CONSEIL SUPÉRIEUR DE L'ÉDUCATION

Research and Education at the College Level: A Synergy to Be Promoted

Summary

Autumn 2025



This document may be reproduced for educational or research purposes provided that the extract or the whole document is reproduced without modification.

The source must be acknowledged.

Any other use must be authorized by the Government of Québec, which holds the exclusive intellectual property rights to this document. This authorization can be obtained by email by writing to: conseil@cse.gouv.qc.ca.

You can consult this document at www.cse.gouv.qc.ca.

Coordination, writing and research

Katie Bérubé, coordinator

Research and contribution to the writing

Simon-Louis Lajeunesse, research agent

Contribution to the research and writing

Hermann Enomana, research agent **Sophie Gosselin**, research agent and transfer **Marianne St-Onge**, consultant, EFE - Groupe de recherche et consultance

Contribution to the research

Niambi Batiotila, research agent Maude Déry, research agent Emy Fecteau, student research agent

Translation

Ève Krakow

Brief adopted at the 711th meeting of the Conseil supérieur de l'éducation, Avril 11, 2025.

How to cite this document:

Conseil supérieur de l'éducation (2025). *Research and Education at the College Level: A Synergy to Be Promoted – Summary*, Québec, Le Conseil, 26 p.

Legal Deposit

Bibliothèque et Archives nationales du Québec, 2025

ISBN: 978-2-555-01613-2 (print) 978-2-555-01614-9 (PDF)

© Gouvernement du Québec, 2025

Ce document a été produit dans l'esprit d'une rédaction épicène, c'est-à-dire d'une représentation équitable des femmes et des hommes.



This document is printed on paper containing 100% of recycled fiber, treated without bleach, certified EcoLogo.



Notice to readers

The document titled *Recherche et formation au collégial: une synergie à promouvoir* [Research and education at the college level: a synergy to be promoted] was adopted by the Conseil supérieur de l'éducation on April 11, 2025. Changes observed since that date could therefore not be taken into account. These changes include the following:

- the amount granted to each CEGEP by the Ministère de l'Enseignement supérieur (MES) to support the development of research;
- the withdrawal of the Ministère de l'Économie, de l'Innovation et de l'Énergie's contribution to the basic funding of college technology transfer centres;
- the withdrawal, starting in the 2025–2026 school year, of two college research assistance programs offered by the MES, that is, the Programme d'aide à la diffusion des résultats de recherche au collégial and the Mesure de soutien à la relève en recherche au collégial;
- the grant competition opening dates for the Programme d'aide à la recherche sur l'enseignement et l'apprentissage and the Programme de recherche et d'expérimentation pédagogiques.









BACKGROUND

In its brief titled *Recherche et formation au collégial: une synergie à promouvoir* [*Research and Education at the College Level: A Synergy to Be Promoted*], the Conseil supérieur de l'éducation (CSE) proposes a set of orientations and recommendations to promote and optimize the links between research and education at the college level. The CSE examines the ways in which these two aspects of the college mission can feed into each other in order to improve the quality of education and enrich the educational experience of students. In this way, it seeks to make a unique and complementary contribution to the work carried out to date on college research by emphasizing its educational goals.

The CSE begins by recognizing the presence of research in colleges since their creation and its evolution over time. It sets out its position on the achievements of college research, forming the basis for its reflection. It also calls for the adoption of a broad definition of college research, which encompasses a variety of practices and methods in different fields and carried out in various locations. The concept of education used in the brief is broad in scope as well, covering several aspects of the educational environment that contribute to students' education and enhance their educational experience. The CSE focuses its analysis on the regular education sector.

The research–education relationship in higher education is complex and multidimensional (Elken & Wollscheid, 2016). It can occur at different levels (e.g. individual, curricular, institutional or national) and take various forms, as well as vary according to discipline and program level. This relationship is also influenced by cultural factors such as the cultures specific to disciplines, departments, program teams and institutions (CSE, 1998).

Drawing inspiration from various models of the research–education relationship, the CSE chose to focus its analysis on four dimensions: 1) governance and organization of research at the college level; 2) mechanisms linking college research and education; 3) research initiation and the development of a scientific culture among students; and 4) the research potential of colleges. For each of these dimensions, it sets out orientations and recommendations that are addressed, as appropriate, to the Minister of Higher Education, the college community, and other stakeholders involved in college research.

\int

Governance and organization of research at the college level

For the CSE, governance is the foundation on which college research supervision, organization, and management are based, ensuring that activities run smoothly. A solidly established, coherent, and effective governance and organizational structure for college research appears to be an essential prerequisite for planning its structured development and considering its benefits for college education. The first orientation reflects this approach.

Orientation 1: Support the establishment of a solid governance and organizational structure for research at the college level

The CSE reviews research governance and organization at various decision-making and intervention levels, according to the actors involved.

At the provincial **government and ministerial level**, the Ministère de l'Enseignement supérieur (MES) and the Ministère de l'Économie, de l'Innovation et de l'Énergie (MEIE) play central roles in providing financial support and guiding the development of college research. The MES provides financial support for research development and related projects through its research assistance programs, as well as for the basic operations of college centers for technology transfer (CCTTs). The MEIE, for its part, contributes in part to the funding of the CCTTs and administers the Fonds de recherche du Québec (FRQ), which supports college research, particularly through dedicated programs. Although there may be some tension between the research orientations of these two ministries, the CSE notes a shared commitment to promoting research training and skills development in this area. However, changes made in 2024 to the constituting laws of these ministries, which resulted in the transfer to the MEIE of a set of research responsibilities previously assigned to the MES, pose a challenge for the latter to assert its responsibilities and priorities with regard to research, particularly for the purposes of training and student success. The CSE also notes that a vision for the development of college research is difficult to discern at present, particularly given the ongoing wait for follow-up to the Chantier sur la recherche au collegial [Consultation on college research], conducted jointly

by the MES and the MEIE in 2023. Moreover, it maintains that the legislative frameworks governing college institutions need to be updated to clearly define their research mission and reflect the diversity of research activities carried out at these institutions. The CSE believes that revising these frameworks would also provide an opportunity to respond decisively to the ongoing challenges of recognizing and promoting the value of college research. Finally, the CSE highlights the Canadian government's main programs aimed at supporting college research infrastructure and innovation.

At the **institutional level**, colleges are increasingly integrating research into their strategic plans, demonstrating a commitment to developing or structuring themselves in this area in various ways: providing research governance, training students in research, involving staff in research activities and projects, applying research findings to teaching, etc. Although the situation varies depending on the college and its status, research appears to be an essential and indispensable part of CEGEP development. It is also a concern and a priority for subsidized private colleges and affiliated public institutions. The prominent place given to research in college strategic plans also reveals a desire to assert their status as institutions of higher education. A large majority are adopting institutional research policies, some linking research and education. Among other factors, the organization of research through the adoption of policies and the establishment of research-related committees in colleges is conditioned, to some extent, by the requirements of funding agencies. In addition, a growing number of colleges are establishing support structures, commonly referred to as "research offices," which are present in more than half of CEGEPs and which, in most cases, report to the academic dean. The CSE notes that colleges are moving toward developing research structures, albeit to varying degrees depending on the context, and that the situation has evolved rapidly in recent years. It believes that this movement must be accompanied, in each college, by support for the establishment of a sustainable research governance structure that is tailored to the institution's reality.

Moreover, the CSE highlights the tradition of collaboration, which is present in the college community through various **college network organizations**, such as the Fédération des cégeps, the Association des collèges privés du Québec (ACPQ), the Association pour la recherche au collégial (ARC), the Réseau des CCTT — Synchronex, the Association québécoise de pédagogie collégiale (AQPC), and the Centre de documentation collégiale (CDC). These organizations provide forums for consultation and networking, as well as opportunities for sharing expertise, thereby facilitating collaboration and resource sharing among colleges. Moreover, college research is central to the mandate of two joint committees of the MES. These committees enable ministry and college representatives to keep each other informed of ongoing work, the status of joint files, and the impact of government decisions in their communities, and to discuss the definition of budgetary and financial regime appendices

relating to research support. This collaboration within the college network is essential to maximize the impact of research and ensure the sharing of best practices. The CSE invites the college community to take full advantage of these networking opportunities so that the research expertise developed in various fields can be put to broader use. It also welcomes the tendency of these organizations to work together to share expertise and encourages them to continue their efforts in this direction. The CSE invites the Minister of Higher Education to support and promote these college network initiatives aimed at pooling resources and research expertise.

Finally, the CSE believes that continued efforts are needed to study college research activities more extensively and thus uncover the complete scope of college research, with a view to ensuring its full recognition and supporting decision-making in this area. It therefore reiterates a recommendation it made in 2023 on this subject.

Based on its findings, the CSE makes five recommendations to support the establishment of an effective and sustainable research governance and organization structure tailored to the reality of each college, and to encourage the sharing of resources and best practices within the college network.

Mechanisms linking college research and education

The CSE encourages colleges and stakeholders in the college research ecosystem to establish mechanisms for liaising between research activities and education, whether within individual institutions or across the college network as a whole.

Orientation 2: Build links between college research activities and the programs offered

To start, the CSE firmly believes that one of the conditions for establishing links between research and education is to continue the information and communication efforts made in colleges to publicize the research activities they carry out. It notes the variety of initiatives taken by colleges in this regard, such as the organization of research days, and encourages them to maintain such events and to intensify communication activities on this subject.

The CSE also makes observations on **teacher and student participation in CCTT activities**. Although this participation has been increasing since 2010,¹ it remains low, averaging five teachers and nine students per CCTT in 2022–2023. Variations are also observed depending on the CCTT's field of activity. On average, teacher and student participation is higher in CCTTs in innovative social practices (CCTT-PSN) than in CCTTs in technological innovation (CCTT-IT), although the absolute numbers are higher in the latter. The status of CCTTs also seems to have some influence on teacher and student participation. The average number of teachers and students is higher in CCTTs integrated into colleges than in those managed by a non-profit organization. However, the CSE believes that these findings should be qualified, as several factors other than CCTT status may contribute to the closer relationship between some CCTTs and students and teachers. It encourages continued efforts to increase teacher and student participation in CCTT activities.

¹ This increase should be interpreted with caution due to the variation in the number of CCTTs during the reference period, which rose from 46 in 2010–2011 to 49 in 2014–2015 and then to 59 in 2018–2019.

In addition, through a mapping exercise, the CSE highlights the many possible links between the activity sectors of the 59 CCTTs and the programs of study offered at their parent colleges. It notes that each CCTT's sector of activity can be paired with at least one college program, whether pre-university or technical, and that the programs concerned are most often related to science, technology, engineering, and mathematics (STEM), the humanities and social sciences, and administration. It proposes to fully leverage the wealth of CCTTs for student training in research, whether by offering students the opportunity to participate in research conducted at these centers, in accordance with their program of study, or by inviting research staff from these centers to participate in the learning activities of the academic programs. The CSE invites colleges to undertake a similar mapping exercise within their own institutions to systematically examine opportunities for linking their CCTT activities with their programs of study and to make these opportunities visible. This approach would also benefit from including other college research units in order to fully harness their research potential for the benefit of student education. This exercise, which demonstrates the potential for linking CCTT research activities and educational programs, also paves the way for reflection on the possibility of breaking down barriers between CCTTs and colleges. Given that not all institutions in the college network have a CCTT, this avenue would expand research opportunities for students, teachers, and researchers so that they could work in centers other than those at their home college. The CSE suggests developing a common platform dedicated to promoting these opportunities for students.

The **mechanisms for developing and revising programs of study**, both at the ministry level and within colleges, also play a key role in linking research and education. The CSE proposes establishing mechanisms to incorporate the results of college research into program revision so that students can benefit from the latest scientific and technological advances in their field of study. Thus, the wealth of research carried out in colleges should be reinvested into adapting the programs of study, where appropriate, as part of the institutions' process for reviewing and updating these programs. In addition, the process of developing and revising the programs of study would benefit from involving college researchers, whether from CCTTs or other research units, who could contribute their experience in supporting students in conducting research as well as their knowledge of labour market needs in relation to scientific and technological advances. The CSE notes that, at the moment, links with college research stakeholders are not systematic within institutional and ministerial mechanisms for developing and revising programs of study.

In the CSE's opinion, the **dissemination and transfer of college research** are crucial elements for improving the link between research and education. It first notes that the dissemination of college research is an ongoing challenge and that levers still need to be found to raise awareness of all its results, so that the knowledge generated can be widely shared and then used to enrich education.

It suggests building on the role of college network organizations to make sure research results are shared more widely in all fields. In addition, some organizations in this network are adopting promising initiatives for transferring college research results, and such initiatives should be supported on an ongoing basis with a view to establishing, across the network, a model for knowledge transfer that can support, among other things, teaching practices, education quality, and student success. The CSE therefore calls for support for the development of a genuine ecosystem for the dissemination and transfer of college research, drawing on the mission of college network organizations. It also believes that support for this transfer would benefit from being better integrated into the research project cycle, or even systematically funded as part of the project itself rather than through a separate program.

Finally, the CSE considers that implementing this ambition for college research transfer also requires greater **synergy between research and education actors**. It proposes strengthening collaboration between researchers, pedagogical advisors, including those involved in supporting research activities, teachers, administrators and, where appropriate, the research office. In the CSE's opinion, this collaboration creates a dynamic environment where research and education feed into each other. It also emphasizes the pivotal role of pedagogical advisors in mediating between research and educational activities. Finally, it invites each college to address this issue by bringing together the actors involved in research and education in order to determine the model that best suits its reality, while paying attention to the competency development of the people at the heart of transfer activities.

Based on its findings, the CSE makes four recommendations associated with its orientation aimed at building links between college research activities and the programs offered.

Research initiation and developing a scientific culture among students

In the CSE's view, colleges are recognized places for introducing students to research and developing a scientific culture. In addition to helping to cultivate informed and responsible citizens, this introduction to research allows students to develop skills and methods that can be applied to various disciplines or fields of study; for some, it may spark an interest in pursuing research training and a career in science. It can therefore also serve as a lever for training the next generation of scientists in Quebec.

The brief examines the contribution of college education to introducing students to research and deepening their scientific literacy from two angles: 1) research-related training components in the programs of study and throughout the continuum of education from secondary school to university, and 2) opportunities to enrich student education and experience through optional activities that provide research experience or further develop related skills. The CSE has formulated one orientation for each angle.

Orientation 3: Promote research initiation and a scientific culture in college programs with a view to ensuring educational continuity

The CSE believes that all college students should have the opportunity to learn about research regardless of their program of study and whether or not they plan to pursue research in their academic and professional careers. The programs of study are a preferred route for reaching the entire student population to achieve this goal of introducing them to research at the college level and developing a scientific culture.

In reviewing the **programs of study**, the CSE found that a significant proportion of students are introduced to research during their studies, to varying degrees depending on their program. However, the objectives of research initiation appear to be poorly understood by the college community, particularly by students. The CSE therefore recommends highlighting and making visible these educational components that are already present in the programs of study.

The CSE first notes their presence in the common core of college education, for example through common competencies and general education, which, without specifically mentioning research initiation, can instill an interest in research across different programs. With regard to specific training, it notes that a majority of pre-university programs and approximately thirty technical programs explicitly state at least one research-related competency, although it is not always at the same taxonomic level. For example, it may aim to provide an introduction to working methods through to the completion of an entire research project, or documentary research through to an applied research project in process optimization. In addition, some fields of study are more concerned with this introduction to research, such as engineering-related techniques, while others are less so, such as arts programs. The CSE notes that introducing students to research at the college level can spark an interest in academic programs leading to careers in science and, more broadly, paves the way for the acquisition of useful cross-disciplinary skills, with a view to producing informed citizens who are capable of participating in the resolution of complex problems. It points out that changing societal contexts require "sets of competencies to deal with the ambiguity and uncertainty of the future and to collectively solve global problems" (CSE, 2022, p. 42) [Translation]. This introduction to research and the development of a scientific culture in colleges is therefore essential for training citizens who are capable of finding scientific and cutting-edge solutions to contemporary societal challenges and thus becoming drivers of research and innovation.

The CSE also invites teachers, program committees, and staff involved in the development and review of academic programs at institutions to be mindful of **learning contexts and situations** that lend themselves to the development of research-related competencies in programs, and to promote research training and inquiry-based learning in all disciplines, where appropriate. It notes that certain competencies in college programs are accompanied by a performance context that allows for learning through research or investigation, particularly in technical training. The adaptation of official programs of study by institutions can serve as a catalyst for further progress in introducing research into training by providing such learning situations and contexts. For example, educational activities that place students in an active learning situation, through problem solving or investigation, or in a situation similar to a research activity, are conducive to the development of such skills (Elken & Wollscheid, 2016; Lavoie, 2021).

In addition, the CSE highlights initiatives taken by some colleges to enhance education by adding a research component. These "research-study" paths or options are a promising avenue for introducing students to research at the college level and, in some cases, offering research experience that counts toward credits. These initiatives allow students to further develop their research skills

through learning situations in a research context and within a structured framework. Most of these initiatives are carried out in conjunction with CCTTs, while others are conducted in collaboration with independent researchers from colleges or universities. The CSE notes that this concern for providing immersion or experience as part of a research path during college studies is taking shape in a growing number of colleges.

Finally, the CSE observes overall consistency in **the research training continuum from secondary school to graduate studies**, particularly with regard to cross-curricular or common competencies, which makes it a relevant thread to be exploited in connection with the development of scientific culture and research-related skills. In its view, the objectives of research training in this continuum can be summarized as follows: raise awareness of research and the development of scientific culture in secondary school; introduce students to research and continue the development of scientific culture in college; continue the introduction to research at the bachelor's level; and provide research training at the graduate level. Despite the overall consistency observed, some overlap can be anticipated between the objectives of secondary and college education in terms of developing scientific culture, and between college and undergraduate education in terms of introducing students to research. These potential overlaps require continued consultation between these levels of education to ensure optimal progress in the development of research-related skills. The CSE also reiterates the importance of promoting research training activities in all fields and disciplines, in line with a broadened concept of research that is not limited to the natural sciences and technology.

Based on its findings, the CSE has formulated three recommendations associated with its orientation aimed at promoting research initiation and a scientific culture in college programs with a view to ensuring educational continuity.

Orientation 4: Enhance the offering of student research experiences and support student participation in research

Students who wish to further develop their research skills and gain experience in this field also have the opportunity to engage in optional activities. These experiences may take the form, for example, of participation in structured research projects in CCTTs or other research units, or in research projects conducted independently by teaching staff, or participation in workshops or scientific competitions. Through this orientation, the CSE is identifying ways to better support student participation in college research and increase the number of opportunities to participate.

During its consultations, the CSE found that research activities remain largely unknown within the college community, particularly among students. It observed a need to increase **information** about research and its **promotion** in colleges among this population in order to inform them about research activities and their results, as well as opportunities to get involved.

Student participation in research also remains a marginal phenomenon, although the lack of comprehensive systemic data makes it difficult to properly assess its extent. While the MES records student participation in CCTT research activities through its annual reporting process, no systemic data on student involvement in other research units or with college teachers has been collected to date. Nevertheless, the CSE believes that a significant number of students are directly involved in college research activities.

In addition, the CSE's brief provides a **student perspective** on the main advantages and challenges of engaging in research. According to the students interviewed, there are several perceived benefits, for example in terms of skills acquired and the impact on academic and career choices as well as student success. The challenges reported are varied: workload; balancing research experience with the amount of work required by their program of study; the nature of the research tasks assigned to them, which should be of varying complexity; recognition of involvement in research; support and supervision; and others. Students are also sensitive to issues of access to research experience, which they believe should be available to people with a variety of academic backgrounds rather than being reserved for the highest-achieving students.

The CSE also outlines the **funding available to support student involvement in research** at the college level. Some programs are aimed directly at students, while others, intended for college research staff, indirectly require or encourage student participation. It notes that several measures and financial incentives have been put in place by funding agencies and the two main ministries concerned to encourage students to participate in research activities at colleges and contribute to the training of the next generation in this field. For example, the FRQ offers three research initiation scholarship programs to college students in its three research areas. The Mitacs program, funded by both the Government of Canada and private funds, provides scholarships that enable students to complete a research internship. However, this federal program is not well suited to the reality of college studies in Quebec, and opportunities for students are therefore limited. For its part, the MES encourages student participation in research projects funded by the Programme d'aide à la recherche et au transfert [Research and Transfer Assistance Program] (PART) and the Programme d'aide à la recherche sur l'enseignement et l'apprentissage [Teaching and Learning Research Assistance Program] (PAREA), which are intended for college staff and their CCTTs, by requiring the participation of at least one

student in these projects and by offering specific funding. Finally, the MEIE's NovaScience program aims to support the next generation of researchers and promote scientific culture by providing financial support for initiatives by institutions in this area. The CSE believes that financial incentives would benefit from being enhanced to increase and better support student participation in research at colleges.

Moreover, the CSE highlights three **initiatives** by organizations or groups of graduate students that are aimed at promoting student involvement in research, recognizing this involvement, and developing research-related skills among college students. The project *L'expérience qui fait la différence* is led by the Centre de transfert pour la réussite éducative du Québec in collaboration with the ARC. The project InitiaSciences, an initiative of master's, doctoral, and postdoctoral students at Quebec universities, takes the form of a scientific research mentorship for young people in Secondary 3 to 5 as well as college students. Finally, the ARC organizes a Student Awards competition, including the *Relève étoile* Awards offered with the support of the FRQ.

To conclude the section on this orientation, the CSE identifies **conditions for stimulating student participation** in research. It highlights factors to consider in order to optimize this participation with a view to educational success, including the following: strive for a research experience within the study plan so as to achieve a better balance; offer recognition of student research experiences; increase financial support for students; support the supervisory capacity of college staff; develop support structures for students engaged in research and encourage experience sharing among those active in this field within the college network; and continue collaborations between colleges and universities to increase and diversify research opportunities.

The CSE has formulated five recommendations associated with its orientation aimed at enhancing the offering of student research experiences and supporting student participation in research.

The research potential of colleges

The CSE believes that Quebec should mobilize all of its qualified resources to play a significant role in research and cannot allow any of its potential in this area to go untapped—including the research expertise of its colleges. College research staff represent a diverse group, and those who work in this field are mainly members of the teaching and professional staff.

In examining the relationship between research and college education, the CSE focused in particular on issues related to research conducted by college teaching staff, given that they are at the forefront of student education and, if need be, well positioned to reinvest their research activities in their teaching. The CSE maintains that it is important to support the creation of optimal conditions for teachers who wish to engage in research in order to effectively exploit the research potential present in colleges and ensure their full participation in Quebec's scientific community, but also for the benefit of student education. In the CSE's opinion, greater research engagement by college teachers is likely to increase knowledge in areas related to curriculum and pedagogy and lead to benefits for both the programs of study and teaching and learning.

To support the link between research and education, the CSE has developed the following orientation focusing on the obstacles to be removed to enable college teaching staff to engage in research.

Orientation 5: Optimize research conditions for college teaching staff

The CSE recognizes that college teachers are highly educated, with many holding graduate degrees that have directly prepared them for research and, therefore, that they are major partners in the development of knowledge in various fields (CSE, 2000; 2006). Indeed, in September 2024, individuals with a doctoral degree accounted for 10.1% of the teaching staff, while those with a master's degree accounted for 39.7%.² However, the CSE notes that not all holders of master's or doctoral

The data used come from the MES and are extracted from the S3IGRH system, which only covers public colleges, i.e. CEGEPs. These ministerial data are used for management purposes, in particular to classify staff according to pay scale.

degrees necessarily show an interest in research, and that individuals with a bachelor's degree may be interested and active in this field. It also observes that many college teachers and professional staff pursue graduate studies, particularly in education, concurrently with their professional careers.

The CSE reaffirms its position in favour of voluntary engagement in research by college teaching staff. It believes that optimal conditions must be put in place to adequately support teachers who are active in this area and to encourage other college teachers interested in this field of activity to become involved.

Several factors limit teachers' ability to conduct research, including work organization, collective agreement provisions, eligibility criteria for certain grant programs, and access to the necessary information resources. In light of the views gathered, the CSE notes that these issues are recurring and have progressed little over the past two decades.

The CSE also recognizes that participation in research is part of teachers' professional development, as is the integration of its results concerning teaching and learning for reinvestment in teaching practice (CSE, 1997, 2000). It maintains that college research activities, whether related to pedagogy or other disciplines, should be recognized as professional development or skills upgrading.

The issue of **the place of research within the teaching task** has been a topic of discussion for several decades. Research is not included in the tasks common to all college teaching staff. It is therefore an activity that teachers can engage in on a voluntary basis and does not count toward seniority. The fact that research activities are not formally integrated into the teaching task poses challenges for the release of teachers who wish to engage in these activities, as well as for the funding of such release. The CSE notes that progress is being made in the collective bargaining negotiations for college teachers, and it observes a willingness on the part of the parties concerned to engage in further reflection on the issues at stake with a view to identifying promising avenues for the future. It also highlights significant progress in the new 2023–2028 collective agreement for professionals regarding the recognition of research positions in CEGEPs.

In addition, **new members of the teaching staff** who do not have a full teaching load face specific challenges in conducting research in a college setting. Under collective agreements, research is not counted toward seniority, except in cases where local union agreements have been established. As a result, newly hired teachers tend to focus on their career advancement by prioritizing teaching loads rather than investing in research. As well, in order to be released from their tasks to engage in research, teachers must first have such tasks. Teachers often have considerable research potential

during the first ten years of their careers. However, it is often during this period that their teaching task is not complete. The CSE therefore believes that access to research grants remains a crucial issue for newly hired teachers with precarious status. It calls on all stakeholders to seek lasting solutions to break this deadlock so that these teachers can fully integrate into the research culture of colleges.

Furthermore, the organizational model for colleges, which was not designed to allocate a portion of the teaching task to research, creates a problematic **funding model for research**. Thus, funding for college research projects must be accompanied by funding for the remuneration of the teacher for the period during which they are engaged in these projects. Some college research grant programs for teachers cover these costs. However, some require a full teaching load, while others do not offer this funding. Funding for teacher participation in research therefore remains an important issue in enabling colleges to effectively support teachers who are active in this area. Various options have been explored to date. The CSE calls for the establishment of a sustainable research funding structure so that colleges can adequately support their staff members who are engaged in research, while taking into account the particular challenges faced by new teachers.

The CSE also reports on the main **funding programs available to college researchers** from relevant provincial ministries and funding agencies. For example, the MES offers four funding programs designed exclusively to support college research: PAREA, PART, the Programme d'aide à la diffusion des résultats de recherche au collégial [Program to support the dissemination of college research results] (PADRRC), and the Programme de recherche et d'expérimentation pédagogiques [Pedagogical Research and Experimentation Program] (PREP). The Mesure de soutien à la relève en recherche au collégial [Support measure for the next generation of college researchers] also aims to support a first research project. Specifically, the FRQ offers grant programs in three major sectors: society and culture, health, and nature and technology. However, the CSE notes that a thorough understanding of the various programs can be complex for college researchers. It notes that some programs have been put on hold or their annual opening has been postponed, which leaves colleges in a situation of uncertainty regarding the funding available to support research projects. Given that instability in college research funding programs can also negatively affect teachers' willingness to engage in research, the CSE calls for continuity and predictability in MES and funding agency programs to support college research, as well as their enhancement, in order to leverage the full research potential of colleges and continue the growth of college research.

Finally, in its brief, the CSE emphasizes the need to ensure **broader access to scientific literature** for college staff engaged in research, in order to guarantee that they have up-to-date information on advances in their field and enable them to conduct high-quality research. This ongoing challenge forces these individuals to find alternative solutions, which the CSE believes are not viable in the long term. The rise of open access is a promising avenue for expanding access to scientific literature in colleges, but it remains insufficient to meet needs. According to the views gathered, there is a consensus in favour of resource sharing, which could increase access to scientific literature in colleges and reduce operating costs. The CSE believes that the college community needs support to find optimal solutions for better access to scientific literature, and it invites stakeholders to consider how college network organizations might contribute in this regard.

The CSE puts forth five recommendations regarding its orientation aimed at optimizing research conditions for college teaching staff, with a view to linking research and education.

CONCLUSION

In its brief, this CSE proposes a comprehensive approach that addresses various aspects at multiple levels of responsibility and intervention which, together, are likely to optimize the relationship between research and college education. By combining the various avenues suggested, stakeholders in the college education and research ecosystem will be able to enrich the student experience, enhance the quality of teaching and learning, and contribute to the growth of research within the college community, while encouraging the next generation of researchers to participate in the development of Quebec society. The alignment of research and education is also essential to train citizens who are capable of finding scientific and cutting-edge solutions to contemporary societal challenges, thereby becoming drivers of research and innovation, and to promote a dynamic educational environment that is in step with scientific and technological advances.

SUMMARY OF RECOMMENDATIONS

Orientation 1 :	Support the establishment of a solid governance and organizational structure for research at the college level			
Stakeholders concerned	Recommendations			
Minister of Higher Education	1. Propose an amendment to the main legislative frameworks governing college-level educational institutions that offer programs leading to a DEC, in order to clearly and comprehensively include their research mission.			
	2. Define a vision for the development of college research for the aspects under its responsibility, particularly in relation to educational objectives, for example in a dedicated policy, action plan, or ministerial strategic plan, including a plan for collecting data and producing information that describes the state of college research in a systematic manner to support decision-making.			
	3. Allocate sufficient funding to ensure the establishment of effective and sustainable governance and research support structures in all college institutions offering programs leading to a DEC.			
Colleges	4. Ensure that their research governance, support, and development structures and related institutional policies provide for mechanisms to ensure synergy among research and education stakeholders in all fields, such as college and CCTT research staff, program committees, teaching staff, research offices, research advisors, other pedagogical advisors, and students engaged in research.			
Colleges, college network organizations, and other organizations concerned	5. Ensure long-term collaborations to create forums for discussion and promote the sharing of expertise and best practices among all those involved in college-level research.			

Orientation 2 :	Build links between college research activities and the programs offered			
Stakeholders concerned	Recommendations			
Minister of Higher Education and colleges	6. Invite college research stakeholders to participate in ministerial and institutional processes for developing and revising programs of study, in order to leverage their experience in supporting students in research and their knowledge of labour market needs in relation to scientific and technological advances.			
Minister of Higher Education	7. Support the college network in establishing an ecosystem for the dissemination and transfer of college research, leveraging the mission of college network organizations, and integrate funding for this transfer into its research assistance programs in order to maximize the value of research results and their impact on education.			
Colleges	8. Conduct a thorough review of the potential for linking the activities of their research units with their programs of study, and provide these units with a mechanism for planning the impact on education, for example by using their strategic plan or action plan, so as to engage in a reflection on the impact of their activities on education and contribute to the establishment of a research culture based on this synergy between research and education.			
Colleges and college network organizations	9. Work collaboratively to establish a provincewide platform dedicated to research opportunities for students, either at their own college or another institution; to make these opportunities known; and to promote inspiring research experiences within the entire college community.			

Orientation 3:	Promote research initiation and a scientific culture in college programs with a view to ensuring educational continuity			
Stakeholders concerned	Recommendations			
Colleges	Leverage the institutional cycle of program evaluation to identify and highlight:			
	 general competencies that are useful in research, particularly those related to common competencies, general education, and other competency frameworks applicable to college education; 			
	 elements of program-specific competencies related to research; and the contexts in which learning takes place and learning activities that are conducive to an introduction to research, for all fields of study. 			
Teachers	11. Use different strategies to introduce students to research and promote the development of scientific culture in the context of learning activities in various programs of study, for example through contextualized and active learning opportunities.			
College network associations	12. Establish a forum for consultation and follow-up, in collaboration with secondary and university education associations, to ensure the optimal progression of research skills development among students, with a view to providing continuity in research training.			

Orientation 4 :	Enhance the offering of student research experiences and support student participation in research			
Stakeholders concerned	Recommendations			
Colleges and college network organizations	Continue their efforts to raise awareness and recognition of research among the student community, foster scientific outreach, promote opportunities for student involvement in research, encourage the sharing of experiences, and offer support in research methodology to students.			
Minister of Higher Education	14. Adopt a financial assistance plan dedicated to student involvement in college research, for example by increasing the number of scholarships available and raising remuneration, and provide significant support for the supervisory capacity of college staff so that they can assist a larger number of students in research activities.			
Funding agencies	15. Ensure that scholarship programs for students are tailored to their needs and to the reality of Quebec colleges.			
Funding agencies and colleges	16. Pay particular attention to the criteria used to admit students to research scholarships, research activities, and research–study paths, in order to promote broader access that is not based solely on academic record.			
Colleges and universities	17. Establish links between colleges and different levels of education, for example between researchers in departments, study programs, or CCTTs at colleges and those at universities, as well as between students in these two levels of education, in order to enhance research opportunities for college students and promote inter-level student research opportunities through the platform to be implemented.			

Orientation 5 :	Optimize research conditions for college teaching staff			
Stakeholders concerned	Recommendations			
College collective bargaining committee and union parties	18. Continue discussions to ensure progress in improving research conditions for college teaching staff, particularly new staff members who do not have full-time teaching responsibilities.			
Minister of Higher Education and funding agencies	19. Ensure the sustainability and predictability of college research grant programs, enhance them, and broaden their scope in order to leverage the full research potential of colleges and ensure the continued growth of college research.			
Minister of Higher Education	20. Provide financial support to colleges and college research support organizations for the pooling of resources intended to assist college researchers with documentary research and to promote broader access to the scientific literature required for research at this level of education.			
Colleges	21. Continue their efforts to publicize research being conducted at their institutions, disseminate the results, and support teaching staff engaged in research in order to encourage all interested individuals to become involved in this field of activity.			
	22. Integrate research into institutional policies for professional development or training to promote the development of research competencies among teachers and other staff involved in research.			

REFERENCES

Conseil supérieur de l'éducation (2022). *Formation collégiale : expérience éducative et nouvelles réalités*, Québec, Le Conseil, 174 p., Retrieved May 1, 2025. [Abridged English version: *College education: Educational experience and new realities*.]

Conseil supérieur de l'éducation (2006). *Le dialogue entre la recherche et la pratique en éducation : une clé pour la réussite : rapport annuel sur l'état et les besoins de l'éducation 2004-2005*, Québec, Le Conseil, 109 p., Retrieved May 1, 2025.

Conseil supérieur de l'éducation (2000). *La formation du personnel enseignant du collégial : un projet collectif enraciné dans le milieu*, Sainte-Foy, Le Conseil, 102 p., Retrieved May 1, 2025.

Conseil supérieur de l'éducation (1998). *Recherche, création et formation à l'université : une articulation à promouvoir à tous les cycles*, Sainte-Foy, Le Conseil, 106 p., Retrieved May 1, 2025.

Conseil supérieur de l'éducation (1997). *Enseigner au collégial : une pratique professionnelle en renouvellement*, Sainte-Foy, Le Conseil, 106 p., Retrieved May 1, 2025.

Elken, Mari et Sabine Wollscheid (2016). *The Relationship Between Research and Education: Typologies and Indicators: A Literature Review*, Toyen (Oslo), Nordic Institute for Studies of Innovation, Research and Education, 65 p., Retrieved May 2, 2025.

Lavoie, Carole (2021). *La réussite au cégep : regards rétrospectifs et prospectifs*, Montréal, Fédération des cégeps, 151 p., Retrieved May 6, 2025.

