The Value Proposition

for Post-Secondary Education

Prepared by Dr. Elle Ting, Research & Projects Officer, BCCAT
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TABLE OF CONTENTS

INTRODUCTION

The value of higher education is frequently touted as a guaranteed-gains proposition to both the learners using the system and the public at large. Certainly, the **return on investment (ROI)** metrics for **tertiary education** show a strong, consistent association between higher rates of educational attainment and demonstrable benefits at both the micro (individual) and macro (social) levels. For post-secondary graduates, virtually any amount and type of formal schooling completed beyond high school graduation produces an increase in lifetime earnings (Battaglia & Xu, 2024; Fry, Braga & Parker, 2024; Government of British Columbia, 2024), and these graduates go on to deliver important human capital returns to their communities, not only through their skilled labour contributions but also through the positive **externalities** of increased tax revenue and civic engagement, as well as reduced dependence on public assistance programs (Whistle, 2019; Ma et al, 2025; Pullman et al, 2025).

Given the many advantages attributable to higher educational attainment, post-secondary learning should be nothing short of a winning value proposition for learners and society alike. However, in North America, learner and public confidence in post-secondary education as a profitable investment has diminished over the past several decades (Fischman & Gardner, 2022; Parkin, 2023; Ma et al., 2025; Nyugen, Fishman & Cheche, 2025; Gallup & Lumina, 2025a), with this skepticism persisting despite conspicuous efforts to make higher education accessible and attainable for more learners.

This report examines the incongruence between post-secondary ROI data and learner and public perceptions of the value of post-secondary. Conventional ROI data are logical but very limited, and in the ongoing public discourse about whether post-secondary education is "worth it" to average learners and their families, the narrow entrepreneurial interests of standard ROI methodology are frequently mismatched with the "squishiness" of human decision-making and the complex factors that nudge someone to opt into or out of higher learning. Raising post-secondary education's perceived value requires a gap analysis of standard ROI measures, a reframing of costs and benefits to include the **missing markets** of learners lost through noncompletion, and a reconsideration of the myriad nonfinancial dimensions that intersect to define value in an emergent **"vibe economy."**

WHAT IS ROI?

In its simplest form, *return on investment*, or ROI, is a business formula for estimating the actual or anticipated profitability of an investment. To calculate ROI, the net gains of an investment are divided by the total costs; if the investment produces a positive return (in most scenarios, a 10% return is considered "good"), then its ROI is considered favourable.

ROI's straightforward approach to cost-benefit analysis makes it an elegant and versatile framework for modelling a project's feasibility or comparative advantage. However, as its very name makes clear, ROI can provide only a basic estimate of returns without contextualizing those profits or losses. As such, the use of ROI, especially for complex initiatives and systems, is constrained by the following limitations[1]:

- *ROI does not account for time:* factors like inflation and **discounting** are absent, which means that the profit/loss amount is reported the same regardless of how long an outcome took to be realized; as such, the utility of ROI is confined to a short time horizon[2].
- *ROI does not account for risk,* so high-risk and low-risk investments are presented as equal based simply on upfront profit/loss numbers.
- *ROI does not capture qualitative/nonfinancial measurements:* intangible or "soft" evidence lies outside the scope of standard ROI; when nonfinancial variables are included, they are necessarily measured by proxy and converted to "business impact" (monetary) data[3].
- *ROI is subject to a high degree of variability and, therefore, bias:* selective curation and oversimplification of data can mute important insights, resulting in grossly reductive conclusions.

Per these provisos, ROI can furnish a reasonable "elevator pitch" for the basic financial *opportunities* that higher education facilitates for learners, for institutions, and in policymaking. But, while ROI methodology is usefully mobilized in recruitment and accountability metrics, its snapshot of success is detached from the overall *value* of post-secondary participation, a longer-term commitment that people experience and interpret through the filters of positionality, risk management, and emotional benchmarks. To accept ROI alone as a true and complete measure of value is to make the mistake of "know[ing] the price of everything and the value of nothing[4]."

Value is created through negotiation, and developing a holistic value proposition for higher education involves challenging a couple of leading assumptions that are baked into standard ROI as a measurement: (1) that ROI data are neutral and complete, and (2) that people are perfectly rational (at least as economic actors). Addressing these limitations and the liabilities that ROI manifests in a "buyer's marketplace" enables a renegotiation of post-secondary's value that is informed by hearts and minds, in addition to balance sheets.

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[1] Elliot, n.d.; Seemer, n.d.; Brousselle, Benmarhnia & Benhadj, 2016; Chen & Kane, 2026.

[2] Limited to a specified time horizon (usually one year), *rate on return (RoR)* describes the change in an investment's value over time and is considered a better evaluation instrument for longer-term financial planning. ROI can also be annualized to produce year-over-year calculations. However, both formulae are more complicated than ROI and, thus, is less "sexy" for policy and marketing purposes.

[3] The conversion of qualitative data to monetary, "business impact" formatting is recommended as an ROI best practice (Phillips, 2003).

[4] From the inimitable Oscar Wilde, who was not referring to ROI in this quotation, but whose words still offer sound guidance on valuation more generally.

SATISFACTION *NOT* GUARANTEED:

PERCEPTIONS OF HIGHER EDUCATION'S VALUE

Perhaps unsurprisingly, public and learner impressions regarding higher education experienced a downturn during and immediately after the "major world trauma" of the COVID-19 pandemic[5], with unprecedented levels of dissatisfaction over the costs of post-secondary education; higher education's supposed ideological bias[6]; the belief that academic studies do not actually lead to good pay; "or perhaps a thoughtful, or casual, or even thoughtless blend of these reasons" (Fischman & Gardner, 2022, p. 21-22). US public confidence in higher education reached a recent nadir in the last few years, with only 36% of the general population expressing confidence in post-secondary institutions overall (Brenan, 2023) and 40% of American adults believing that a degree was "not at all important" to getting a good job (Fry, Braga & Parker, 2024); almost a full half (49%) of respondents said that completing a degree is now less important than it was twenty years ago, and less than a quarter (22%) believe that post-secondary education is worth getting a loan for (Fry, Braga & Parker, 2024). Canadian opinion polling over a similar time period uncovered a similarly low perceived value of higher learning, with fewer than half (48%) of those responding to a large-scale poll on the value of a diploma or degree describing these as worth their investment and another 39% being uncertain of their value (Ipsos, 2025); among young Canadians surveyed (those aged 18-29), 42% agree with the statement "going to college or university is more or less a waste of time," even while 69% of the same respondents conceded that a diploma or degree was necessary to access a good job (Parkin, 2023). Although disaggregation of these data noted some variations attributed to demographic identifiers (age, gender, race, and political affiliation[7]) and geographic location, these differences were in magnitude but not in kind: public perceptions on the value of higher education remain consistently lukewarm, a sentiment that works against a concurrent supposition that post-secondary education is necessary for economic and social mobility.

Among the learners themselves, cost-benefit experiences and perceptions are checkered, but taken as a whole, these ultimately fall into a recognizable and unfortunate pattern of inequity that is based on student characteristics and outcomes, with learners who attend selective (a.k.a., more "prestigious") institutions and/or programming reporting much higher rates of satisfaction and completion than those in less selective institutions and areas of study (Colyar, Chatoor & Deakin, 2023; Fischman & Gardner, 2022). An examination of Canadian post-secondary completion rates and labour market outcomes by credential type identified a strong correlation between the length of a credential and positive outcomes: those graduating with longer credentials (degrees) are happier and better-paid than those from shorter programs, and microcredentials appear most likely to yield weaker student outcomes (Colyar, Chatoor & Deakin, 2023). The relationship between the selectivity and extended duration of post-secondary programming and learner-reported value reflects the level of commitment expected from students but also speaks volumes about the *implied privilege*

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[5] A large-scale US study that compared student's "confidence in the value and importance of college" versus post-secondary "data realities" concluded that postpandemic post-secondary learners held much less favorable views regarding the necessity (-28%) and benefit (-17%) of college-going postpandemic, and that cost, debt, respondent composition, and uneven market outcomes were not drivers of these perceptions: instead, negative views were attributable solely to "pandemic timing" (2021), with a slight rebound measured in 2023 but no appreciable effect on enrolment at any point during the study (Ma, O'Grady, Howell & Jacklin, 2025).

[6] Post-secondary institutions' ostensibly Left-leaning ("woke") culture is a more contentious issue in the US than in Canada, but there have been calls on both sides of the border, as well as other jurisdictions, to make educational discourse more "neutral."

[7] There is a wealth of research in the US that investigates differences in how Republicans and Democrats feel toward various social institutions.

that facilitates the requisite investment of time, money, and energy that staying in school demands; on the other hand, shorter programs, which are "attractive as options for ensuring that graduates can move more quickly into the labour market or reskill after displacements" (Colyar, Chatoor & Deakin, 2023, p. 14), serve a greater number of "nontraditional"[8] students, who face multiple, intersecting barriers that place them at greater risk of dropping out.

> The relationship between the selectivity and extended duration of post-secondary programming and learner-reported value reflects the level of commitment expected from students but also speaks volumes about the *implied privilege* that facilitates the requisite investment of time, money, and energy that staying in school demands...

Graduate earnings premia data are similarly distorted by "upper tail" earners from the most selective and/or high-opportunity programs, who are disproportionately wealthier, male, and White (Bartik & Hershbein, 2016) and whose experiences do not necessarily represent what is "normal" in any given post-secondary student or graduate sample. In British Columbia, for instance, the lifetime earnings premium for a bachelor's degree is listed as $930,911 CAD; however, the highest premia are concentrated within STEM programs, with engineering ($2,094,467 CAD), health ($1,459,711 CAD) and computer science ($1,451,856 CAD) producing the highest premia, whereas graduates from the fine arts ($172,300 CAD) and humanities ($425,856 CAD) earned premia well below the average bachelor's degree graduate (Government of BC, 2024)[9]. These disparities simultaneously reflect and perpetuate systemic inequities in both the post-secondary system, as well as the larger labour market, with "traditional" learners[10] experiencing a relative advantage in the status quo. While learners tend to express similar frustrations with higher learning—affordability and stress being of greatest concern—their mileage varies greatly in terms of how impactful these barriers are to their experiences in the post-secondary system or to the perceived value of their education.

To return to an earlier point about the limitations of ROI in measuring the complexities of value—and in the case of higher education, *time, risk, subjectivity,* and *data bias* all have a role to play in appraisal—there is much exploration beyond the economic scorekeeping of post-secondary learning that needs to be done to explain the gap between optimistic ROI results and the lack of confidence among learners and their communities.

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[8] Many educational researchers now favour the descriptor "New Majority" over "nontraditional" to reflect the current reality that most post-secondary learners can be categorized as such (Genio, 2025a).

[9] STEM graduates (particularly from engineering and computer science) consistently earn the highest lifetime earnings premia, and those from visual and performing arts and humanities earn the lowest premia. Interestingly, gender is strongly correlated with earnings: the lowest earners in STEM are in the most female-dominated area of study (biology/life sciences), and the highest BHASE earners are in the most male-dominated field (business). (StatCan, 2017). Engineering and computer science, both as post-secondary fields of study and as work disciplines, are stubbornly male-dominated (Chan, Handler & Frenette, 2021; Patrick, Reigle-Crumb & Borrego, 2021); in fact, computer science has become *increasingly* male-dominated since the 1990s (Harmon & Walden, 2021).

[10] "Traditional" students—the students for whom the architecture of the modern post-secondary system was originally designed—are predominantly young (18-24 years of age) and well-resourced, with the economic, social, and cultural capital to navigate the systems of higher education more easily than their "post-traditional" peers.

HIGHER ED'S ROI

In the vocabulary of post-secondary performance metrics, the ROI of individual learner benefit continues to be most commonly expressed as a lifetime earnings premium, or total additional income earned above the estimated career earnings of someone with high school completion alone...

In the context of North American higher education, the adoption of ROI as a performance indicator coincides with the sector's shift from a niche private good (generally reserved for preparing the clergy and upper-class professionals) to a key economic engine post-WWII (Carnegie, 1971; Labaree, 2016). At the onset of the postwar growth economy[11], post-secondary institutions emerged as key economic drivers, first supporting the technological research and development that would define the digital revolution, and then the provision of the human capital (through the education of veterans and then their children, the Baby Boomers) needed to run the modernized infrastructure[12]; three decades of cooperation among higher education, government policy, and the economy—and a shared ethos of **scientific management**—solidified ROI as the "coin of the realm" (pun intended) and its methodological legitimacy has only been boosted further by its dissemination as an accountability metric in the fiscal conservatism defining the decades since.

In the vocabulary of post-secondary performance metrics, the ROI of individual learner benefit continues to be most commonly expressed as a **lifetime earnings premium**, or total additional income earned above the estimated career earnings of someone with high school completion alone. While much variation exists between different program areas and credentials[13], virtually any amount or type of tertiary education produces an increase in lifetime income. In the United States, the average lifetime earnings premium among four-year college graduates is approximately one million dollars (USD)—working out to an extra $19,034 annually (Whistle, 2019), or close to an additional $400 (USD) every week (Hiler & Erickson, 2016), with the premium steadily increasing with a worker's age (OECD, 2025c). Canadian data show a similar correlation between post-secondary education and appreciable increases in personal income, with degree graduates' earnings premia generally in the range of $1-2 million (CAD) and certificate and diploma graduates' premia falling between $226K-403K (CAD) (Government of British Columbia, 2024); while wage distribution is narrower in Canada than in the US, Canadian earners with tertiary attainment make, on average, 39% more than those without (OECD, 2025b).

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[11] The US and Canada were victors coming out of WWII, a conflict whose theatres were almost all outside of continental North America: consequently, both countries enjoyed extraordinary postwar prosperity because their economies were driven by growth and technological dominance (in the Cold War) rather than recovery.

[12] Burgeoning demand for educational services among WWII veterans and their families pushed federal education expenditures skyward in both Canada and the US, with government subsidies growing more than sixfold in these countries between 1950 and 1965. By 1970, US federal education expenditures had largely levelled off after a peak in 1967 (Labaree, 2016), but Canadian federal spending on post-secondary education, via a relatively generous provincial transfer payment system at the time, grew to approximately *twelve times* what it was in 1955 before plateauing around 1972 (Usher, 2023).

[13] STEM fields and certain professional qualifications (Engineering, Medicine) consistently have the highest-earning graduates, while Fine Arts programs (Visual Arts, Performing Arts) generally yield the lowest earnings premia (Gunderson & Oreopolous, 2010; Government of BC, 2024).

Likewise, the collective returns of higher educational attainment are frequently monetized to simplify the governance and accountability for movement of taxpayer dollars in and out of the post-secondary sector. Post-secondary education directly supports economic resilience through the production of human capital: graduates, as highly qualified workers, contribute their skilled labour and innovative ideas to the workforce and pay higher income taxes that, in turn, are cycled back into supporting social programs. Furthermore, higher incomes create other, subtractive benefits through reduced dependency on public assistance: people with college experience are much less likely to be unemployed or underemployed, to smoke (Whistle, 2019; Ma & Pender, 2023), or to be incarcerated[14] (Muller, 2025), and college graduates are also likelier to vote, volunteer, and practice self-care[15] (Ma & Pender, 2023; OASH, 2024). On several fronts, higher educational attainment is a government money-saver, and improvements to post-secondary access have been a consistent priority in modern social and economic policymaking.

Still, the problem remains that ROI's corporate storytelling can only report on monetary returns, and these returns are attached solely to the outcomes of those who *complete* their post-secondary programs of work. The exclusion of non-completers from these data creates a survivorship bias that skews North American post-secondary ROI calculations to be misleadingly optimistic, and by a *very* wide margin of error. In reality, at the average US public four-year institution, a first-time, full-time student has less than a 50/50 chance (48%) of completing a degree in six years (Hiler & Erickson, 2016; Pelman & Watson, 2018; Whistle, 2019), and there are currently 43.1 million noncompleters nationwide (NSCRC, 2025). Canadian public post-secondary completion rates are higher—75% in universities and 60% in colleges (Colyar, Chatoor & Deakin, 2023; Coté & Dobbs, 2025)—but still throw into stark relief the number of learners who do not graduate: of the approximately 2.3 million students studying at Canadian public post-secondary institutions, an average of 26% will not complete a credential within six years (Statistics Canada, 2025), and in British Columbia, only 65% of bachelor's degree students complete within six years, a rate that has not improved significantly in almost two decades (Heslop, 2024). Furthermore, as the available data are generally limited to public institutions, these numbers underreport the actual noncompletion counts[16]. While credit transfer can help raise completion rates by about 10-11% (Finnie & Qiu, 2009; Whistle, 2019), *in absolute numbers, there are tens of millions of noncompleters in North America whose profiles and outcomes are silenced in post-secondary's guaranteed-gains ROI data narrative.*

The disappearance of noncompleters from the ROI of post-secondary education is consequential in terms of learner and public perception because these learners' experiences and outcomes are as sobering as they are common. There is some evidence of "prorated" benefits for those who leave their post-secondary studies closer to completing a credential (Colyar, J., Chatoor, K. & Deakin, J., 2023; OECD, 2025a; Pullman et al., 2025), but generally, **dropouts'** socioeconomic profiles play out similarly to those of people who did not pursue any additional education past high school. Incomplete attempts at higher education represent a significant loss of investment for governments and institutions through defaulted loans, lost labour potential, and reduced tax revenue[17] (Whistle, 2019; Pullman et al, 2025), but noncompletion is

[14] Educational attainment is now considered a more powerful predictor of incarceration risk in the US than race or socioeconomic status: those without any college experience are eleven to thirteen times more likely than college graduates to end up in jail (Muller, 2025).

[15] Gary Becker, the economist who coined the term "human capital," defines a person's *productivity* as "accumulation of knowledge and the maintenance of health" and acknowledged as early as 1964 that "emotional health increasingly is considered an important determinant of earnings in all parts of the world" (Becker, 1993, pp. 251 and 54, respectively).

[16] Historically, private/for-profit institutions have higher noncompletion rates than their public counterparts.

[17] A recent Canadian (Ontario) study priced out the net loss per noncompleter at $600,000 CAD each and the net gain of every noncompleter-to-completer conversion at $1,000,000 CAD (Pullman et al, 2025).

perhaps most immediately damaging to learners and their families: after factoring in the accrual of student debt during their studies and the opportunity cost of any employment given up while in school, in addition to the eventual loss in potential earnings premia, post-secondary dropouts often face worse financial outcomes than those with no post-secondary experience. Longitudinal research on Canadian post-secondary outcomes found that noncompleters are at a much higher risk of unemployment and underemployment, and those who are employed are making, on average, less than half of a graduate's median income in the first year of leaving post-secondary (Colyar, J., Chatoor, K. & Deakin, J., 2023). In the US, where the relative returns of education are among the highest in the world and "few viable alternatives to tertiary education exist as a pathway to strong earnings" (OECD, 2025c, p. 1), the relative loss of income is more pronounced: the average noncompleter only starts to see a meaningful increase in income at age 36, and almost four of every ten noncompleters (38%) will never see an earnings premium, despite having some post-secondary experience (Ma & Pender, 2023).

The omissive treatment of noncompleter data in the cost-benefit calculus of tertiary education is not intentional, of course, but neither is it wholly accidental, and a possible explanation for its ubiquity in higher education's ROI comes down, again, to a purely market-driven valuation of the system and its tight focus on monetary costs and returns. Besides the practical impediments to following up with and supporting **stopouts** and dropouts after they decide to leave an institution, there is the prevailing business assumption among post-secondary providers that re-engagement with the "leavers" is an expensive, underproductive endeavour: "From a university's perspective, re-enrolling students who have dropped out are often seen as generating lower returns on investment than first-time enrollment and retention efforts" (Price qtd. in Horn, 2018), especially given that almost two-thirds (66%) of re-enrolled students will stop out again (New, 2014). Furthermore, while attrition is an expensive problem across the board, it is especially problematic for public institutions[18] because tuition and government funding are insufficient to offset operating costs (Pullman, A. et al, 2025; Signal 49 Research Canada, 2025), and as a result every [domestic] student who leaves without a credential represents a monetary penalty for the institution[19]. A vicious risk-avoidance cycle results from these pressures, with institutions perversely incentivized to maximize the recruitment of traditional, "higher-ROI" students at the expense of resources for retaining and re-engaging noncompleters (and other "nontraditional" learners[20]), a disproportionate number of whom are historically underserved. Ultimately, institutional and systemic inertia reinforces the barriers that cause many learners to leave their post-secondary studies, resulting in more noncompleters.

Such high rates of noncompletion-driven **churn** in the post-secondary marketplace and the uneven distribution of outcomes demands a reconsideration of the overall authenticity of higher education's ROI data and the promises that it upholds. When only half a participant pool is "winning" in higher education, then, to the remainder, the risks of post-secondary participation become obvious while the benefits remain obscure. Recovering the value lost in this perspective gap requires shifting to the end users' points of view and experiences in higher learning.

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[18] To drill down further into comparative costs, noncompletion is particularly expensive at universities, which have lower dropout rates but much higher operating costs than colleges and other institutions. STEM programming, which is more expensive to deliver than other programming, such as humanities, also represents a greater attrition loss.

[19] The natural consequence of this disparity is that "institutions must rely heavily on other revenue sources, including government transfers or international student tuition fees, to close the gap" (Signal 49 Research Canada, 2025).

[20] Many educational researchers now favour the descriptors "post-traditional" or "New Majority" over "nontraditional" to reflect the current reality that most post-secondary learners can be categorized as such (Genio, 2025a).

POST-SECONDARY'S VALUE IN DOLLARS AND *SENSE*

Becker (1993), in what appears to be the earliest attempt to price out higher education as a producer of human capital, explains an assumption that undergirds most economic modelling of consumer choice:

> A major assumption [in ROI] is that actual accumulation paths are always the same as optimal paths. Sufficient conditions for this assumption are that all persons are rational and that neither uncertainty nor ignorance prevents them from achieving their aims. Of course, these are strong conditions, and a fuller model would make room for irrationality, uncertainty, discrepancies between actual and 'desired' capital… (p. 119)

ROI can indeed outline the profit margin for a post-secondary credential, but monetizing the goals of learning also defaults to a traditional (and arguably obsolete) assumption in economics that people are unflinchingly "optimizing" in assessing potential risks and benefits and maximizing net financial gain (Thaler, 2015; Natrella, 2025): in this *homo economicus*[21] simulation of consumer choice, the impact of nonfinancial, psychological, and emotional factors is generally dismissed as *irrational* behaviour and, therefore, irrelevant to the rules of conventional ROI.

Although the mere acknowledgement of "irrational" motivators was described as radical in Becker's time[22], there has been in the intervening years a growing recognition among economists of the interplay between consumers' emotions, perceptions, and behaviour. **Behavioural economics**, a younger branch of economics[23] that accepts nonfinancial factors in consumer choices and actions, broadens economists' conceptual vocabulary to describe the ways in which a good's perceived values can be inflected by *feelings* about uncertainty (financial and otherwise), self-identity, belonging, and power dynamics, often more than money. People's emotional motivators vary depending on the scenario, but in the context of higher education, **delay discounting, mental models,** and learner stress and loneliness represent significant emotional motivators in the educational attainment journey.

Delay Discounting

As it happens, timing plays a substantial role in how something is subjectively valued, with people generally showing a strong preference for nearer payoff, with the desire to see immediate benefits usually so powerful that most would choose to accept a smaller reward right away (a **smaller sooner reward**, or SSR) over a much larger award at a later time: this tendency toward immediate reward is referred to as delay discounting, and "[a]s the delay to the receipt of the reward increases, the subjective value of the reward decreases" (Reed, D., Niileksela, C. & Kaplan, B., 2013). The value of post-secondary education is put at a distinct disadvantage in terms of delay discounting, since its net benefits are primarily held in its **illiquidity premium** (Becker, 1993), which by definition makes it a higher-risk investment type because students are expected to commit to investing their time, money, and energy now, with limited information, in

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[21] "Economic Man [Human]," a model of human decision-making that depicts people as perfectly rational agents "whose relentless pursuit of personal gain is said to produce efficient markets and desirable societal outcomes" (Natrella, 2025).

[22] Becker was both an economist and a sociologist, and his investigations of social issues (education, crime, marriage, to name but a few topics) through an economic lens was revolutionary at the time he was writing (1960s to 1990s).

[23] Behavioural economics was conceived in the 1970s but only became fashionable around the mid-2010s.

exchange for a reward in the form of a lifetime earnings premium that will only be fully realized over several decades. As the old adage states, "while the grass grows, the horse starves": learners often find that the very real affordability pressures from student debt and a volatile job market make the promise of a million dollars over a forty-year career appear hypothetical by comparison, especially when betting upfront costs against a backdrop of a 50/50 completion scenario. Against these odds, many students may decide to reduce their personal risk exposure by dropping out (with the most common dropout point being the end of first year) or avoiding post-secondary altogether.

Mental Modelling

The different expectations that shape individual choices about post-secondary attendance and programs of work further challenge the idealized choice psychology on which the ROI model is contingent. An examination of the motivations and viewpoints of different postsecondary communities—[24], off-campus adults (trustees and parents of post-secondary students), and on-campus adults (post-secondary faculty, staff, and administrators)—identified four **mental models**, or positional archetypes that summarized users' motivations for and engagement with higher learning:

- *inertial*, those without any plan, vision, or purpose for post-secondary and who simply default to tertiary education as "the thing that one does after high school";
- *transactional*, those who view post-secondary learning as a token to trade for a desired job;
- *exploratory*, those who see higher learning as an opportunity to try new things and meet new people; and
- *transformational*, those who aim for personal growth through higher education (Fischman & Gardner, 2022).

Misalignment between mental models can result in very different definitions of value, and these conflicting views often result in missed opportunities for institutions and their communities: for instance, while many students are indeed approaching post-secondary education as a directly transactional venture (45%), the majority engage with higher learning with either an exploratory (36%) or transformational (16%) lens and expect more from institutions than just a basic, economical post-secondary experience. Impressions of value also vary widely between students, off-campus adults, and on-campus adults in terms of which programming is most useful (students and on-campus adults generally want more versatile/transferrable skills like budgeting, while off-campus adults want more specific, job-focused content) and what higher learning ideally "should be": notably, 78% of on-campus adults—in this context, all of whom work in higher education—regarded post-secondary as a *transformational* experience for learners, while far fewer off-campus adults and students shared the same view (26% and 16%, respectively) (Fischman & Gardner, 2022).

Learner Stress and Loneliness

As learners navigate the potentially life-changing decision to attend or avoid higher education, the impact of mental health challenges on their choices and what happens thereafter cannot be understated. While the number of students receiving mental health diagnoses and supports was steadily rising in the fifteen years preceding the COVID-19 pandem-

[24] The students in this US-based study (Fischman & Gardner, 2022) were limited to approximately 1500 domestic general arts and science undergraduates across ten [unidentified] institutions selected to serve as a representative sample of the post-secondary sector.
[25] Much of this increase can be attributed to destigmatization of mental health problems and improved supports but also to the diversification of post-secondary students in general to include learners who might previously have been excluded due to their condition(s) or opted out.

ic[25], with conservative estimates worldwide placing the rate of mental health issues among the post-secondary population at about 20% (Lattie & Eisenberg, 2018; Auerbach et al., 2018; Wiens et al., 2020), reported mental distress has increased and worsened since the pandemic and is consistently identified by students as the primary reason for stopping out (Gallup & Lumina, 2025b). Over one-third (35%) of Canadian post-secondary students describe their mental distress as severe (Derkach, Wu & Faulkner, 2025), and an Ontario study found that four of every ten post-secondary students have a formal mental health diagnosis (Moghimi et al., 2023); comparable US estimates on mental health diagnoses among post-secondary students are above 60% (Zimmerman, Bledsoe & Papa, 2021; Lipson et al., 2022).

Declining mental health among post-secondary learners post-pandemic has, not coincidentally, occurred in tandem with reported increases in self-reported feelings of alienation and loneliness among youth; loneliness was itself declared a pandemic in a US Surgeon General advisory report, with a mortality impact equivalent to smoking fifteen cigarettes a day[26] and residual anxiety and depression persisting up to nine years after a social isolation event (Murthy et al., 2023), and youth now make up the loneliest segment of Canadian society, with a quarter of all young people aged 15-24 always or often feeling lonely, a rate of alienation that far surpasses that of any other age group (StatCan, 2021).

RECOMMENDATIONS FOR RENEGOTIATING THE VALUE OF HIGHER EDUCATION

Surfacing the unrealized value of higher education is contingent on accounting for the temporal, risk-related, and qualitative factors that are situated outside the scope of a standard ROI framework:

- *Improve institutional and system transparency around noncompletion data:*

  In some learner scenarios, noncompletion is currently the most likely outcome, and the risk of noncompletion disproportionately affects historically multi-barriered students. Fulsome, contextualized measurement of stop-out and dropout outcomes and motivators is the first step to creating better supports for affected learners, and future research in this area would inform strategies to remove barriers to completion.

- *Highlight the more accessible, near-future benefits of post-secondary education, and orient programming and processes towards the earlier attainment of benefits:*

  Communicating monetary gains in shorter time ranges—for example, the improvement in annual earnings instead of lifetime earnings, or, even more to the point, weekly increases in pay—aligns better with household budgets and feels more concrete than a lump sum promised in thirty years. As much as possible, longer programs of work, such as baccalaureate degrees, should be punctuated with "off-ramp" or laddered credentialing options (e.g., certificate, diploma, associate degrees), which can give students recognition for incremental learning completed, even if the final credential is not attained.

[26] In this advisory report, the measurement of mortality impact uses cigarette smoking as shorthand for the elevated physical health risks associated with social isolation, such as cardiovascular disease, diabetes, and self-harming behaviours (Murthy et al., 2023).

- *Leverage transfer to curb noncompletion:*

  The overwhelming majority of noncompleting students—over 80%, conservatively— wish to return and finish the credentials that they started (Pelman & Watson, 2018[27]; Pullman et al, 2025), and transfer pathways give learners more options to end interruptions to their studies and find their way back into school after a stop-out period. Pursuant to the previous recommendation, **reverse transfer** agreements between institutions can help students receive more flexible recognition for completed academic work (McQuarrie, 2022).

- *Provide a sense of connection and community on campuses between learners and with institutional supports to protect against stress and loneliness:*

  A feeling of belonging bolsters academic persistence and performance and is, therefore, a protective factor against dropping out (Brady & Gopalan, 2026). Facilitating organic peer-to-peer connections in class and out of class and fostering a sense of campus community and identity through direct institution-student communications (Carnegie, 2024) can signal to students that they belong in post-secondary and build their trust in their institutions.

CONCLUSION

ROI offers an uncomplicated explanation of the financial gains made available by post-secondary education and can help learners, their families, and the wider community to assess their investment in and valuation of higher education. It makes sense, too, that there are new ways to connect interested parties with faster, more targeted ROI information about what tertiary learning options exist and what returns can be expected (such as CourseCompare's aptly named Return on Education [ROE] Index[28], which features a short list of credentials and their associated ROI rating).

However, it bears repeating that ROI is unequipped to be anything more than a short-term predictor of notional financial returns, absent the messy, real-life variables of risk assessment. The use of ROI is, therefore, very conditional in an evolving *vibe economy*, in which human experiences and emotions directly influence valuation and, by extension, exert force on economies: Scanlon (2022) explains how perceptions can drive a recession—a **vibecession**—when consumer pessimism over a feared recession becomes generalized enough to cause an actual recession:

> Money is not a moral compass. But money is the economy. And the economy dictates what we do, and how we feel, and how we go about in the world (to a degree).
>
> So when the vibes are off - when we think about how Recessions come about (beyond the technical aspects) it makes sense that we would somehow end up with the vibes of a Recession, but maybe not the economic reality of one (yet).

In renegotiating the value proposition for higher education, then, perception is different from and perhaps more powerful than ROI in determining future economic arcs, in which case avoiding a "vibecession" in the post-secondary sector would indeed be "all about the vibes."

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[27] Pelman and Watson's [US] estimates place potential returners at 89%.

[28] https://www.coursecompare.ca/roe-index/

KEY TERMS

Behavioural economics[29]	An approach to understanding consumer decision-making that intersects behavioural psychology with economic principles; contrary to traditional economics, behavioural economics accepts irrationality as a part of decision-making.
Churn (or attrition)[30]	Customers who stop doing business with a given vendor; in higher education, churn estimates are based on the number of dropouts.
Delay discounting[31]	The tendency to prefer a smaller sooner reward (SSR) over a larger reward later.
Discounting	An investment's change in value over time, based on the assumption that "current costs and benefits [are] worth more than those occurring in the future because there is an opportunity cost to spending money now and there is desire to enjoy benefits now rather than in the future."[32]
Dropout	A student who leaves the post-secondary system permanently.
Externality (or external economy[33])	An indirect, "spillover" economic effect that can be either positive or negative.
Illiquidity premium[34]	A "bonus" or additional return for taking on the cost, risk, and inconvenience of a longer-term investment.
Lifetime earnings premium	Additional individual income above median career earnings: in this report, a lifetime earnings premium refers to the expected increase in income that someone who completed a post-secondary credential would earn over the calculated lifetime earnings of someone who does not have a post-secondary credential.
Mental model[35]	A positional "lens" that shapes one's views and/or experiences (in this context, of post-secondary learning).
Missing market	A potential consumer market that does not exist due to a lack of awareness/information, disconnection between consumers and producers of a good, or some other systemic inefficiency.
Return on investment (ROI)	A measurement of net profit against the costs of a particular investment; for the purposes of this report, ROI refers to the metric(s) used to evaluate the monetary benefits of **tertiary education** to individual learners and to society.
Reverse transfer[36]	A credit transfer arrangement in which a student can, after transferring to a new institution, send credit "back" to the earlier institution and have the credit recognized toward a credential. Typically, reverse transfer occurs for students who move to a university to complete a baccalaureate degree and send credits back to a college for an associate's degree.

[29] Reed, Niieksela & Kaplan, 2013.
[30] Genio, 2025a.
[31] Reed, Niieksela & Kaplan, 2013
[32] U.S. Environmental Protection Agency, 2010.
[33] Becker, 1993.
[34] Becker, 1993.
[35] Fischman & Gardner, 2022.
[36] McQuarrie, 2022.

Smaller sooner reward (SSR)[37]	A smaller reward given earlier, which is perceived as more valuable than a larger reward that is delayed.
Scientific management[38]	A management theory that aims to maximize economic production through the scientific measurement of work.
Stopout	A student whose post-secondary studies are stopped temporarily (as opposed to a **dropout**, who leaves permanently).
Tertiary education[39]	Any formal education beyond high school completion (a.k.a., post-secondary education), including public and private universities and colleges; technical training institutes; and vocational schools.
Vibe economy	An economy governed primarily by "emotional signals [that] increasingly steer behaviour, capital flows, and institutional risk[40]."
Vibecession	Damage to consumer confidence based on fears about recession that are not consistent with economic indicators: an attendant decline in spending, if sufficiently severe and protracted, can bring about an actual recession[41].

[37] Reed, Niieksela & Kaplan, 2013
[38] Taylor, 1911.
[39] World Bank Group, 2025.
[40] Vibe Economy. https://thevibeconomy.com/en/articles/vibecession
[41] Scanlon, 2022.

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