



From CCTT to college: a collective responsibility

A tool to generate positive repercussions on college training

Extension paper

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From CCTT to college: a collective responsibility A tool to generate positive repercussions on college training

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Is there a College Centre for the Technology Transfer (CCTT¹) affiliated with your college or do you work in a CCTT? Do you want to optimize the impact of this CCTT's activities on the college training? If you answered "yes" to one of these questions, this paper is for you. You will also find it interesting if you want to learn more on ways that colleges and CCTTs can use to work together to encourage spin-offs on college training generated from the CCTT activities.

Despite their importance in the Québec intermediation and innovation systems, the CCTTs have until now been the subject of very few researches. When they have, it has mainly been in terms of their contribution to the economic or industrial development of all of Québec or its regions. We have instead carried out a research² to analyze the tandems formed by CEGEP and their affiliated CCTT. In doing so, our goal was to offer decision makers and researchers working at CCTTs and higher education levels **strategies to optimize the impact resulting from the CCTT activities on college training (ICT)**. Once the approaches enabling an optimization of the impacts of CCTT activities on college training are known, another question remains: **how do we showcase these repercussions?** That is the second major issue that our research aimed to address, in order to help the CEGEP-associated CCTTs to better highlight the positive effects of their activities on college training.

Instead of summarizing here most of the optimization strategies and indicators proposed in our research report, we have chosen to create and present a simple user-friendly tool resulting from the first part of our work (optimization strategies only). This tool, essentially a chart, regroups the local factors involved in the production of ICT³.

¹ The CCTTs are organizations for which one or more colleges are responsible. Recognized by the ministère de l'Éducation, du Loisir et du Sport (*MELS*) and specialized in one or more specific fields, the 40 currently existing CCTTs provide applied research, technical support and technology transfer services to businesses and organizations. Impacts from their activities influence college training and socio-economic development. Since 2009, there are also CCTTs in the field of innovative social practices (CCTT-*PSN*). The 6 currently existing CCTT-*PSN* have a mandate similar to that of traditional CCTTs, but their goal is to produce new social practices by working with various partners and with the community.

² This research, conducted from 2009 to 2011 and funded by the ministère de l'Éducation, du Loisir et du Sport, has led to the publication of a report from which the present paper originates: Kingsbury, F. and F. Bourgeois, in collaboration with André Doré, *Optimisation des retombées des activités des centres collégiaux de transfert de technologie sur la formation collégiale. Pour favoriser des retombées de qualité*, Research Report, Cégep de Sainte-Foy, 2011. This report is available at the College Documentation Centre [www.cdc.qc.ca] and on our Internet page [www.cegep-ste-foy.qc.ca/rechercheCCTT].

³ Our complete report also addresses others factors which are not specific to the CCTT-college context, but have an effect on it and on the production of ICT.

Some parts of the chart only require a factual observation while others imply an evaluation. It is the combination of objectivity and subjectivity that will allow the users of the chart, whether they are professors, educational consultants associated with the research in their college, CCTT project leaders or college and CCTT administrators, to take a critical look at the factors helping or hindering ICT production in their CCTT-college tandem.

Thus, by using the chart we developed for them, the actors of the CCTTs and colleges will be able to better define collaboratively the aspects on which to work and decide, as well as the actions to be carried out to further promote quality impact production. This chart could also be used as a leadership tool, during discussions between the people that have to collaborate so that college training benefits as much as possible from CCTT activities.

Questions	Answers		
	Partly	Yes	No
Theme: Shared View			
1. Do we share a similar view on what the CCTT is, its goals, its mission?			
2. Do we benefit from a leadership that mobilizes us on the production of ICT? (In concrete terms: is the production of ICT part of our priorities? In each project that we develop, are we concerned about reflecting together upon the ways in which it could contribute to college training?)			
3. Do we nurture both in college and in CCTT, a true research culture? (In concrete terms: do we take note of research results? Do we base our decisions on such results? Do we value research activities and the dissemination of their results, to both employees and students?)			
4. Are we convinced that the production of ICT is altogether the responsibility of all the actors of the CCTT and all the actors from the college?			
5. Does the intensity of the relations between the administrators of the college and the administrators of the CCTT allow close and harmonious links between the two entities?			
6. Does the intensity of the relations between the professors or technicians of the college and the researchers or technicians of the CCTT allow close and harmonious links between the two entities?			
7. Are the people who work at the college well aware of the activities, challenges and needs of the CCTT?			
8. Are the people who work at the CCTT well aware of the activities, challenges and needs of the curriculum(s) most related to the CCTT activities and those of the college as a whole?			
9. Does the college sufficiently support in a concrete manner the CCTT in its efforts regarding the ICT?			
10. Does the CCTT seek to link its activities sufficiently and in a concrete manner to those of the college?			
11. Are we ready to allocate resources (human or material) to the production of ICT?			
12. Is the message sent by the college to the CCTT clear regarding its expectations in terms of ICT (concrete objectives, realistic targets, incentives, etc.)?			

Questions	Answers		
	Partly	Yes	No
13. Regarding the ICT, does the CCTT include concrete and realistic objectives in its action plan, following consultations with the college and the professors?			
Themes: Continuous Communication and Consultation			
14. Is the director general of the CCTT invited to participate in meetings with the collegiate heads of services?			
15. Beyond the consultations taking place on the administrative level, are there permanent interfaces that encourage exchanges between project leaders and professors (to enquire about future projects, current or completed; to determine common themes of interest; to discuss each one's needs, etc.)?			
16. Can the project leaders, the professors and the students easily accede to the CCTT and college (physical proximity, access, etc.)?			
17. Have we set up the premises and mechanisms for the students, professors and project leaders to frequently meet and exchange formally or informally?			
18. Do the professors and project leaders feel comfortable enough to informally ask each other for professional help or advice?			
Theme: Connection between CCTT and Curriculums			
19. Are the people who work at the college familiar enough with the CCTT activities to use them in their own courses or curriculums?			
20. Are the people who work at the CCTT familiar enough with the college curriculum(s) to be able to target, in their projects, the elements that could be used in the courses or the curriculums? Are the people who work at the CCTT familiar enough with the latter to adapt their projects in order to make them more useful to their collegiate counterparts?			
21. Does the college offer a curriculum (College Diploma or Attestation of Collegial Studies) related to the CCTT's activities? (If not, have we contemplated creating one or locally adapting a curriculum to link it with the activities of the CCTT?)			
22. Do the professors instinctively ask the CCTT for feedback on the curriculums or courses related to its activities (matching of the market current or emerging needs, trends and avenues, etc.)?			
23. Do professors from the college participate in projects in collaboration with the CCTT?			
24. Are professors from the college with the required profile interested in participating in projects in collaboration with the CCTT?			
25. Do employees of the CCTT willingly invite college professors to participate in projects with them?			
26. Do the professors willingly propose projects to the CCTT?			
27. Could we modify some of our practices so that the college professors could more easily participate in projects with the CCTT?			
28. Have CCTT employees and college professors agreed on themes for which both groups have a common interest (themes that they would both like to develop, themes that fulfill a need in each group, etc.)?			
29. Do students visit the CCTT?			
30. Do the curriculum(s) most related with the CCTT activities plan, in one of their courses, student group visits to the CCTT?			
31. Do the professors make good use of the students' visits to the CCTT in their courses?			

Questions	Answers		
	Partly	Yes	No
32. Do the professors participating in projects with the CCTT integrate these experiences in their courses?			
33. Could the layout of the CCTT benefit from changes to better accommodate students or groups of students, whether for visits, work on specialized equipment, database consultation or other activities?			
34. Does the CCTT offer apprenticeships to the college students?			
35. Does the CCTT offer jobs to the college students?			
36. In order to offer them appropriate tasks, are the employees of the CCTT familiar with the abilities and skills of the college students?			
37. Do the employees of the CCTT instinctively plan the inclusion of students in their projects (apprenticeship or job)?			
38. Do the professors facilitate student apprenticeships at the CCTT?			
39. Do the professors, project leaders and technicians from the CCTT and the college discuss about the equipment, products or facilities from which they could benefit?			

Beyond the sum of the "Yes", "No" and "Partly" given in response to the above questions, the chart is an invitation to a collective reflection on the tandem CCTT-college and on what facilitates the production of ICT. Moreover, it might be interesting that all actors of a same CCTT-college partnership first fill in our proposed chart individually, and then meet to exchange on their answers. Comparing each one's answers could indeed result in meaningful exchanges on one or another of the themes addressed through the chart: it would, thus, be possible, for example, to see if everyone has the same interpretation of the situation, to find solutions to "basic" problems related to the production of ICT or to reach consensus on the importance of some factors affecting, on a local scale, the production of ICT.

Of course, the factors affecting the production of ICT are not only found on a local scale; the chart therefore, does not take into account all factors into play. Indeed, it must be recognized that contexts prevailing on a Québec-wide scale also affect the production of ICT⁴. Considering both the local and province-wide factors of influence, discussions between director generals of CCTTs, for example, as part of the activities of the "*Réseau Trans-tech*" which regroups the CCTTs, could also allow CCTTs to share the practices and tools that have lead them to contribute efficiently to the production of ICT. Similar exchanges between college administrators could also be fruitful.

In the end, following our work, we invite all of the actors of each CCTT-college partnership to exchange on a local scale and in Québec as a whole on their practices and their perceptions so that, collectively, we can rely more on the CCTT activities to enrich college training.

English translation: Diane Kenny

⁴ For more information on these more global factors and on the optimization strategies we propose, readers can consult our research report.