, which is one of the difficulties they are trying to circumvent, as one experience in this regard recounts: *"Given that the role plays are much more demanding and intimidating, people didn't attend much and it was a problem* (instance 6)*."*In conclusion, this category conveys strong resistance on the part of students towards pedagogical innovation which requires significant commitment to their studies and increased class participation of them. The results arising from the professors' discourses also underline a higher class absenteeism rate in a pedagogical innovation context. This absenteeism seems to be caused by lessons being posted online as the student no longer needs to attend class to obtain the class notes, or also the fact that they do not like the active participation brought about by pedagogical innovation.

Category 4: Obstacles related to the institution

The fourth category, which is represented by obstacles related to the institutional aspect, comprises: *National constraints, The programme, Financial, Lack of institutional support* and *UdeM intellectual property*. Thirteen professors highlighted failings in terms of funding for pedagogical innovation. One participant explained the great difficulty in terms of obtaining funding for pedagogical innovation and regretted that there was not more: *There were financial restrictions because no funds were available. Here, we don't have funds to support people who would like to develop pedagogical projects* (instance 3)*."*

Subsequently, *National constraints* and *The programme* were mentioned as potential obstacles to pedagogical innovation. There is clear evidence that certain demands and rules stipulated for a programme can hamper pedagogical innovation:

"If I want to institute quite a large change and I am in a programme and I am the only one who wants to make this change, I can't do such a thing as the programme states that there absolutely must be multiple choice examinations and I want to do something else. So, that causes a problem (instance 32)*."*

For one participant, one of the obstacles to pedagogical innovation relates to the *Université de Montréal intellectual property* regulations, which restricts possible exchanges between universities concerning what is created and developed. This problem was explained thus:*"Currently, we have limits on what we can share with other universities due to the Université de Montréal's intellectual property philosophy which really wants to preserve the copyright of what is developed. So, sometimes we would like to do exchanges with certain groups but we are kind of limited. We are trying to convince the university to cut us a bit of slack in this regard* (instance 27)*."*

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One professor's remarks evoked a *Lack of institutional support*. They recounted the pressure and significance of institutional constraints to which professors are often subjected when they want to innovate:

"I think that the biggest barrier that might exist is this: Is the management of the unit, the faculty, the department, the programme, prepared to try something new? Is it prepared to take responsibility for all the consequences? What will it think of this innovation? Because, if along the way a new dean arrives and the university's management says to them: 'There, your programme is too expensive', because they think that we have gone too far with all our little groups, our this, our that, I mean the carpet can be pulled from under you from one day to the next, it can change everything again (instance 32)*."*

This category highlights failings in terms of pedagogical innovation funding. Subsequently, and mentioned by only a few respondents, national constraints, the programme, Université de Montréal intellectual property and lack of institutional support were evoked and demonstrate the pressures and the significance of the institutional constraints to which professors are subjected when they wish to innovate.

Category 5: Obstacles related to assessment

The penultimate and fifth obstacle category, which is related to student assessment, hinges on the sub-themes: *Group work assessment, In-class examinations* and *Feedback impossible*. Assessing student learning in the context of pedagogical innovation remains an obstacle. This specifically concerns *Group work assessment,* which was mentioned by one respondent, and the more general issue of assessing students in class, which is often compulsory at undergraduate level or sometimes desired by a professor who is questioning the aim of pedagogical fairness of in-class examinations.

One professor underlined an obstacle noted when introducing a pedagogical innovation. This consisted of the difficulty in offering quality feedback to students. Effectively, the participant laid blame thus: *"The limits are probably at the level of the feedback that we can give because with a group like that (large), it's the number, it's difficult to get around it* (instance 26)*."*
This category exposes reflection on the aims of pedagogical fairness of in-class examinations, group work assessment and the impossibility of giving feedback to students in the context of undergraduate teaching.

Category 6: Obstacles related to the discipline

Finally, the sixth obstacle category, the discipline, is comprised of a single sub-theme, *Subject.* It specifies that the subject can have an impact on or a determining role in the choice of pedagogical innovation used. From six of the professors' discourses the hypothesis emerges that the subject can have an impact on or a determining role in the choice of pedagogical innovation used. In fact, the participants often link pedagogical innovation to content in their remarks. One of them stated: *"There aren't subjects that easily lend themselves to that and context groups that easily lend themselves to that* (instance 31)*."* In other words, the interviewed professors explained that they chose the type of pedagogical innovation to use in relation to the discipline taught and the class content, and clarified that very complex content limits the use of pedagogical innovation.

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A deterrent to pedagogical innovation: Student evaluation of teaching

The results of the analysis of the individual interview professors' discourses vis-à-vis evaluating pedagogical innovation mention that the student questionnaire for evaluating teaching provision is ill-suited to the teaching dispensed by professors who use pedagogical innovation. I wished to delve deeper into this issue during the group interview to understand in what ways the student questionnaire for evaluating teaching provision is ill-suited to pedagogical innovation and why.

The interviewed professors' remarks hinge on five points (Table II). First, they explained the disadvantages of students evaluating teachers. Next, they mentioned the various impacts of the latter. Finally, the professors wanted to clarify what this student questionnaire for evaluating teaching provision represents, before evoking the alternatives that they had found and making several recommendations to improve it.

Points	Sub-theme	Frequency[3]	Instance[4]
Disadvantages	Obsolete questions	5	3
	Inflexible form	3	2
	Inappropriate student comments	2	1
	Students not competent to evaluate professors' teaching	3	3
	Correlation between student grades and evaluation forms	3	1
	Disadvantages	**16**	**10**
Representation	Student satisfaction form	3	2
	Difference between compulsory and non-compulsory classes	4	2
	EF[5] related to class	3	2
	Don't expect any feedback on your PI in the EF	1	1
	Representation	**11**	**7**
Impact	Promotion depends on evaluation	11	4
	Deterrent to pedagogical innovation	4	3
	Obstacle to the pedagogical relationship	1	1
	Professor subjected to assuming a role of seduction	6	3
	Use of EF against professors	5	2
	Nuisance to professors	3	2
	Impacts	**30**	**15**
Alternatives	Prefer direct student comments	2	2
	Prefer informal evaluation	3	2
	Status not important	3	2
	Pay no attention to evaluation form	2	1
	Use as feedback rather than assessment of student satisfaction	2	2
	Alternatives	**12**	**9**
Recommendations	Adapt the questions	1	1
	Modifications have been attempted for a long time	1	1
	The participant is professor representative at the GEE	1	1
	Professors' union refused access to UdeM GEE (Teaching Evaluation Group)	1	1
	Recommendations	**4**	**4**

Table II – List of the five points related to teaching provision evaluation

[3] Frequency is the number of segments coded as relating to the sub-theme.

[4] One instance is one interviewed professor participating in our research. Here, this column shows the number of instances (professors) who have one or more segments coded to the sub-theme.

[5] EF: Evaluation Form refers to the student questionnaire for evaluating teaching provision form.

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Disadvantages

Let us begin with the disadvantages of teaching evaluation. Three respondents stated that the student questionnaire for evaluating teaching provision was obsolete and explained that certain questions were poorly worded. One of them exclaimed: *"I am evaluated using forms that make no sense!* (instance 3GI)*"*. Another stipulated: *"All these sets of questions are off-subject and poorly worded* (instance 4GI)*"*. They also encourage inappropriate comments from students. One professor confided that students' personal comments were sometimes malicious and inappropriate, and could include comments unrelated to teaching. They revealed: *"above all for the disproportionality between the essence of the question and the liberty of tone that the students take in their personal comments. Sometimes it's cruel!* (instance 4GI)*"*. This participant added that the personal comments are quite specific to the Université de Montréal in the sense that in other countries there is no place for this type of comment and added: *"There is no place for destructive, racist, nasty, etc. personal comments.* (instance 4GI)*"*.

At this point, the notion of students' ability and objectivity in being able to legitimately evaluate professors' teaching arises. One of them wondered: *"Even the question: Is the professor an expert in their subject? What does a student know? The students respond to it either off-hand, vengefully or to have a laugh* (instance 4GI).*"*

Another disadvantage was revealed through two professors' discourses. This is lack of flexibility in the student questionnaire for evaluating teaching provision. One of the respondents had tried, in vain, to obtain authorisation to make changes to the questionnaire. As he explained: *"I went to see my faculty dean, who told me: No, you are not permitted to adapt it in any way whatsoever* (instance 3GI).*"* These words were confirmed by a colleague who had tried to adapt it to his teaching by adding a few questions related to his pedagogical innovation at the end. He was rapidly prohibited from doing so again and expressed in these words: *"I tried it one year, I added five questions, and an administrator called me to say: you're not allowed to do that!* (instance 1GI)".

Impact

Secondly, the professors spoke about the impact of this teaching evaluation. It seems crucial to highlight the challenge that this student questionnaire for evaluating teaching presents to professors' careers. Effectively, for the most part, the respondents explained a dependency between the student questionnaire for evaluating teaching provision and the process for requesting a promotion to associate or full professor. This is in accordance with Sunal and Hodges (1997), who have already indicated professorial promotion as an obstacle to innovation. One of them said ironically: *"I am waiting to be appointed as a full professor and then I will get down to it!* (instance 4GI)*"*. Another effect of this questionnaire is it being used against professors, as one participant explained: *"It's great in principle, but poor in practice. I find it atrocious that it is used to evaluate my ability as a professor* (instance 5GI).*"* The evaluation of professors' teaching provision can even, in certain circumstances, definitively harm their career at the Université de Montréal. *"I have seen professors have their career completely ruined because once they had received negative evaluations as course leaders, they could no longer attain the post of professor* (instance 5GI).*"*

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Thus, this student evaluation of teaching provision proves to be a serious hindrance to pedagogical innovation: *"I find that this form is a deterrent* (instance 4 GI)." It arises from the participants' discourses that students are sometimes displeased by the unexpected additional workload required of them through pedagogical innovation and that this can provoke a lowered evaluation of a professor's teaching. As was explained: *"But the (conceptual) map reduced the evaluation from 3.8 to 3.4 (out of 4). So, it's just due to the fact that it's something unusual* (instance 1GI)*."*

One of the respondents asserted that the student questionnaire for evaluating teaching provision contradicts the pedagogical relationship that should form between student and professor. Three of them believed that they were, despite themselves, obliged to win over students and deplored this awkward situation: *"It's terrible to be subjected to assuming a role of seduction. It disgusts me!* (instance 5GI)*"*

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In this way, this student evaluation of teaching proves to be a hindrance to pedagogical innovation. It transpires that the additional workload demanded of students by pedagogical innovation could displease them and provoke a lower teaching evaluation. One of the respondents noted that the questionnaire contradicts the pedagogical relationship that should form between student and teacher. The professors find themselves involuntarily obliged to win over students.

REPRESENTATION

This brings us to the third part where I observe, manifestly, that this questionnaire does not correspond to the respondents' expectations. Firstly, two participants highlight the difference in the effect of this questionnaire depending on whether the class that they teach is compulsory or not. Evidently, students in an optional course are not there by obligation, but out of desire. Therefore, the professor can profit from this situation:

"Unlike my colleague I don't teach any compulsory classes. So, at the start of the game I say: 'I'm the only master on board. These are the game rules. If you don't want to take this class, you aren't obliged to be here'. So, the seduction operation is above all selecting the students who are interested in wanting to get on board. It wouldn't be the same if I were teaching 250 first-year students (instance 2GI)*."*

Next, two respondents' remarks indicate that the results of the professors' teaching evaluations are also linked to the content itself of the class to be taught, as one speaker shares here:
"We have a social statistics class that we call 'the bad class'. It doesn't matter who gives it, it always gets evaluations of between 1.8 and 2 (out of 4). Firstly, because it's an absurdly difficult class and secondly because it's maths and you sign up for social sciences so as not to do any more maths (instance 4GI)*."*

Finally, one of the professors was concerned about an ambiguity in the concept itself of defining the student questionnaire for evaluating teaching provision and its usage. It could indeed have had many virtues when it was created, but today it boils down to merely evaluating student satisfaction.

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Alternatives

The penultimate section allows us to present the alternatives tried and discussed by the professors, who recall the importance of using this evaluation as feedback on their teaching. Effectively, whatever their status, two participants stated that they were resigned and did not pay any attention to the student questionnaire for evaluating teaching provision, as one of them explained:

"I have to say that I am not a full professor, only an associate, I have compulsory classes, large groups and I am always screwed by these evaluations. I am not a full professor and I don't give a damn. Because I know that I have to get knowledge into their heads whether they are happy or not (instance 5GI)*."*

Finally, two professors decided to prefer informal evaluation and two others *Direct student comments* rather than those provided on the back of the questionnaire:

"I even tell students: Put what you want, I'm not interested in it, I don't even look at it. If you have real, informative comments, send them to me or write them on the back of the form, but, for me, questions graded by a quantitative response aren't useful at all! (instance 2GI)*".*

RECOMMENDATIONS

Whilst, according to one of the respondents, the teachers' union is not authorised to participate in the Université de Montréal Teaching Evaluation Group (GEE), it had put forward a recommendation issued by the professors. Whether the GEE likes it or not, and despite the modifications attempted in vain, moreover for some time now, the interviewed professors insisted that it is important to adapt the student questionnaire for evaluating teaching provision to include questions that would allow teaching practices using pedagogical innovation to be evaluated on the same basis as traditional teaching.

DISCUSSION

Some of the questions on the student questionnaire for evaluating teaching provision are not, on the one hand, adapted to innovative professors, nor, on the other hand, appropriate for students who do not necessarily possess the skills to respond to them accurately and objectively. Further, I highlight, based on the professors' discourses, that the inappropriate use of this evaluation, for the redirected purposes of professorial promotion and student satisfaction, makes this evaluation tool inadequate in terms of its real and objective coherence. According to the respondents, it appears to be more of a student satisfaction survey than to lend value as a true evaluation of their teaching. Finally, this use of the student questionnaire for evaluating professorial teaching provision can not only prove to be an important deterrent to pedagogical innovation, but also, can unjustifiably wreck an entire career. Consequently, student evaluation of professorial teaching provision confirms both the professors' fears over the risk of innovation and student resistance to change.

The deterrents to pedagogical innovation raised by the interviewed professors hinge on six obstacle categories. Nevertheless, I observe that these were not referred to with equal frequency by the respondents. This means that the professors alluded to some obstacle categories more frequently than others. The category related to professors represents 39% of instances. Close

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behind, that relating to technical aspects amounts to 23%. Student-related obstacles account for 17% and those related to the institution have 15%. Far behind, the discipline and assessment only represent 4 and 2% respectively. Consequently, the results suggest the hypothesis that the obstacles related to professors, technical aspects, students and the institution form the pillars of deterrents to pedagogical innovation, according to the professors interviewed. Nevertheless, it is important to qualify these results. In effect, are the professor-related obstacles not influenced by the institution in which the professor works? In this case, a university that is strongly committed to research, with a marked preference, would inevitably impede headstrong professors, as Drumond et al. (1997) have already mentioned.

It is therefore tempting to hypothesise that the institution, equipped with a human lever, subjugates professors in terms of pedagogical innovation. Undoubtedly, using teaching evaluation for promotion purposes subjects the professors to assuming a *'role of seduction'* towards students and the technical aspect gives rise to discontent and, consequently, is a means of additional pressure, albeit tangible this time, on professors. In this way, the institution, in fourth place, retains a major and decisive impact embodying the role of an orchestra conductor, who can constrain, at leisure, their musicians to play the tune of their choosing. This leads us to question, from a more fundamental perspective, the suggestive and latent power of this sword of Damocles as an obstacle to innovation by jeopardising pedagogical innovators' professorial careers.

Future research could therefore investigate the perspective of the directions of university institutions in terms of pedagogical innovations. A qualitative research could help to address the suggestive and latent power that institutions wear on professors in this idiosyncratic context.

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