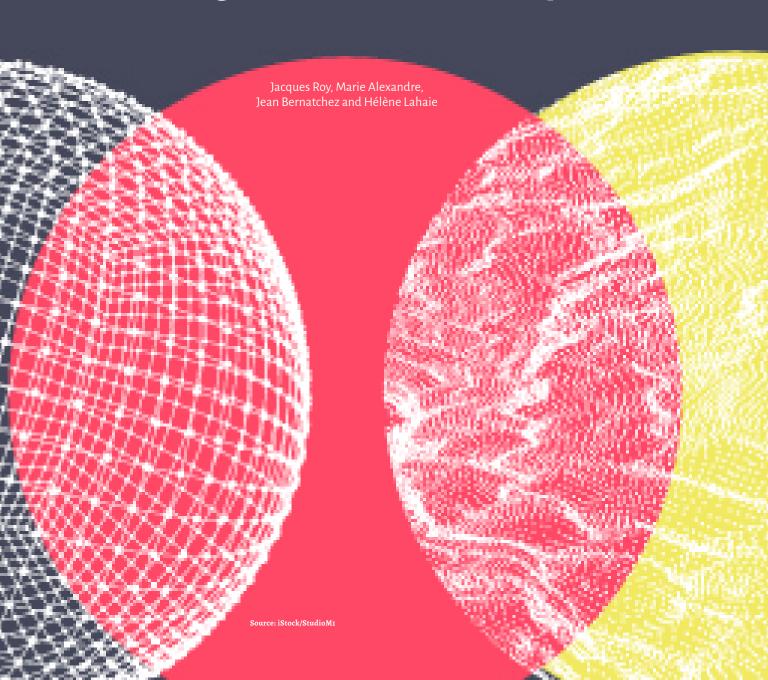
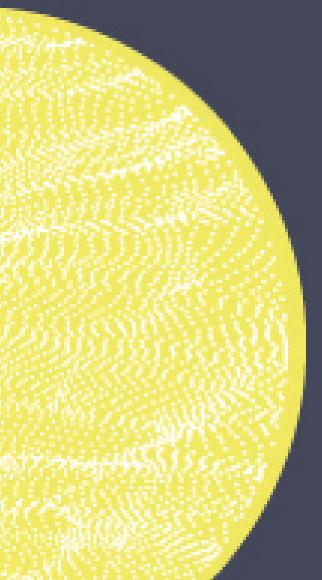
Distance Learning at College: A Generation Gap





Distance education (DE) is not new, but the upheavals of recent years have prompted the education community—and society at large—to rethink its view of this teaching method. A recent study highlights the differences between young and adult student populations in their experiences of DE. The findings are unequivocal: there is an undeniable generational divide when it comes to online teaching.



Context

The state of recent knowledge in the field of DE identifies the existing pitfalls inherent to this mode of education that can affect student motivation, engagement and academic success (Alexandre et al., 2022; Cégep Saint-Jean-sur-Richelieu, 2023; Papi et al., 2017). From this perspective, the pedagogical practices that would best meet these needs confirm the complexification of teaching practice with respect to two dimensions—learning and environment (Fournier Dubé, Alexandre & Bernatchez, 2022).

These challenges are being met by another: the transformation of the student population and its relationship with knowledge. According to the Conseil supérieur de l'éducation (2021), CEGEPs are home to a growing number of adults and people who

have interrupted or are returning to their studies. Despite this situation, there is almost no research on the adult student population at the college level (Richard, 2022).

Among other trends, the life course of individuals has changed to the point where the boundaries between youth and adulthood are increasingly porous (Hamel, 2019). We are witnessing a desynchronization of social time, where study, paid work and leisure intermingle (Roy, 2015, 2019). Finally, managing these transitions in an indeterminate time may have a negative impact on the mental health of certain student populations in the context of reconciling different spheres of activity (Beaudoin, Rousseau & Chartrey, 2022; Fédération étudiante collégiale du Québec, 2021; Gaudreault et al., 2018; Gosselin & Ducharme, 2017; Lavoie *et al.*, 2010).

Research methodology

The focus of this article is specifically on the differences observed between youth and adults through an exploratory study¹ on the DE experience in Winter 2021 at the Cégep de la Gaspésie et des Îles. The survey was conducted among students enrolled in four Diploma of College Studies (DCS) programs using digital learning environments: Paralegal Technology, Criminology Intervention and Special Care Counselling, as well as the pre-university program Arts, Letters and Communication. Of the 128 participants from these programs, 51 completed the survey, for a participation rate of 39.8%.

In designing the survey, six areas were selected based on their importance in the literature:

- Their personal characteristics (e.g. age, gender, geographic origin);
- 2. Their relationships with teachers, the school environment and DE learning modes (e.g., perception of the CEGEP, time allocated to schoolwork, student perseverance, relationships with teachers and students, appreciation of the work of educators and DE learning modes);
- 3. Social and family network (e.g., parental support, perceived impact of friends' network on studies);
- Personal well-being (e.g. mental health indicators such as stress, feelings of depression, selfsatisfaction and substance use);
- Student values (e.g. general values, values related to the importance of academic success);
- 6. Socioeconomic conditions (financial situation and paid work).

Relationships with teaching staff in a digital teaching context, as well as students' assessment of learning tools and modalities related to the digital environment, formed the main basis of the findings. These are mainly to be found in section 2 of the survey.

Due to the size of the sample, the results cannot be generalized to the CEGEP as a whole, nor can they be compared with regular teaching. A gender analysis of the students is also limited by their number: 5 male students and 46 female students. On the other hand, the age distribution of the sample allows for interesting comparisons along the youth/adult divide. In fact, in the sample of participants, 15 are between 17 and 19 years old (29.4%),

16 are between 20 and 24 years old (31.4%), 9 are between 25 and 30 years old (17.6%), and 11 are 31 years old and over (21.6%).

Main results

One of the aims of the exploratory study was to determine how the pedagogical practices implemented by college teaching staff in DE correspond to the profiles and needs expressed by students using digital learning environments. We will limit ourselves here to the results directly relevant to this objective, with a special focus on the comparison between youth and adults.

The research study was funded by the Fonds de recherche du Québec - Société et culture (FRQSC), and the results will be published in 2024. It consists of three components: a questionnaire survey, Living Lab-style interviews and a process of exchange with teachers on the results.

Older students paint a more positive picture of academic success

Before looking specifically at the DE components, let's consider some general results that, in a sense, set the table for a comparative analysis by student age. **Table 1** presents the results of a bivariate analysis of academic performance.

Table 1

Main factors positively associated with student academic performance²

Compared to others, the student with "good" academic results:

- has no academic difficulties in their current program;
- does not feel depressed;
- does not think about dropping out;
- is older.

These are the four main factors that affect academic performance.³ Age is the fourth most important factor. In fact, if we divide students into three age groups, we obtain the following grade point averages for each age group: 77% for those under 20; 82% for those 20 and over; 86% for those 30 and over. Thus, the differentiation of the school averages is progressive according to age. Later on, we'll examine some of the factors that explain the differences observed in this respect between youth and adults.

- The variables are listed in descending order. The p-value, which measures the degree of association, is less than 0.05, indicating it is statistically significant.
- Of course, the range of factors positively associated with academic performance is broader in the literature. Our study was limited to a small sample size (51), which meant that we could not be more comprehensive.

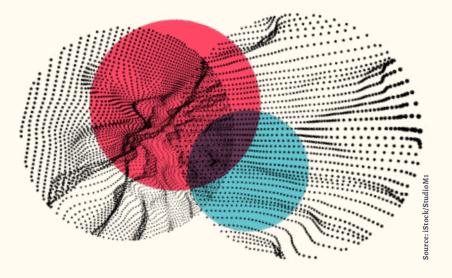


Table 2 presents the main characteristics that are closely associated with student age according to the results of the bivariate analysis.

Table 2

Main age-related characteristics of students⁴

${\bf Compared \ to \ others, the \ student \ with \ "good" \ academic \ results:}$

- receives less financial support for their studies from their parents;
- places less importance on making money quickly;
- has no academic difficulties in their current program;
- places less importance on pleasure;
- does not think of dropping out;
- places less importance on the consumption of material goods.

In the Discussion section, we will analyze the results of this table, which immediately paints a more favourable picture of academic success among older CEGEP students. It is notable that four of the six factors in this table are strongly associated with academic success. With regard to the parental support factor, it is simply influenced by generational conditions linked to adulthood. Let's now turn our attention to the results directly associated with DE.

Students clearly in favour of DE

Whatever the indicators used to assess DE learning modes, they all point to a certain level of satisfaction among students, with a more pronounced tendency among adults. In fact, the different perspectives converge toward a positive reception, especially with regard to the teachers and the use of the synchronous mode. Let's take a closer look.

Student satisfaction with teaching staff is clearly high. Almost all students rate their relationships with teachers as "satisfactory" (33%) to "very satisfactory" (65%), leaving a meagre 2% "dissatisfied." According to the literature, satisfaction with teaching staff is generally very high, but not as high as the proportions recorded in this study (Ducharme, 2012; Roy, 2015). This may be explained by the fact that our sample included a significant proportion of adult students, who are generally more satisfied with their teachers than their younger peers, as shown in **Table 3**.

⁴ The variables are listed in descending order. The p-value, which measures the degree of association, is less than 0.05, indicating it is statistically significant.

Places less importance on making money quickly; has no academic difficulties in their current program; does not think of dropping out; and places less importance on the consumption of material goods (Roy, 2015).

The comments received highlight the fact that teaching staff may be perceived as friendly and understanding, with good listening skills, and available to answer students' questions. According to several respondents, the fact of having small student cohorts would foster a closer relationship with the teaching staff. In addition, it was emphasized that teachers master their material and the platforms appropriate for interactive classes.

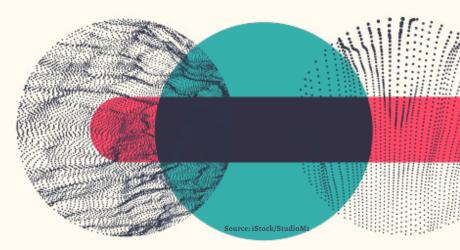


Table 3 Percentage distribution of students according to their level of agreement with statements about teachers and digital pedagogy

Statements ⁶ about teachers	Strongly agree (%)	Somewhat agree (%)	Somewhat disagree (%)	Strongly disagree (%)
They make effective use of the digital learning environment (e.g. Omnivox, Moodle, Teams).	74,5	23,5	0,0	2,0
They master the content to be taught.	88,2	9,8	2,0	0,0
They are present in the digital learning environment.	80,4	15,7	2,0	2,0
They are involved in our success.	82,4	15,7	0,0	2,0
They provide frequent feedback in the digital learning environment.	76,5	19,6	2,0	2,0
They maintain a meaningful relationship with the group.	74,5	23,5	0,0	2,0
They stimulate interaction between learners in the digital learning environment.	70,6	23,5	3,9	2,0
They support learners' interests.	74,5	23,5	0,0	2,0

⁶ These statements were presented in French in the original questionnaire and have been translated by Pédagogie collégiale.

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Overall, students seem to clearly appreciate their teachers and their pedagogical methods in DE. For example, nearly 8 out of 10 students said they "Strongly agree" with the various statements, with scores ranging from 70.6% to 88.2%. A clear divide between youth and adults is evident in the results, and sometimes strong. An illustration of this

generational divide can be found in Roy's (2015) study of 1,816 male and female CEGEP students, in which 18.9% responded "Strongly agree" to the statement "Teachers know how to interest us." In this study, the percentage rises to 74.5%, a fourfold increase. The overrepresentation of the adult population in our sample (7 out of 10 students are aged 20 and over)

compared to national survey by Roy (2015), in which three-quarters of CEGEP students were aged 17 to 20, essentially explains this difference.

Now let's take a look at students' perceptions of the effectiveness of the digital tools made available to them by teaching staff.

Percentage distribution of students according to the degree of effectiveness attributed to the digital tools used by teachers

Pedagogical tools	Very much (%)	Somewhat (%)	Little (%)	Not at all (%)	Don't knov (%)	
Course plan	9,8	43,1	29,4	13,7	3,9	
Course notes	72,5	25,5	2,0	0,0	0,0	
Books and articles	52,9	35,3	7,8	3,9	0,0	
Website	35,3	47,1	17,6	0,0	0,0	
E-mail	9,8	39,2	23,5	3,9	23,5	
Slide show	60,8	31,4	3,9	0,0	3,9	
Video	66,7	31,4	0,0	0,0	2,0	
Synchronous meetings (e.g. Zoom, Skype, Teams, videoconferencing)	72,5	17,6	3,9	0,0	5,9	
Homework (e.g. Omnivox, Moodle, Teams)	51,0	45,1	2,0	2,0	0,0	
Forum (e.g. Omnivox, Moodle, Teams)	19,6	39,2	15,7	13,7	11,8	
Progress tracking (e.g. Omnivox, Moodle, Teams)	31,4	27,5	19,6	2,0	19,5	
User groups ⁸ (e.g. Omnivox, Moodle, Teams)	15,7	39,2	13,7	3,9	27,5	
Others	15,7	9,8	5,9	0,0	68,6	

⁷ The two statements are similar: "Teachers know how to interest us" in Roy's study (2015) and "Teachers support learners' interests" in the present study.

 $^{^8}$ User groups are used to organize, form and manage teams in the virtual classroom, both on the learning platform and on the videoconferencing software.

Two tools stand out: course notes and synchronous meetings (almost three-quarters of students consider these tools to be "Very much" effective pedagogically). Two other tools are close behind the first two in terms of perceived effectiveness: videos (66.7% "Very much") and slide shows (60.8% "Very much"). Students consider that the use of these four digital tools facilitates their

learning. Furthermore, these results suggest a certain consistency in the digital learning environment set up by teachers, which is in line with the work of Ames and colleagues (2021) on teachers' selection of the right form of technology in relation to the task at hand. However, there is a discrepancy regarding the course plan, which, despite being used 100% of the time, only accounts for 59.2% of

learners' perceived effectiveness in their learning. This suggests that the course plan, often seen as the teacher's map of the "learning territory," is not perceived as being as useful by students.

In terms of teaching modes, **Table 5** illustrates the popularity of synchronous mode among students.

Table 5

Percentage distribution of students according to the degree of effectiveness attributed to the synchronous and asynchronous modes used by teachers

Teaching modes	Very much (%)	Somewhat (%)	Little (%)	Not at all (%)	Don't know (%)
Synchronous	84,3	11,8	3,9	0,0	0,0
Asynchronous	17,6	51,0	25,5	5,9	0,0

The proportion of students who find the synchronous mode to be "Very much" effective is five times higher than for the asynchronous mode, which—proportionally—eight times more students find "Not very" or "Not at all" effective compared to the synchronous mode. As one student put it: "I preferred the synchronous classes to the asynchronous ones, because we had to be present in front of the camera. We had no choice." Some shy learners say they find it easier to make contact in synchronous mode. In general, learners appreciate the group dynamics and mutual support that develop in synchronous mode: "It's motivating to meet in synchronous mode, to see your gang that you've been following since the beginning. You can't wait to see your teachers, whereas now you're watching a video, and you're not necessarily live," says one student.

Similarly, Anastasiades and colleagues (2010) have shown that learners feel comfortable with distance teaching staff and are quite positive about communication and collaboration between them in the virtual classroom. In addition, 44% of learners prefer a combination of both synchronous and asynchronous teaching methods. On the other hand, some would prefer all classes to be face-to-face, while a significant percentage would appreciate more distance learning. An important number would prefer all classes to be taught at a distance. That said, learners have a negative opinion about the possibility of replacing face-to-face teaching with distance learning, even though the use of videoconferencing facilitates their learning.

Bond (2020) suggests using a combination of synchronous and asynchronous technologies. Niemi and Kousa (2020) report that a lack of social interaction leads to dropout. According to our findings, students lament the overuse of the asynchronous mode, which hinders the creation of "real" connections and contributes to isolation. In addition, students report "feeling less engaged" while the course is "less entertaining."

Discussion: a generational viewpoint

"We feel it is essential to establish a genuine culture of differentiation in student success support that goes far beyond simple pedagogical differentiation" (Chouinard & Piché, 2017, p. 88).

This quotation⁹ introduces the discussion. Beyond the pedagogical aspects, much of the comparison between the younger and adult student populations has more to do with distinct individual and family characteristics. There is also a significant difference between the two groups of students concerning the use of synchronous and asynchronous modes of distance learning, as we will see later.

According to the literature, adult students are individuals with different experiences, motivations, perceptions of time and self-concepts than their younger peers (CSE, 2018, p. 4). In the same vein, other studies insist that one of the main components that distinguishes the adult student population from those who follow a so-called "traditional" or "linear" path is a higher, intrinsic motivation toward their educational project (Langrehr et al., 2015; Lapointe Therrien & Richard, 2021; Javed et al., 2022). Among adult students, career choice is also more defined (Lin, 2016; Richard, 2022). The major descriptive study of student enrolment in the college network by Gaudrault and colleagues (2018) concludes that there are significant differences between the profiles of students aged 20 and over and those aged 17 and under. The authors of this study also consider that the majority of adult students know exactly what they want to do and indicate that they need less help to confirm their career choice or to motivate themselves in the face of studies (Gaudrault *et al.*, 2018, p. 105).

In the present study, older students were found to have higher academic achievement, sometimes with significant differences. In line with this, the results of **Table 2**, which looks at the main characteristics associated with students' age, revealed the presence of factors positively associated with academic success, such as a greater willingness to persevere in their studies than in younger students, and a value system more compatible with the pursuit of studies. 10 Let's hypothesize that their greater motivation and clearer aspirations regarding their studies may also contribute to higher academic performance.

Translated from French by Pédagogie collégiale: «Il nous apparaît essentiel d'instaurer une véritable culture de différenciation dans l'aide à la réussite qui va bien au-delà de la simple différenciation pédagogique.»

¹⁰ In particular, they may place less importance on making money quickly, having fun and consuming material goods, three values that are negatively associated with academic success (Roy, 2015).

But what about DE in terms of differentiation between youth and adults? According to our results, satisfaction with teachers and the effectiveness of learning methods is relatively high among both groups of students. However, an examination of the comments collected shows that opinions are more divided among younger students than among adults. In particular, two points of view may distinguish the two groups of students with regard to the asynchronous mode in DE. Younger students point out that this mode does not meet their need for socialization, for example, to share and help each other in class. According to the Conseil supérieur de l'éducation, these concerns are quite legitimate:

The preference for face-to-face learning is justified by the difficulties experienced in a distance education mode, by the need for socialization, as well as by the perceived positive effect on success and perseverance (2021, p. 81).

According to our results, adults, who are more mature and more motivated by their studies, may perceive DE as a learning mode more suited to their social situation (reconciling work, studies and family) and to their desire for personal autonomy, rather than seeking, as one student put it, to contribute "to a community spirit."

A hypothesis: could it be that the socialization sought transcends at least part of the appreciation of DE between youth and adults? In sociological terms, then, the quest for social bonding, as understood by Akoun (1999), would be different from a generational perspective, and could condition a view from different perspectives.

Distance learning requires a great deal of self-discipline and self-management. However, in contrast to face-to-face education, this pedagogical framework allows for much more freedom, which leads to a number of pitfalls, especially for younger students. This is consistent with the findings of recent work by Niemi and Kousa (2020) during the pandemic, and Manderscheid and Jeunesse (2007).

Conclusion

The issue of students' age proved to be central to this exploratory study. It manifested itself through different dimensions related to different personal characteristics and DE learning sometimes experienced in different ways, testifying to the existence of needs and realities specific to different life cycles. It also highlights the pitfall of obscuring generational differences by conflating, in global portraits, the vast majority of students under 20 years of age (over 90% of the college student population) with a minority of adult students whose reality would thus be lost in the overall picture, flying under the radar.

This new angle of analysis paves the way for future work that distinguishes between the periods of adolescence and adulthood in the context of DE. This analytical perspective will, we believe, encourage collective reflection in order to better intervene according to the specific realities of these two groups of students. This is all the more important as the pedagogical enrichment possibilities offered by digital technology and DE can represent a strategic advantage for the college network (Fédération des cégeps, 2021).



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