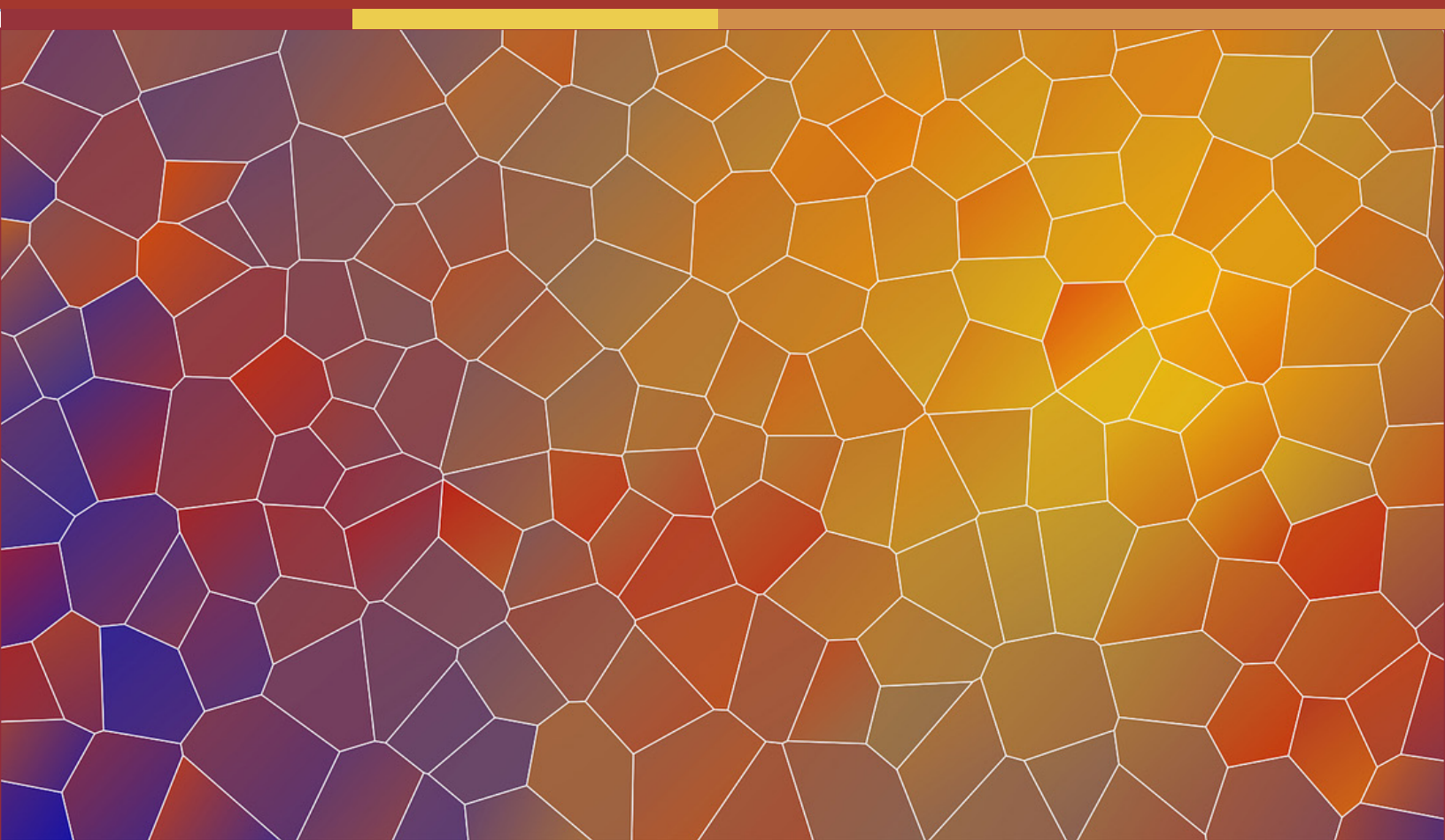


# Currents

In Teaching and Learning | ACADEMIC JOURNAL



VOLUME 14 NUMBER 2 JANUARY 2023



WORCESTER  
STATE  
UNIVERSITY

# TEACHING REPORT

## Instructor Perspectives on Failure and Its Role in Learning in Higher Education

—Jennifer N. Ross, Dan Guadagnolo, Abby Eastman, Matthew Petrei, Angela Bakaj, Laura Crupi, Shirley Liu, Nicole Laliberte, and Fiona Rawle

Jennifer N. Ross, Interdisciplinary Postdoctoral Fellow, Center for the Study of the United States, University of Toronto.

Dan Guadagnolo, Assistant Professor (Teaching Stream), Institute of Communication, Culture, Information, and Technology, University of Toronto Mississauga.

Abby Eastman, Research Assistant, Department of Leadership, Higher, and Adult Education, Ontario Institute for Studies in Education.

Matthew Petrei, Research Assistant, Department of Biology, University of Toronto Mississauga.

Angela Bakaj, Undergraduate Student Researcher, Department of Biology, University of Toronto Mississauga

Laura Crupi, Undergraduate Student Researcher, Department of Biology, University of Toronto Mississauga

Shirley Liu, Undergraduate Student Researcher, Department of Biology, University of Toronto Mississauga

Nicole Laliberte, Assistant Professor (Teaching Stream), Department of Geography, Geomatics, and Environment, University of Toronto Mississauga.

Fiona Rawle, Professor (Teaching Stream), Department of Biology, University of Toronto Mississauga.

Correspondence concerning this article should be addressed to: [jennifern.ross@utoronto.ca](mailto:jennifern.ross@utoronto.ca)

### Abstract

Reflecting on failure is a critically important component of the learning process. However, relatively little scholarship to date has examined instructor perspectives of failure, including how failure informs their approaches to teaching and learning. This case study explores instructor perspectives on failure using data collected from a series of semi-structured interviews conducted across disciplinary departments at the University of Toronto Mississauga. When contemplating how and/or whether to incorporate failure pedagogy, instructors considered how interlocking systems of power shaped both their own and their students' positionalities and willingness to engage with failure. Three interlocking themes emerged, with instructors describing (1) failure

as privilege, (2) failure as simultaneously a valuable pedagogical tool and an institutional risk, and (3) a disconnect between instructor desires to facilitate generative failure and the limitations of institutional policy in supporting such endeavors. The study finally explored how instructors, in light of existing power structures, suggested navigating institutional politics, incorporating new pedagogical techniques, and constructing support systems that could aid students in embracing, learning from, and bouncing back from failure.

### Keywords

productive failure, generative failure, instructor perspectives of failure, higher education

## Perspectives on Failure *continued*

**Declarations of interest:** none

### **Funding:**

This work was generously supported by principal investigator funds, the University of Toronto Mississauga Research Opportunity Program, and the Provost Learning and Education Advancement Fund at the University of Toronto.

In recent years, discourses of “embracing risk” and “failing forward” have permeated institutions of higher education. This rhetoric frames failure as an opportunity for learning, improvement, and growth. Scholarly research (e.g., Kapur, 2008; Kapur & Kinzer, 2009; Bjork & Bjork, 2011; Steuer & Dresel, 2015; Kapur, 2015; Eyler, 2018; Bjork & Bjork, 2020) has confirmed the pedagogical value of failure and encourages instructors to incorporate failure pedagogies such as “desirable difficulties” (Bjork & Bjork, 2011), “constructive error climate” (Steuer & Dresel, 2015), and “productive failure” (Kapur, 2015) into their classrooms. Much of this literature assumes that instructors and students engage with institutional teaching and learning environments that evenly distribute material resources (such as money, technology, and adequate staffing) and intangible assets (including time, support, and opportunities to experiment). However, pervasive inequalities structure how instructors and students conceive of, approach, engage, and learn from failure (Kundu, 2014; Hallmark, 2018; Feigenbaum, 2021). Interlocking systems of power across race, gender, socioeconomic status, access, university hierarchy, and first-generation and international student status dramatically shape who can afford to embrace risk in teaching and learning, as well as who has the resources and support to fail and try again.

The present case study pauses to take a broad view of failure as it relates to power, privilege, and learning in higher education. Focusing on instructor perspectives of failure, this study asks two questions in particular: With what mental frameworks are instructors approaching the topic of failure both as it relates to their own research and teaching, and as it relates to their students’ learning and willingness to take chances? How do instructors acknowledge and navigate the structures of power shaping both their and their students’ opportunities to take risks, learn from failure, and try again? In pursuit of these questions, an interdisciplinary team of researchers

sought to examine faculty perspectives of failure more deeply. The current article reports the findings from a series of semi-structured interviews collecting perspectives on failure from tenured, pre-tenure, contingent faculty and postdoctoral fellows at the University of Toronto, a multi-campus Research-1 institution located across the Greater Toronto Area.

This case study begins the work of uncovering the role intersectional power structures play in shaping how—and whether—instructors are able to incorporate failure into their teaching. Moreover, the study indicates the thought processes instructors engage in when determining under what conditions they feel students can take risks, engage with failure, and learn from it. Three interrelated themes emerged in discussion. Instructors identified (1) failure as privilege, (2) failure as simultaneously a valuable pedagogical tool as well as an institutional risk, and (3) a disconnect between instructor desires to facilitate generative failure and the limitations of institutional policy in supporting such endeavors. Citing the high stakes and lasting implications of failure, participants consistently reflected on the ability to fail—and particularly the ability to fail without long-term consequences—as a privilege unevenly distributed and experienced by individuals across the institutional hierarchy. Many interviewees recognized the pedagogical value of failure as a learning opportunity but hesitated to implement structured experiences of failure into their own classrooms for precisely these inequalities. The interviewees not only referred to their own precarity as pre-tenured or pre-continuing faculty but also expressed concern for the emotional and material burdens classroom failure would place on their students, particularly financially precarious, racialized, first-generation, and/or international students. Institutional metrics such as course grade, GPA, and student evaluations deterred instructors from experimenting with failure in their teaching. The hesitancy expressed by this study’s participants demonstrates a disconnect between what we know of failure’s pedagogical potential and the institutional policies implemented to structure and track students’ progress through higher education.

## Perspectives on Failure *continued*

### Critical Context

In the following subsections, we describe the areas of educational research both informing the present study and with which we place this work in conversation.

### The Potentialities of Failure

Scholarly research acknowledges the pedagogical value of failure (e.g., Kapur, 2008; Bjork & Bjork, 2011; Kapur, 2015; Anderson et al., 2018; Eyler, 2018; Bjork & Bjork, 2020). In recent years, two approaches—desirable difficulties and productive failure—have come to the forefront. Bjork & Bjork (2011) acknowledge the learning potential of difficulty. “Desirable difficulties,” they write, “trigger encoding and retrieval processes that support learning, comprehension, and remembering” (p. 58). By creating challenges that utilize students’ existing knowledge to analyze and solve problems, instructors engender in their students “more durable and flexible learning” (Bjork & Bjork, 2011, p. 59). Similarly, Kapur’s (2015) concept of productive failure develops student learning by engaging them in tasks they cannot fully solve initially. This model of learning requires students to draw upon prior knowledge in an attempt to develop solutions, even if the solutions they put forward are incomplete, sub-optimal, or incorrect. These exercises in productive failure are designed to assist students in identifying their own knowledge gaps and prime them for asking follow-up questions (Kapur, 2008; Loibl & Rummel, 2014; Gloger-Frey et al., 2015; Lai et al., 2016; Likourezos & Kalyuga, 2017; Anderson et al., 2018). Scholars such as these informed our understanding of the potential pedagogical benefits of failure. With this research in mind, we sought to examine how instructors at our own institution of higher education conceptualized and implemented failure in their research and teaching.

### Instructor Perspectives of Failure

Relatively little research to date has focused on instructors’ perspectives of failure and how these perspectives inform their approaches to teaching and learning. Jungic and colleagues (2020) reported a narrative inquiry of ten professors’ perspectives on failure with the aim of demonstrating how failure serves as an important learning opportunity for students, instructors, and institutions. Their analysis underscores

a great diversity of experience and perception toward failure. Nevertheless, themes of individualized failure and isolation appeared in nearly all the narratives.

Like Jungic et al. (2020), the present case study was interested in determining instructor perceptions of failure, broadly defined. However, the present work diverges from that of Jungic and colleagues in its attention to the relationships between learning, failure, and power in academe. Our study is concerned with failure in both teaching and learning, and as it impacts on both students and instructors. Within each of these groups, who feels empowered to take risks, who can fail without detrimental repercussions, and who is able to recover and try again?

### Emphasis on Power and Privilege in Failure and Learning

The work of scholars such as Kundu (2014), Hallmark (2018), and Feigenbaum (2021) undergird our examination of the roles of power and privilege in instructor perspectives of failure and student learning. Critical of the growing emphasis on grit and student resilience, Kundu (2014) argues that such approaches to student learning “oversimplif[y] the problems facing education and what it takes for students to achieve” (p. 80). Specifically, “focusing on grit” causes us to “los[e] sight of structural obstacles in the path of student success” (p. 80). Kundu suggests instead that educators and administrators focus on “building capacity” through the cultivation of individual, collective, and systemic agency (p. 80). Meanwhile, Hallmark (2018) acknowledges that privilege shapes how equity groups experience failure. Referring specifically to low-income and first-generation students, Hallmark contends that an important step must involve recognizing not only “the privilege that comes with saying ‘Failure is OK’” but also how these enjoiners “dismiss...some students’ struggles” and “can actually be harmful to their success” (p. A44). Feigenbaum (2021) examines the role of neoliberal social and economic ideologies in generating fear of failure under the framework of “precarious meritocracy” (p. 13). For Feigenbaum socioeconomic precarity and hyper-competitiveness stigmatize failure and foreclose student learning. He advocates for “generative failure,” which prioritizes feedback and improvement over clear metrics for assessment (p. 13).



## Perspectives on Failure *continued*

In addition to the field of educational research, we draw from cultural theory to round out our understanding of power and privilege. Specifically, we utilize Crenshaw's (1991) concept of intersectionality as a lens through which to explore the complexity of power and privilege. Developed from the field of critical race theory, this framework accounts for how varied systems of power intersect and combine to create complex and multi-layered experiences of privilege and oppression. Together, these scholars offered multiple ways of understanding how different manifestations of power and privilege combine and act upon instructors and students in myriad ways within institutions of higher education.

Guided by the scholarly work of Crenshaw (1991), Kundu (2014), Hallmark (2018), and Feigenbaum (2021), the present study delves into instructor observations on how structural inequalities (including race, gender, socioeconomic status, and first-generation or international student status) influence instructors' descriptions of failure, their willingness to take pedagogical risks, and their understanding of the impacts of power and privilege on student failure and learning in higher education. Specifically, we seek insight into how instructors grapple with systems of power in their pedagogical decision-making. Where do instructors see power working, if at all? How do they themselves navigate unequal power structures in their research and teaching, and how do they help their students navigate those structures? What role does institutional power play in instructors' pedagogical decisions? After describing the methods applied to this qualitative study, we explore in detail the emerging themes of privilege, institutional risk, and restrictive educational policies. Following the presentation of results, we place our findings in relation to existing literature before concluding with instructor insights from disciplines already incorporating failure pedagogy.

### Methodology

#### Case Study Approach and Institutional Context

This project undertook an empirical enquiry via a case study approach. The case study focused on instructors at the University of Toronto Mississauga, which is located in the diverse urban city of Mississauga, is part of the University of Toronto tri-campus system, and is a Research-1 institution. The University of Toronto

hosts just under 75,000 undergraduate students with slightly over 15,000 of these students at the Mississauga campus (University of Toronto, 2021a). In 2021, 23.8% of faculty at the Mississauga campus self-identified as racialized or persons of color, while 44.4% of faculty self-identified as women (University of Toronto, 2021b).

Little research (with the notable exception of Jungic et al., 2020) has systematically explored instructor perspectives toward failure. By utilizing a case study approach, we were able to conduct an in-depth analysis of instructor perspectives on learning through failure within one university's specific context. The latter is an important point. Focusing on one institution allowed us to delve deeply into instructor comments about intersecting cultural and institutional power structures as they manifested at the University of Toronto Mississauga. We were, for instance, able to evaluate instructor insights within the context of the university's specific policies, practices, and institutional mindsets. Pairing instructor insights with particular policies and practices began the work of uncovering the oft unacknowledged role power and privilege play in pedagogical decision-making. The case study not only revealed how instructors at our particular institution responded to the role of power and privilege in teaching and learning. It also raised further questions about how power and privilege influence pedagogical decisions at or across other institutional, local, and national levels. Given the contextual nature of the case study approach, we want to be careful not to generalize broadly. However, the cross-sectional (i.e., instructors of varying status and power within the university hierarchy) and cross-disciplinary aspect to the current study design lends itself to potentially meaningful contributions to the field, especially given the lack of current research on this topic. This case study, along with the work of Jungic et al. (2020), serves to equip future researchers with preliminary knowledge and future directions for broader, cross-institutional enquiries into the intersections of failure, learning, and power in higher education.

#### Respondents and Interview Process

Instructors (n=12) from a range of faculty and non-faculty positions were invited via email to participate in semi-structured interviews. The institutional categorization of the instructors was as follows: professors with tenure (n=1), pre-tenure instructors

## Perspectives on Failure *continued*

(n=6), continuing non-tenure track instructors (n=3), and postdoctoral fellows (n=2). All participants taught and conducted research in a humanities capacity, though some (such as those in digital humanities, communication, information, or technology units) also engaged with computer science- and technology-related fields. Seven participants identified as women and five as men. When using pronouns in the discussion below, we utilize they/them in order to preserve the interviewees' anonymity.

Of note, the study eschewed a set definition of failure in an effort to capture the nuance with which participants thought about failure in their research, teaching, and understanding of student perceptions. The research team was interested in examining how instructors conceptualized the intersections between failure and learning. Yet, we recognized that fears and experiences of failure beyond the classroom or institution would inform their perceptions of failure, as well as their decision-making, willingness to take risks, and comfort in implementing failure pedagogy in the classroom. Therefore, the study approached failure from a broader and more generalist view to investigate how instructors were describing failure, how those descriptions changed over time or were applied differently to different contexts or groups, and what forces or combination of forces (i.e., social, economic, institutional) they saw as most influential to their perception of and approach toward failure at any given time.

### Data Analysis

Interview data were processed according to Creswell's qualitative coding protocol (Creswell, 2002). Two members of the research team coded each response according to theme and subtheme. During this process, a detailed coding ledger was developed in order to track the themes and subthemes and to standardize the language used in each description. Coding was done both by participant, in order to capture the nuances of their individual thoughts and experiences, as well as by question, in order to compare perspectives and track the range of attitudes and opinions specific to a given question. The coding was then repeated wholesale to record any additional themes and subthemes not initially documented, as per Miles et al. (2020).

### Ethics

This research protocol was approved by the University of Toronto Mississauga Delegated Ethics Review Committee in October 2020.

### Results

#### Descriptions of Failure

As mentioned previously, the study deliberately did not offer definitions of failure to the interviewees. We were interested in how faculty understood the concept as it applied to their own research and teaching, as well as how those conceptualizations changed over time, how or if they shifted in response to major life changes (such as full-time employment or tenure), and how perceptions of failure differed in discussion of their roles as researchers and instructors versus discussion of student perceptions of failure. This decision yielded nuanced data. Participants revealed complex and multifaceted perceptions of failure that were highly contingent on positionality, circumstance, and expectation, among other factors. Table 1 records the myriad ways interviewees conceptualized failure, including failing an assignment or course; failure to complete graduate training, to produce research, or to find stable employment; and failure to earn a reputation or become respected in one's field. Instructor descriptions of failure proved fluid and malleable, with participant perspectives toward failure shifting between institutional contexts (e.g., graduate school and tenure-track employment) and between subject groups (instructors and students).

#### Identification of Core Themes and Subthemes

Beyond their shifting perceptions of failure, participants discussed a number of core themes and subthemes, which have been documented in ranked order in Table 2. Of particular interest are three interrelated themes woven throughout the interviews: (1) failure as privilege, (2) failure as both a pedagogical tool and institutional risk, and (3) the disconnect between generative failure and institutional policy. The following subsections describe each topic in turn. A subsequent discussion of these findings in relation to higher education scholarship will then occur.

## Perspectives on Failure *continued*

### Theme 1: Failure as Privilege

Participants framed failure as a privilege in relation to their own graduate educations, their past and current positions within the university hierarchy, and their students' abilities to safely engage with and learn from failure. Specifically, interviewees indicated that their positions in academia, their individual subjectivities, and their degree of socioeconomic security influenced how they defined and engaged with failure. Of the twelve interviews, two-thirds reflected on the ways their position within the university hierarchy shifted their ideas of and willingness to engage with failure. Of those eight, five specifically referred to failure as a privilege, with four describing privilege as the ability to fail without detrimental financial consequences. Two cited identity politics by acknowledging how subjectivity and positionality influence students' experiences of failure and their ability to try again. One described the privilege of time to "play with ideas" and seek feedback. Finally, one participant recounted an instance in which a graduate professor wielded the threat of academic failure over students in order to sustain his own institutional and racial privileges.

Non-tenure track interviewees repeatedly correlated failure with economic distress. In the words of a postdoctoral fellow in digital humanities, failure is "very different for someone who's comfortable in a position versus someone who's still in the process." Speaking of their graduate school experience, the fellow asserted that the ability to produce research was "tied to economic stability." Failing to fulfill time-to-degree expectations or to produce chapter drafts or publications could result in loss of funding. The threat of financial insecurity led the fellow to ask, "If my research isn't good enough, or people don't think it is, will I be living in my car next year?" This fear of economic distress only increased as they entered their fellowship, where "the stakes are just so much higher." A limited-term assistant professor of women and gender studies concurred. Their fears of financial insecurity "intensified in [their] time on the job market" because "there's just more PhDs [than there are] jobs." For them, the limited availability of employment means that "many of us will fail, and there's nothing we can do about it."

Those participants who had secured tenure or tenure-track positions by the time of the interview tended to

express a more positive outlook toward failure. An assistant professor of writing studies indicated feeling "more comfortable with it," while an associate professor in English and drama expressed how their ideas of failure changed for the better only as they moved further along in their career. At the time of the interview, the associate professor of English and drama defined failure as an "inability to be influential" but noted that if they had been asked about failure before they obtained their tenured position, they would "have had a very different definition." Both participants attributed their relative comfort to the security afforded to them by their positions, and both reflected on their altered perception of failure as a privilege. The assistant professor of writing studies explained that their shift in perspective "has a lot to do with the privilege of my position. ...I'm very comfortable with it now because of that security that I have." Similarly, the tenured professor characterized their relationship to failure as privileged because unlike others in academia, failure would not result in them "not being able to pay the bills or not being able to get a job." Having secured tenure, they are now able to look beyond the socioeconomic impacts of failure.

While participants primarily referred to failure as a privilege in terms of socioeconomic status, two reflected on the role of race and first-generation status. Specifically, these two participants indicated that failure was not a privilege afforded to them during their graduate education. As a first-generation university student, anxieties of failure loomed for the now limited-term assistant professor of women and gender studies mentioned previously. "I'm the first person in my family to get an undergrad degree, let alone a PhD," they explained. For this participant, failing the defense would mean "failing everyone" in their family. Meanwhile, an assistant professor of American and African American literature described a situation in which a tenured professor wielded the threat of academic failure against non-white, women students in order to perform academic gatekeeping. As a graduate student, the interviewee internalized these "power play[s]" as a "damnation of my capacities as a thinker and writer." The experience "stifled any desire to take intellectual risks" to the extent that the interviewee was "convinced I should drop out of my program."

## Perspectives on Failure *continued*

Participants extended the discussion of failure as privilege to their students. Almost half of the interviewees recognized the ability to fail (and particularly the ability to fail without lasting consequences) as a privilege unevenly distributed among and experienced by the student population. A postdoctoral researcher in management innovation described the pressure experienced by their multi-language students as they struggled to accept the failures attendant with learning how to write in university. Similarly, a sessional lecturer in visual studies who works regularly with international students recognized how subjectivity changes student engagement with and response to failure. For them, instructors should always “consider the multiple identities that students hold” since each one affects how students define success.

### Theme 2: Failure as Pedagogical Tool and Institutional Risk

In addition to exploring failure as a privilege related to academic rank, job security, and positionality, instructors correlated their willingness to incorporate failure as a pedagogical tool with their institutional status. Though their terminology differed, all the interviewees described the pedagogical value of failure.<sup>1</sup> “I think failure would enable more exploration [and] deeper learning,” mused the assistant professor of women and gender studies. The assistant professor of writing studies concurred. “It’s a lovely teaching moment. ...It’s through that [messiness] that you’re going to grow and you’re going to build” knowledge and skills.

However, participants expressed varied willingness to pursue failure as a pedagogical tool. Postdoctoral fellows, contingent, and pre-tenure/pre-continuing faculty particularly hesitated to incorporate alternative pedagogies and grading metrics into their classrooms either before entering supportive departments/units or securing tenure. One assistant professor of digital technologies hoped one day to be able to incorporate failure-based learning opportunities and alternative assessment metrics into their classroom. The interviewee both acknowledged the pedagogical benefits of failure and was open to the idea of incorporating “carefully” structured learning moments. Nevertheless, they have put teaching innovation on “the back burner” while their job security is at stake. “I’m pre-tenure,” they explained.

“So, I’m nervous about it.” Fearful of poor evaluations, the participant decided to continue using conventional teaching strategies “until I get to tenured status, until I have that sort of safety where student evaluations or student feedback...doesn’t mean as much.”

One third of participants reported a lack of departmental or institutional support for either themselves or their students. “I don’t feel at all supported in my teaching,” asserted the associate professor of English and drama. The interviewee expressed a desire to know that, should they “try something out” pedagogically that the department will back them, even if the experiment returns lower evaluations on the first try. The assistant professor of digital technologies felt support was offered conditionally. “At this stage in my career...I need to create a record that demonstrates my competence and eventually expertise in pedagogy. ...So long as I can demonstrate that there is progress being made, I feel like I will be supported.” Two different respondents indicated a lack of support for students in their departments as well. Specifically, they maintained that their departments viewed student failure as an inevitable outcome and attributed the causes of that failure to the student alone. The assistant professor of American and African literature explained that their department held the view that “students who are good students are good students and students who are bad students are bad students.” Their department expects a select few to succeed without examining the institutional expectations, pedagogical strategies, or sociocultural power structures that scaffold student endeavors. An assistant professor of visual studies expands on this point, alluding to neoliberal ideologies that individualize failure and responsibility: “My impression is that the department thinks that some students in every class will always fail and that’s on them. ...I don’t think they think of it as a learning process.”

The interviewees were particularly concerned as to how failure would affect their students, especially students of marginalized or minority status. Nine out of twelve participants expressed concerns over student fear, anxiety, and stress. “I think students are afraid to take chances or to explore too much because they’re deeply, deeply afraid of failing,” asserts the assistant professor of women and gender studies. As the postdoctoral

<sup>1</sup> Terms referring to the connection between failure and learning include the following: exploration, play, mistakes, trial-and-error, confusion, unclarity, revision, iteration, and debugging.



## Perspectives on Failure *continued*

researcher in management innovation explains, this fear impacts student learning and risk-taking. In their words, “fear of failure as in a bad grade, or even a slightly lower grade, might affect the student’s willingness to really think about [difficult] questions and engage with them.”

Of the nine participants, five specifically worried about the effects of stress and anxiety on their students’ physical and mental wellbeing. The postdoctoral fellow in digital humanities recognized the destructive potential of high-stakes failure. As they explained, pressure and expectations “come at [students] from all sides. You can see the strain as the semester goes on. It gets really bad toward the end of the semester.” The assistant professor of women and gender studies concurred. “The stress of not being able to fail and experiment... is just overwhelming.” Cognizant of student stress, the sessional lecturer in visual studies expressed an impulse “to try and take that edge off of the fear of taking risks.” Their strategy for doing so depended on establishing a rapport with students and “requires a lot of community building” within the classroom. However, course size and workload limit instructors’ abilities to connect with students and to create supportive learning environments.

When asked about incorporating failure into their classrooms, instructors diverged in their opinions. Some, such as the assistant professor of American and African American literature hesitated, worrying that the inclusion of structured failure would only multiply the number of stressors students face. “I don’t want to be perceived as punitive in ways that can make the incorporation of failure into classes feel riskier to the wellbeing of my students,” she explained. The assistant professor of women and gender studies considered the notion differently. So long as opportunities for failure were incorporated through low-stakes grading and revision, this instructor was “in favor of doing anything that would help alleviate a little bit of that anxiety to fail, to take chances, to explore.”

Those who expressed interest in the pedagogical value of failure agreed on one point: the experience of failure would have to be carefully framed and structured. First, instructors would have to clarify what they meant by failure. The assistant professor of writing maintained, “The word failure in itself is a barrier to learning for some students. ...Failure can seem absolute to a lot of

my students.” Instructors therefore asserted the need to separate classroom failures in the form of mistakes, errors, or unsuccessful experimentation from recorded failures such as lower grades or GPA. Disconnecting the failures experienced during the learning process from long-term penalties thereby creates “space” for students to assimilate information and practice skills in a generative and encouraging manner. For the instructors interviewed in this study, tactics for fostering such a space include clear expectations and learning objectives, low-stakes or scaffolded assignments, built-in revision opportunities, grading rubrics, dropping the lowest grade, and either more available instructors and teaching assistants or smaller classes. Table 3 compiles the various pedagogical tools interviewees indicated they have already incorporated or would like to see included in the teaching and administration of higher education.

### Theme 3: Failure and Institutional Policy

Given their understanding of failure as a privilege, risk, and pedagogical tool, participants expressed frustration at what they viewed as an incompatibility between experimenting with generative failure and the demands of institutional policy. One quarter of participants identified grades and GPA as policies that hindered students’ engagement with failure. The postdoctoral researcher in management innovation expressed frustration with the degree to which contemporary grading conventions obfuscate real learning. Grades are “this one output. You can have a whole class that you can learn or do all these things in [and at] the end of the day, it narrows down to a grade on your transcript.” The associate professor of English and drama conveyed a similar distaste for grades. “We need to stop being tough about grading. ...Students really fixate on things like grades and deadlines, as opposed to what we actually want to communicate to them.” For the assistant professor of women and gender studies, “get[ting] rid of grades, maybe completely reimagin[ing] how we do it” offers one method of addressing performance-driven fear among students.

In addition to describing grades and GPA as practices that discourage student learning and risk-taking, instructors also reported how institutional measures limited their own abilities to engage with failure in the service of student education. For instance, the institution attempted to intervene in at least two instructor’s course

## Perspectives on Failure *continued*

grading schemas because, it claimed, student grades were “too high.” One instructor explained, “I’ve been explicitly told that my grades can’t be too high.” A second instructor reported after the initial interview that their department reached out with similar concerns. The department suggested the instructor review the course marks and adjust them downward. In the words of the first instructor, the institution hinders educators’ abilities to incorporate failure pedagogy, such as revise and resubmit assignments, with “this constant threat that if my grades are too high someone is going to come and talk to me.” A third participant agrees. Rigid institutional expectations regarding the distribution of grading curves “throws the autonomy of instructors into somewhat of a crisis if you’ve constructed your class such that students can improve over time.”

Along with strict grading protocol, participants identified the institutional allocation of time and resources as a limitation to their ability to engage students in failure pedagogy. “All the right things are being said,” stated the postdoctoral fellow in digital humanities, “and we know what the right things are to help students learn. But carving out the time for instructors to actually do that in a way that is sustainable and equitable, I don’t think the institution knows how to do that.” For this instructor, neither the tenure system nor the recent turn to precarious adjunct labor offers “equitable and just” divisions of labor, livable wages, or departmental resources. The assistant professor of visual studies offers a specific example by describing the amount of time necessary for providing students with written comments and substantive feedback on their assignments. In this participant’s courses, students engage in a series of revise-and-resubmit assignments designed to emulate peer review and scholarly communication. However, the instructor consistently feels the strain of returning comments in the short amount of time stipulated by the university. As they explained, “In order to normalize failure and getting feedback, students need to do smaller, lower stakes assignments more frequently. To balance that against a 12-week semester means that there’s a constant back and forth” between the students and the instructor. “The workload ends up being very, very intense all semester for those of us involved in marking and grading.” Smaller courses could offer one solution to the pressures involved in returning student feedback, but

institutions would need to find and allocate resources for hiring more faculty/teaching assistants and, as the postdoctoral fellow in digital humanities reminds us, needs to do so equitably by offering livable incomes and job security.

### Discussion

Despite the acknowledged pedagogical value of failure (e.g., Bjork & Bjork, 2011; Kapur, 2015; Eyler, 2018; Bjork & Bjork, 2020), systemic inequalities influence who has the ability to productively engage with failure and who can try again after an unsuccessful experience. The present study reveals an intricate web of power structures shaping how—and whether—instructors are able to incorporate failure into their teaching, as well as instructors’ thought processes involved in determining how—and whether—their students feel they can take risks, engage with failure, and learn from it in their coursework. Three overarching, though contextually specific, themes emerged from the interviews. Whether speaking of undergraduate students, their own experiences in graduate school, or their present teaching and research, a significant portion of the participants recognized the ability to fail safely and productively as a privilege associated with whiteness, masculinity, and tenure/tenure-track institutional status. Women, instructors of color, and pre-tenure/continuing status instructors or postdoctoral fellows felt limited in their ability to take pedagogical risks. At the same time, the interviewees recognized how students unevenly experience the academic, as well as material, mental, and social impacts of failure. Though instructors recognized the learning opportunities presented by moments of error or failure, they felt compelled to weigh the potential pedagogical gains against not only the institutional, social, and financial risks for themselves, but the academic, emotional, and psychological wellbeing of their students. The following section positions instructor insights regarding the privilege of incorporating and learning from failure pedagogy in relation to relevant educational research. Afterward, we detail instructor suggestions for creating supportive classroom and institutional environments capable of fostering not only students’ willingness to embrace and learn from failure, but the instructors’ willingness to experiment in their own research and teaching as well.

## Perspectives on Failure *continued*

### **The Privilege of Failure: Race, Socioeconomic Status and Learning**

A significant portion of the faculty interviewed in this study understood failure as a complex experience informed by intersecting subjectivities, institutional policies, and systemic inequalities. However, major publications in higher education research have espoused the benefits of failure without sufficient attention to the intricate identities and backgrounds represented in each student (notable exceptions include Kundu, 2014; Hallmark, 2018; and Feigenbaum, 2021). Particularly troubling are the neoliberal discourses of grit (Duckworth, 2016) and resilience (e.g., Brown, 2015; Fuller et al., 2016; Ayala & Manzano, 2018) that have permeated higher education in recent years. While it is important to encourage and empower students with ideas like perseverance, passion, and resilience, it is crucial to also de-individualize failure and recognize how damaging ideologies have been operationalized within social, cultural, political, and economic institutions, including higher education. We concur with Feigenbaum (2021) when he argues that “widespread proclamations about the benefits of failure do not reflect the lived experiences of students, especially those from socioeconomically, culturally, and politically marginalized backgrounds” (p. 16). In centering the individual as the primary site for developing grit and resilience, these discourses obfuscate how both instructors and students navigate structural inequalities and systems of power that shape radically different experiences of failure and determine how—or even if—they can recover and try again.

Conditions of social and material precarity impinge on not only students’ abilities to learn and on the educational opportunities in which students feel they can partake, but also on the pedagogical risks instructors are willing to take when considering how to best leverage failure for enhanced student learning. Nearly half of the instructors interviewed in this study worry that an uncritical approach to failure will alienate their students, cause them undue stress and anxiety, or undermine their willingness to try new things and learn from real or perceived failures. Uncritical attempts to normalize failure, and particularly neoliberal exhortations to fail fast, hard, and often “ignore the fact that failure affects people differently. Privilege plays an important role in

who is allowed to fail—and who isn’t” (Hallmark, 2018, p. A44). Therefore, argues the sessional instructor of visual studies interviewed for this project, “we need to think about students within their larger context and constellations.”

Instructors in this study identified socioeconomic stability as a leading concern in determining whether they would experiment with failure pedagogies. They also expressed unease over how academic failure might impact their students’ funding and career opportunities. These anxieties reflect broader currents of apprehension related to what Feigenbaum (2021) describes as a “precarious meritocracy” (p. 13). Though the specific circumstances differ between students and instructors, each group encounters “a pervasive feeling of socioeconomic anxiety with an ethos of hypercompetitive individualism” heightened by the knowledge that an eroding social safety net very likely will not sustain them should their worst fears—failing college, rejection from graduate or medical schools, or unemployment—come to pass (Feigenbaum, 2021, p. 17). For instructors in this study, fear of poor teaching evaluations, the denial of tenure, and subsequent socioeconomic instability led them to avoid pedagogical experimentation until they felt secure enough in the university hierarchy to risk failure.

Participants recognized a similar fear of failure among their students, with several remarking on student tendencies to “play it safe” by pursuing those research topics and courses of study that will give them the best chance to succeed, rather than the most opportunity to learn. As Bledsoe & Baskin (2014) explain, “the classroom often represents to many students a competitive environment to achieve high grades rather than the locus of their personal quest for knowledge and skills mastery” (p. 34). Moreover, Feigenbaum (2021) argues that some students view the ability to experiment, explore, and potentially fail as “indulgences of the affluent” (p. 20). Given the financial costs of academic failure, the ability to fail, particularly in terms of the time, space, and resources to try again, are seen as privileges afforded to a limited (white, middle/upper class) demographic of pupil. For others of limited monetary means, failure in the pursuit of learning feels not only financially but perhaps even intellectually out of

## Perspectives on Failure *continued*

reach. As Verschelden (2017) explains, “persistent worry about money, including lack of regular access to adequate food, health care, safety, and so on, takes up parts of the brain that are then not available for thinking, learning, and making good choices” (qtd. in Feigenbaum, 2021, 19). For many of the instructors in our study, concern over students’ financial burdens, the attendant pressures to maintain GPAs for funding and scholarships, and the cognitive costs of those stressors, gave them pause when considering the feasibility of incorporating failure pedagogy in the classroom.

In addition to socioeconomic security, instructors described failure and recoverability as a privilege related to race and ethnicity. Both instructors and students of color encounter unique precarities and cognitive loads their white counterparts do not experience, including the cognitive costs of navigating structural racism and white supremacy as they have been embedded within institutions of higher education (Patton, 2016; Verschelden, 2017; Feigenbaum, 2021). In this study, discussion of racialized precarity centered on institutional surveillance and gatekeeping. While a number of instructors revealed a discomfort with departmental and institutional surveillance of their teaching strategies, research has documented how this surveillance falls unevenly on instructors of color. In a qualitative study of Black and minority ethnic instructors in England and Australia, Lander & Santoro (2016) documented how instructors of color “felt surveilled, under scrutiny, and...hypervisible” to both colleagues and students (p. 1013). For instance, in their study one Southeast Asian instructor grappled with negative comments on student evaluations because of her accent, while a Black instructor endured students Googling her to ascertain her credentials (Lander & Santoro, 2016). With increased scrutiny from both colleagues and students, instructors of color weigh carefully the pedagogical benefits of failure with the need to continually demonstrate teaching excellence to counter racializing ideologies. As the assistant professor of American and African American literature in our own study explains, “fears about being perceived as a failure as a pedagogue intersect with the risks I’m willing to take.” Furthermore, having experienced racial gatekeeping as a graduate student, this instructor is acutely aware how structural racism works against the students of color they now teach. “I don’t want to...make the incorporation of failure into classes feel riskier to the wellbeing of my students,” they maintain. “I know there are forces that are using failure against them.”

### Compassion and the Fear of Failure

Informed by their own deep anxieties regarding failure, multiple participants sought ways to demonstrate compassion for their students and mitigate fears of failure. Previous scholarship (e.g., Neff et al., 2005; Hjeltnes et al., 2015) prioritized affective interventions into student fears of failure. Like resilience discourse, interventions into student affect focus on “adapting the individual to cope with outside pressures in order to negate their effects, rather than seeking to eradicate these pressures in the first place” (Webster & Rivers, 2019, p. 526). For the participants in our study, an affective approach was not sufficient to assuage student concerns because it did not address the underlying sources of student fears. Instructors attributed fear of failure to structural, rather than affective origins. Instructors identified institutional policies such as program and graduation requirements, lack of support for students’ mental and physical wellbeing, and grading policies as structural elements stoking student fears of failure.

Throughout their interviews, instructors expressed the desire to see more capacious departmental and institutional attitudes toward failure. It is “necessary” to afford students the room to experience “different intermediate states of confusion or unclarity or error” without those intermediate states leading to failure or penalty, argues the associate professor of English and drama. The postdoctoral researcher in management innovation suggests “providing a safer space” for students to practice or to engage with their confusions.” That is, there needs to be “more room for [the] failure process,” insists the assistant professor of visual studies. “You don’t actually learn from [failure] unless you have the chance to reflect and dwell in [it] and really work with those ambiguities and those struggles.”

Some participants envisioned what a more gracious approach to failure would look like in practice. The assistant professor of writing studies argues that “we need...to have built-in pedagogical activities that allow [students] to experiment and play with voice and style before it ever gets to an assignment.” For the postdoctoral researcher in management innovation, such pedagogical activities would include “scaffold[ed] or iterative kinds of assignments.” The sessional lecturer in visual studies similarly envisions more opportunities for students to engage with their work in progress, perhaps even stipulating that “the amount of improvement is more



## Perspectives on Failure *continued*

important to [the] mark” than the final product. A full quarter of the participants indicated that they would like to “rethink our relationship to grading.”

The ability to offer smaller courses depends on institutional, as well as broader socio-cultural adjustments in priorities and attitudes toward failure. “If we were going to change an education model that went from fear of failure to something else, I think it would have to really pinpoint what drives students intrinsically instead of the extrinsic reward system for good grades,” muses the postdoctoral fellow in digital humanities. For this instructor, the North American emphasis on wealth shifts student priorities from learning and exploration to the pursuit of careers with high capital gains. An assistant professor in visual studies contends that current ideologies of meritocracy cause harm to students by equating them with their academic performance. They argue that both instructors and their institutions need to exhibit “more compassion for students.” Students “get dismissed as people” when educators or departments correlate their academic performance and productivity to their personhood.

### Acknowledging Limitations, Learning from Failure

We would be remiss if we did not acknowledge some of the limitations facing initiatives to incorporate critical failure interventions. At the level of the classroom and the institution, an individual instructor’s endeavors to create space for socially informed pedagogical failure may not work given the systemic nature of bias, intractable policies, or unfavorable departmental or institutional culture. Even if one classroom serves as an oasis for exploration, play, and revision, students may still be unable to fully engage with the opportunity because larger social and institutional forces continue to weigh upon them. As the assistant professor in writing studies explains, students

might embrace [failure] in my class because they do have space to write some of their assignments and play with ideas and get instant feedback. But the larger stresses that they’re under from their programs in general and some of the factors that are affecting them as they come to my classroom make it very hard for them to even engage on that level with things some days.

More broadly, initiatives to incorporate critical approaches to failure pedagogy may very well be stymied by elements of systemic racism, neoliberal capitalism, and negative sociocultural perceptions of failure. For instance, incorporating lower-stakes assessments or opportunities for revision do not by themselves “challenge the ideology of hypercompetitive individualism,” writes Feigenbaum (2021). He continues, “Furthermore...interventions that do not address the systemic roots of stigmatization can themselves be incorporated into the logics of precarious meritocracy” (p. 22). It will take a larger ground swelling to change the broader social, cultural, political, and economic stigmatization, stakes, and consequences of failure.

When considering how to incorporate a pedagogy of failure responsive to the dynamics of power, positionality, and institutional policy, individual instructors and institutional administrators may find it helpful to identify those academic units or centers where failure is already accepted and normalized. What can be learned from those locations where failure—in the form of confusion, error, exploration, or calibration—forms a key component of the learning process? Instructors from this study identified three such locations: theatre and the performing arts, writing studies, and digital programming/coding. Each one emphasizes a particular aspect of failure pedagogy, including exploration, revision, and modeling, respectively.

For the associate professor of English and drama, theatre courses require students to engage in iterative rounds of experimentation with voice and movement as they learn about performance techniques. Of the dramatic arts the instructor asserted, failure “is just so accepted, so part of the discipline.” As they explained, failure in theatre often takes the form of being unable to connect to the audience. In order to deliver a successful performance, students learn to experiment with different acting styles and modes of presentation. They must “calibrate” their performances based on audience responses, thereby engaging in a continuous cycle of revision. In this way, theatre teaches them to “naturalize” failure as “a necessary precondition” for determining the appropriate mix of theatrical strategies.

Like the performing arts, interviewees from the field of writing studies also emphasized explorations in

## Perspectives on Failure *continued*

voice and the importance of revision. Whether in the humanities or STEM fields, student writers work to develop their scholarly voice through reflection and revision throughout their college careers. “You want that process [of] iteration to be part of the learning/discovery/pedagogical process,” argues the assistant professor in writing studies. The assistant professor of visual studies concurs. “Allow[ing] students to potentially fail at an early iteration and course correct...is a key thing.” For the assistant professor in American and African American literature, this is because revision involves “repeating a skill set...to understand it better.” In terms of student learning, opportunities for revision not only ease some of the fears of failure (and the cognitive load it consumes) but also reinforce the knowledge and skill sets students strive to develop.

Finally, instructors can turn to the digital humanities, media studies, and computer science for particularly robust examples of modeling failure. In programming, failure is “absolutely essential,” asserts the assistant professor in communication and technology. “Failure, trial, and error [are] an inevitable part of programming. ...Embracing failure is key” to learning how to design, code, and debug digital material. This instructor, therefore, has incorporated failure into their course pedagogy, as well as dedicated time for modeling what failure looks like and how to recover from it. For instance, when teaching Python coding, the instructor devotes class time to having students type commands into the Python shell to see what happens. They then learn to read error messages to determine what might have gone wrong. Later, when teaching students how to write a Python program, the instructor engages in live-coding, a style of teaching in which the instructor writes out the code in front of students, who in turn type the code on their own device. During live-coding sessions, instructors can and do make mistakes, which are then transformed into learning opportunities for students to collectively engage in locating and solving the portion of code leading to errors. The process of live-coding makes failure visible while also demystifying the act of problem-solving. These strategies aim to eliminate the fear of failure, develop students’ analytical skills, and encourage them to move forward despite their mistakes. As the communications instructor explains, “There’s this philosophy that you will fail, you should expect to fail, and you need to do it as quickly as you can with

the simplest version of your idea so that you can make progress.”

### Conclusion

When incorporating failure pedagogy into our classrooms and institutions, it is essential to think critically about the oft unacknowledged power dynamics and privileges determining who gets to fail, and who gets to try again. We agree with Eyler (2018) that “failure can be one of our biggest allies in learning if we utilize it appropriately” (p. 196). However, this case study demonstrates the importance of a critical approach to failure that acknowledges and seeks to remedy the uneven distribution of anxiety, stress, and negative academic, social, and health-related consequences on students and instructors in marginalized, minority, or precarious positions. Understanding the intersecting oppressions and stigmas many instructors and students face will help educators to design more socially conscious and meaningful interventions into the isolating, stigmatizing, and demoralizing aspects of failure. By deliberately creating space where instructors and students can safely and equitably implement and learn from failure pedagogies, we not only facilitate better learning, but cultivate deeper and more positive understandings of failing and trying again.

**Acknowledgements:** We wish to acknowledge the land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit River. Today, these places are still the home to many Indigenous people from across Turtle Island, and we are grateful to have the opportunity to work on this land. We wish also to acknowledge the continued histories of injustice, oppression, and violence perpetuated by white, settler colonialist systems and institutions, including schools and universities. We recognize how education served as a tool to erase indigenous cultures, devalue native knowledge systems, and craft systems of exclusion. It is not enough to be grateful for the land we now occupy. We recognize and seek to redress injuries both past and present. These histories and their present reverberations form part of the impetus for our work understanding and intervening in structures of power and privilege in the university.

## Perspectives on Failure *continued*

### References

- Anderson, C. G., Dalsen, J., Kumar, V., Berland, M., & Steinkuehler, C. (2018). "Failing up: How failure in a game environment promotes learning through discourse." *Thinking Skills and Creativity*, 30, 135–44. <https://doi.org/10.1016/j.tsc.2018.03.002>
- Ayala, J.C. & Manzano, G. (2018). Academic performance of first-year university students: the influence of resilience and engagement. *Higher Education Research & Development*, 37(7), 1321–1335. <https://doi.org/10.1080/07294360.2018.1502258>
- Bjork, E. L., & Bjork, R. A. (2011). Making things hard on yourself, but in a good way: Creating desirable difficulties to enhance learning. *Psychology and the real world: Essays illustrating fundamental contributions to society*, 2(59–68).
- Bjork, R. A., & Bjork, E. L. (2020). Desirable difficulties in theory and practice. *Journal of Applied Research in Memory and Cognition*, 9(4), 475–479. <https://doi.org/10.1016/j.jarmac.2020.09.003>
- Bledsoe, T. & Baskin, J. (2014). Recognizing student fear: The elephant in the room. *College Teaching*, 62(1), 32–41. <https://doi.org/10.1080/87567555.2013.831022>
- Brown, R. (2015). Building children and young people's resilience: Lessons from psychology. *International Journal of Disaster Risk Reduction*, 14(2), 115–124. <https://doi.org/10.1016/j.ijdr.2015.06.007>
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43(6), 1241–1299. <https://doi.org/10.2307/1229039>
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Merrill Prentice Hall.
- Duckworth, A. (2016). *Grit: The power of passion and perseverance*. Scribner.
- Eyler, J. (2018). *How humans learn: The science and stories behind effective college teaching*. West Virginia University Press.
- Feigenbaum, P. (2021). Telling students it's O.K. to fail, but showing them it isn't. Dissonant paradigms of failure in higher education. *Teaching & Learning Inquiry*, 9(1), 13–27. <http://dx.doi.org/10.20343/teachlearninqu>
- Fuller, A., Belihouse, R., & Johnston, G. (2016). *Get It – Creating Resilient Learners*. Inyahead Press.
- Glogger-Frey, I., Fleischer, C., Grüny, L., Kappich, J., & Renkl, A. (2015). Inventing a solution and studying a worked solution prepare differently for learning from direct instruction. *Learning and Instruction*, 39, 72–87. <https://doi.org/10.1016/j.learninstruc.2015.05.001>
- Hallmark, T. (2018). When "failure is ok" is not ok. *The Chronicle of Higher Education*, 64(23), A44.
- Hjeltnes, A., Binder, P.E., Moltu, C., & Dundas, I. (2015). Facing the fear of failure: An explorative qualitative study of client experiences in a mindfulness-based stress reduction program for university students with academic evaluation anxiety. *International Journal of Qualitative Studies on Health and Well-Being*, 10(1). <https://doi.org/10.3402/qhw.v10.27990>
- Jungic, V., Creelman, D., Bigelow, A., Côté, E., Harris, S., Joordens, S., ... & Yoon, J. S. (2020). Experiencing failure in the classroom and across the university. *International Journal for Academic Development*, 25(1), 31–42. <https://doi.org/10.1080/01360144X.2020.1712209>
- Kapur, M., & Kinzer, C. K. (2009). Productive failure in CSDL groups. *International Journal of Computer-Supported Collaborative Learning*, 4(1), 21–46. <https://doi.org/10.1007/s11412-008-9059-z>
- Kapur, M. (2008). Productive failure. *Cognition and Instruction*, 26(3), 379–425. <https://doi.org/10.1080/07370000802212669>

## Perspectives on Failure *continued*

- Kapur, M. (2015). Learning from productive failure. *Learning: Research and Practice*, 1(15), 51–65. <http://dx.doi.org/10.1080/23735082.2015.1002195>
- Kundu, A. (2014). Backtalk: Grit, overemphasized; agency, overlooked. *Phi Delta Kappan* 96(1), 80. <https://doi.org/10.1177/0031721714547870>
- Lai, P. K., Portolese, A., & Jacobson, M. J. (2016). Does sequence matter? Productive failure and designing online authentic learning for process engineering. *British Journal of Educational Technology*, 48(6), 1217–27. <https://doi.org/10.1111/bjet.12492>
- Lander, V. & Santoro, N. (2016). Invisible and hypervisible academics: The experiences of Black and minority ethnic teacher educators. *Teaching in Higher Education*, 22(8), 1108–1021. <https://doi.org/10.1080/13562517.2017.1332029>
- Likourezos, V. & Kalyuga, S. (2017). Instruction-first and problem-solving-first approaches: Alternative pathways to learning complex tasks. *Instructional Science*, 45(2), 195–219. <https://doi.org/10.1007/s11251-016-9399-4>
- Loibl, K., & Rummel, N. (2014). Knowing what you don't know makes failure productive. *Learning and Instruction*, 34, 74–85. <https://doi.org/10.1016/j.learninstruc.2014.08.004>
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2020). *Qualitative data analysis: A methods sourcebook* (4th ed.). Sage.
- Neff, K. D., Hsieh, Y. P., & DeJitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, 4(3), 263–287. <https://doi.org/10.1080/13576500444000317>
- Patton, L. D. (2016). Disrupting postsecondary prose: Toward a critical race theory of higher education. *Urban Education*, 51(3), 315–342. <https://doi.org/10.1177/0042085915602542>
- Steuer, G. & Dresel, M. (2015). A constructive error climate as an element of effective learning environments. *Psychological Test and Assessment Modeling*, 57(2), 262–275.
- University of Toronto. (2021a). *Enrolment Report 2020-2021*. <https://planningandbudget.utoronto.ca/wp-content/uploads/2021/06/Enrolment-Report-2020-21-FINAL.pdf>
- University of Toronto. (2021b). *Report on Employment Equity 2021*. <https://people.utoronto.ca/inclusion/eedash/>
- Verschelden, C. (2017). *Bandwidth recovery: Helping students reclaim cognitive resources lost to poverty, racism, and social marginalization*. Stylus Publishing.
- Webster, D., & Rivers, N. (2019). Resisting resilience: Disrupting discourses of self-efficacy. *Pedagogy, Culture & Society*, 27(4), 523–535. <https://doi.org/10.1080/14681366.2018.1534261>



## Perspectives on Failure *continued*

**Table 1.**

*Themes of instructor usage of the term “failure,” ranked from most frequent to least frequent.*

Theme	Description of Theme	Example Quote
Learning Process	The role of failure in developing one’s knowledge and skill sets	Learning through the process of. consecutive successful attempts is just lucky isn’t it? It’s unrealistic. So to learn how to achieve success through failure, I think, is key. It’s extremely important to have to learn to sit with that and be comfortable with that in order to continue to struggle and move forward and then achieve that success.
Career Path/ Professional Life	Both the nebulous fear of failure and material markers of failure (e.g. failing graduate school, unemployment, grant/publication rejection) relating to academic training and careers	As an academic, failure completely structures everything we do for our whole entire careers. This fear of failing out and then having to completely do something else with your life.
Academic Failure	Failures and fears of failure associated with academic performance and fulfillment of program and degree requirements	Fear of failure as in a bad grade, or even a slightly lower grade, might affect the students’ willingness to really think about [course] questions and engage with them.
Personal	Equating error or failure with personal deficiency	Defending my dissertation was the most nerve wracking...I’m the first person in my family to, like, get an undergrad degree, let alone a PhD and so that would be my column failing everyone.
Institutional	How institutions fail students, staff, and instructors (i.e., inequitable employment practices, lack of resources, lack of support)	My impression is that the department thinks that some students in every class always fail and that’s on them and that’s just how it is.
Interpersonal	Failures and fears of failure associated with the relationships between individuals	A lot of [fear of failure] had to do with getting the approval of people that I cared about—colleagues, my advisors, people that I respected.
Health/Wellbeing	Effects of failure on physical and mental health and wellbeing.	If students could fail assignments or portions of assignments without it so negatively impacting them, I think, just in terms of mental health, just in terms of personal happiness, satisfaction, wellness, they’d be much better off.

## Perspectives on Failure *continued*

Research/Scholarly Work	The role of failure in research development and writing (excludes publication)	If I can't find something or an answer doesn't come to me quickly or I get confused by how things are fitting together in my research, I don't see that as a failure. That's an opportunity. That's where it gets exciting.
Worldview	Socio-cultural and disciplinary differences in the perceptions of failure	Are you teaching [scientific theories as] unequivocally right and correct versus a concept and way of looking at the world that is historically contingent?
Risk	Ways in which failure and fear of failure can be associated to exploration, challenge, and risk	Students are afraid to take chances or to explore too much because they're deeply, deeply afraid of failing.
Moral	Moral shortcomings with damaging effects to others	My cohort of graduate students, experienced a lot of personal attacks that stifled any desire to take intellectual risks. The person responsible for that removed from the world that enabled that but... I can name two people out of a cohort of 11 who dropped out in specific relation to one person's abusive behaviors.
Social/Cultural	Relationship between failure and social/cultural values.	If we were going to change an education model that went from fear of failure to something else, I think it would have to really pinpoint what drives students intrinsically instead of the extrinsic reward system for good grades and finding a good career and making money.
Unimportant/Insignificant	Failure is not a major experience or is not a significant experience for students	From a student perspective, it's quite hard to fail. You don't often fail. Like you've written a paper, a paper probably you're going to pass. You might not do very well, but the threshold of mediocre seems pretty broad and the instances of outright failing an assignment or doing exceptionally well on an assignment are both very narrow.

## Perspectives on Failure *continued*

**Table 2.**

*Most-often coded themes and subthemes in faculty perspectives of failure in research, teaching, and learning ranked from most frequent to least frequent.*

Main Theme (in ranked order)	Subthemes (in ranked order)
Attitude toward Failure	<ol style="list-style-type: none"> <li>1. Causes Anxiety: Failure and fear of failure cause anxiety and stress.</li> <li>2. Process: Failure is part of the process of learning and growing.</li> <li>3. Form of Knowledge Production: Failure can lead to new avenues of inquiry or understanding.</li> <li>4. Fear of Failing: Failure is an experience to be feared and avoided.</li> <li>5. Risk: Exploring, experimenting, and challenging oneself are risky, though potentially beneficial, endeavors that may lead to failure.</li> <li>6. Creativity/Trial-and-Error: Individuals learn from small-scale, low-stakes encounters with failure that encourage play and experimentation.</li> <li>7. Opportunity/Serendipity: Failure can lead to surprising or fortuitous discoveries or opportunities.</li> <li>8. Generative: Failure can provoke new ideas, questions, methods, and findings.</li> <li>9. Judgment/Stigma: Failure is shameful, looked down upon, and discredits one's character and abilities.</li> <li>10. Adaptability/Flexibility: Navigating failure requires adaptation and flexibility.</li> </ol>
Expectations	<ol style="list-style-type: none"> <li>1. Institutional Expectations: Standards, requirements, qualifications, and conditions expected of students and instructors by the institution.</li> <li>2. Student Expectations: Assumptions, hopes, desires, and requirements of students.</li> <li>3. Disciplinary Expectations: Standards, conventions, and requirements of a specific discipline.</li> <li>4. Instructor/Advisor Expectation: Assumptions, hopes, desires, and requirements of instructors or advisors.</li> <li>5. Personal Expectations: Standards and requirements one holds toward oneself.</li> <li>6. Career Expectations: Standards, qualifications, and requirements demanded by an academic career.</li> <li>7. Social Expectations. Standards, assumptions, and conventions held by society at large.</li> </ol>
Type of Failure	<ol style="list-style-type: none"> <li>1. Writing/Communication: Ability to write/communicate clearly and coherently for an audience.</li> <li>2. Career Path: Ability to fulfill career and employment goals and benchmarks.</li> <li>3. Publishing: Ability to produce studies/articles and fulfill disciplinary research requirements; refers specifically to faculty.</li> <li>4. Assignment/Course/Program Requirement(s): Ability to pass assignments/courses and fulfill program/graduation requirements; refers specifically to students.</li> <li>5. Ability to Relate to Others: Ability to understand and be understood by peer groups or society more broadly.</li> </ol>
Learning Process	<ol style="list-style-type: none"> <li>1. Revision/Iteration: Students should have or have been offered opportunities for revision.</li> <li>2. Needs to be/already incorporated into classroom: Failure pedagogy should be or has already been included in faculty classrooms.</li> <li>3. Second Chances/Improvement: Students should be offered second chances and opportunities to demonstrate improvement.</li> <li>4. Learn From Mistakes: Students can learn from mistakes and should be offered opportunities to try.</li> <li>5. Teachable Moment/Learning Opportunity: Failure is a key learning opportunity and teachable moment.</li> </ol>

## Perspectives on Failure *continued*

Role of Instructor	<ol style="list-style-type: none"> <li>1. Help Students Navigate Feedback: Help students to understand feedback and strategies for improvement.</li> <li>2. Offer Feedback/Identify Improvements: Provide robust feedback and identify areas for improvement.</li> <li>3. Mitigate Anxiety: Be mindful of and address student fears to assuage anxiety.</li> <li>4. One-on-One Attention: Provide students with individualized attention.</li> <li>5. Modeling: Model what failure looks like, problem-solving strategies, and how to recover from failure.</li> </ol>
Scales/Stakes of Failure	<ol style="list-style-type: none"> <li>1. Job/Program: Effects of failure on future academic and career options.</li> <li>2. Low-Stakes Grading: Offer low-stakes assessments to normalize failure and help students learn.</li> <li>3. Evaluations: Effects of student evaluations on instructor standing in the department or institution.</li> </ol>
Power/Privilege	<ol style="list-style-type: none"> <li>1. Who Gets to Fail: Uneven distribution of the ability to safely fail, opportunities/resources to try again, and negative effects of failure.</li> <li>2. Economic/Job Security: Role of career and financial stability on who can take chances, fail, and try again.</li> <li>3. Labor: Departmental and institutional labor practices, including adequate number of instructors/TAs, equitable hiring practices, and distribution of workload.</li> <li>4. Failure Harmful to Others: Individual or institutional failings that produce negative effects for another individual or group.</li> <li>5. Status/Rank: Standing in the institutional hierarchy and its effects on one's ability to take risks, fail, and try again.</li> </ol>
Resources/Support	<ol style="list-style-type: none"> <li>1. Time: Is there enough time to fail and try again?</li> <li>2. Money: Is there enough money and economic security to fail and try again?</li> <li>3. Lack of Support: Gaps in or absence of individual and/or institutional support, including support networks, encouragement, departmental/institutional backing, etc.</li> <li>4. Lack of Resources: Gaps in or absence of individual and/or institutional resources, including mental health resources, advising, etc.</li> </ol>
Shift in Worldview Shift in the understanding of or perceptions toward failure	[No subthemes identified]
Fear of Future	[No subthemes identified]
Competition	[No subthemes identified]



## Perspectives on Failure *continued*

**Table 3.**

*“Wish list” of pedagogical techniques, institutional policies, and socio-cultural changes instructors already use or would like to see included in higher education (unordered).*

<b>Pedagogical Techniques</b>	<p>Clear learning objectives</p> <p>Rubrics</p> <p>Lower stakes and more frequent assessments, including</p> <ul style="list-style-type: none"> <li>• Credit for effort and participation (pass/fail) to allow for exploration and play</li> <li>• Scaffolded or iterative assignments</li> <li>• Repeated assignments with lowest grade dropped</li> <li>• Opportunity for revision</li> <li>• Work-in-progress and/or revision included in grade</li> </ul> <p>Peer feedback/anonymous peer review</p> <p>Model failure and recovery</p> <p>Co-knowledge creation between instructor and students</p> <p>Clarify course definitions of failure</p> <p>Instructor collaborations to create shared vocabulary around failure to highlight similarities across disciplines</p>
<b>Institutional Policies</b>	<p>Re-center learning and improvement over metrics reporting and institutional rankings</p> <p>Support for innovative teaching and pedagogical experimentation</p> <p>Instructor autonomy</p> <p>Instructor collaborations to spread student workload more evenly through semester</p> <p>More time to give detailed feedback and/or return grades</p> <p>Reconceptualization of grades and GPA, including dispensing with grades altogether</p> <p>Reconceptualization of teaching evaluations</p> <p>Increased support for student physical and mental health/wellbeing</p> <p>Smaller classes, or more instructors/teaching assistants for large classes</p> <p>Equitable hiring practices</p>
<b>Socio-cultural Factors</b>	<p>Decouple failure from stigma</p> <p>Decouple failure of a task from personal identity</p> <p>Reconceptualization of priorities, i.e. fame and wealth</p>