# Can Grades Be Used for Good? The Complex and Surprising Relationship between Assessments and Intellectual Risk-Taking

### Shelby Clark and Madora Soutter Harvard University and Villanova University

The celebrate artists who dare to innovate, leaders who challenge the status quo, and activists who have the courage to stand up for what they believe. In schools, we know how important it is for students to develop intellectual courage and to take intellectual risks in ways that are aligned with these kinds of visionaries.<sup>1</sup>

However, we also know that many school structures and teaching methods lie in opposition to these visions of success. Classroom assessments are one such example: standardized tests, rigid rubrics, and even grades more broadly may have the intention of holding students to high expectations, but they can often hinder students' intellectual risk-taking behaviors.<sup>2</sup> If so much rides on a teacher's evaluation or final scores, it's hard to authentically communicate to students that they should take risks. "Take a chance! But not too much, actually, because you are going to be graded on that project based on these ten strict criteria."

Certainly, we all want to hold students to high expectations, and research shows that teacher expectations are linked to student achievement.<sup>3</sup> But grades aren't the only way to communicate high standards, and we know that grading and other high stakes assessment practices are often linked to *lower* levels of intellectual risk-taking.<sup>4</sup> All of this raises the question: Are there meaningful assessment practices we can bring to our classrooms that not only hold students to high standards, but also allow their intellectual courage to thrive?

We are not the only researchers who have asked how to re-design assessment practices for today's classrooms. *Zeal*, for example, recently featured a number of thoughtful pieces on ungrading and the ways in which different educators are approaching this work.<sup>5</sup> Numerous "grading for equity" researchers promote practices such as re-takes and resubmission of work in order to promote mistake-making in the classroom.<sup>6</sup> Other scholars challenge traditional rubrics and propose a framework for culturally and

linguistically responsive rubrics that encourage linguistic agency.<sup>7</sup> Relatedly, some of our own work has explored how schools might measure character development in ways that center social justice considerations.<sup>8</sup>

In our own university-level teaching, we ask ourselves a lot of questions about grading norms: How are assessments useful? How are they harmful? Which ones foster student learning? Which ones lend themselves to creativity and risk-taking? Where is there nuance? We have recently found some guidance by making connections between Jason Baehr's *Deep in Thought* and some of our own research. In this essay, we describe how one school committed to both moral and academic excellence not only created a culture of intellectual risk-taking aligned with Baehr's work (specifically the principles and postures to foster intellectual virtues), but also used classroom assessments in ways that contributed to, rather than detracted from, the intellectual risk-taking of students. We ultimately describe four assessment practices that, along with two guiding principles, can contribute to a culture of intellectual risk-taking in the classroom.

#### What Are Intellectual Courage and Intellectual Risk-Taking?

Baehr describes intellectual courage, one of nine key intellectual virtues, as "a readiness to persist in thinking or communicating in the face of fear, including fear of embarrassment or failure." More simply, he gives it the slogan, "Take risks!" Baehr describes the pursuit of intellectual virtues such as intellectual courage as necessary in classrooms for a variety of purposes, including helping the transmission of knowledge, creating responsible, critically thinking citizens, and giving students the skills and virtues they will need to succeed in the vocational world. Intellectual courage, in particular, is meant to help students persist despite their fears. It is a virtue that is meant to help individuals keep their fear in check in order to pursue epistemic goods—that is, learning—by taking intellectual risks. Baehr noted that intellectually courageous students might volunteer to write a problem on a board or speak up in class, despite their fear.

In our own research, we define intellectual risk-taking (IRT) as engaging in learning by contributing an idea, question, or creative thought regardless of potential errors or judgments. <sup>12</sup> IRT and intellectual courage are overlapping constructs and are often used interchangeably, but one way to describe the difference is that intellectual courage is the virtue itself, while intellectual risk-taking is the associated behavior or the act of displaying intellectual courage.

For Baehr, a variety of practices help to foster intellectual virtues in general and intellectual courage in particular: for example, sharing common

virtue language, allowing time for reflection and practice to build understanding, and finally modeling and assessing virtues. Baehr describes some practices as particularly important for encouraging intellectual courage in students, including inculcating a growth mindset rather than a fixed mindset (e.g., believing one's characteristics or attributes can change), making sure students feel like they belong in the classroom so that they are willing to take risks, and having teachers give up some of their control in the classroom so that there is space for students to practice taking risks. That said, Baehr does not spend much time on how to foster intellectual courage. For that, we turn to our own "Building a Culture of Intellectual Risk-Taking" framework.

#### How Do You Build a Culture of Intellectual Risk-Taking?

A few years ago, we conducted research at a high school where IRT seemed to be thriving in every classroom. Thistle Academy (a pseudonym) was committed to student-led discussions in all content areas, collaborative learning, and problem-solving. After a year-long investigation (including over fifty classroom observations and twenty-three student and teacher interviews), we ultimately created a theoretical framework that isolates eight elements and twenty-one associated teaching moves. The elements of the framework are: 1) reimagine the purpose of school as egalitarian and process-based; 2) create a safe classroom community; 3) focus on not having one single correct answer; 4) normalize disagreement and problem-solving; 5) teach discussion moves and expectations explicitly; 6) have students support each other; 7) have students provide evidence for their work; and 8) reflect.<sup>14</sup>

As we read through the principles and postures in *Deep in Thought*, we saw a direct alignment with Thistle Academy's approach and with our own IRT framework. At a school so authentically committed to student character development, we recognized Baehr's principles personified in our observations and his postures embodied in our teacher interviews. As readers, we found Baehr's work to be such a clear synthesis of the incredibly complex work we observed. We were particularly drawn to Baehr's notes on assessment, feedback, and reflection given the similarly rich culture of reflection, feedback, and growth at Thistle Academy. Further, as we read, we began to consider possible implications for the nexus of assessment and intellectual risk-taking.

## What is the Connection Between Assessment and Intellectual Risk-Taking?

There is a push to move classrooms away from standardized assessments towards new forms of student feedback that better represent the realities of students' learning (e.g., see the "Ungrading," "Rethinking Assessment," and "Improvement Science" movements). As researchers focused on IRT, we have also looked to new ways of understanding the role of assessments in the classroom given the oftentimes negative associations between assessments and grading, on the one hand, and IRT, on the other.

We know that assessments—such as tests and grades—often *diminish* IRT in students. For example, research has found that students with the highest test anxiety tend to be the most risk-averse in their test taking strategies and are also the lowest achieving. <sup>15</sup> Similarly, when one university tried out a "grade-free" policy for a semester for new students, a majority of students and teachers reported that this allowed for greater student risk-taking in the classroom. <sup>16</sup>

Yet, when we read Baehr's work, we were pushed to think about the ways in which assessments in general—both academic and character assessments—might be leveraged to *foster* virtues. Baehr notes in his chapter on reflection that, in order to be intellectually virtuous, students must be able to self-reflect and come to understand themselves as "thinkers and knowers." One way Baehr suggests to help students begin to self-reflect is by using self-assessments. Through suggestions such as this, *Deep in Thought* inspired us to re-examine our data from Thistle Academy and to ask the question: To what extent can assessment practices contribute to intellectual risk-taking?

#### **Assessment Practices That Support Intellectual Risk-Taking**

Our data analysis revealed four assessment practices that contributed to a culture of intellectual risk-taking at Thistle Academy: (1) problemsolving homework together, (2) participation grades, (3) whole-class reflection process, and (4) teacher reflection.

#### Assessment Practice 1: Problem-Solving Homework Together

At Thistle Academy, homework assignments were approached in formative and collaborative ways that supported the intellectual risk-taking behaviors of students. For example, in the majority of the math courses we observed, class began by students selecting which problems to write up on the board (sometimes because they felt confident and sometimes because they were stuck and wanted support), followed by students and teachers problem-solving together.

In several classrooms, we observed students willing to share their partial work even when they were unsure how to complete a problem. When they were unsure of what next steps to take, they appeared comfortable showing their efforts and mistakes and soliciting the help of their classmates and teachers, making comments such as, "I can put up [problem 3], but not in a complete way.... We can figure it out as a class." Or, "somebody will have a better way of doing it."

In our interviews, students spoke about how this kind of practice contributed to their comfort in taking risks. One student shared:

You're given problems you haven't really learned how to solve yet. You solve them on your own, and then if you didn't understand a problem, you could still write it on the board. You can go up in front of the class and say, "I kind of understood it, but I also didn't understand fully how to solve it. I got to this point and I didn't know where to go next." And the class will help you and that's normal. It happens all the time.

Rather than using homework as busy work, repeated practice, or checks for understanding evaluated by the teacher alone, this thoughtful use of homework is directly aligned with Baehr's guidelines (e.g., his emphasis on assessments not diminishing the intrinsic motivation of students) and also with our own intellectual risk-taking framework (e.g., normalize disagreement and problem-solving). Importantly, this approach both depended on a safe classroom climate and contributed to it. Moreover, collaborative problem-solving with homework necessitated (and was made possible by) the collective intellectual risk-taking and support of the entire classroom community.

#### Assessment Practice 2: Participation Grades

Much of the research on intrinsic motivation and grading suggests that participation grades would have a negative impact on students' intellectual risk-taking. <sup>19</sup> Surprisingly, and crucial to our central, pro-Baehr thesis, students' comments suggested the opposite at Thistle Academy.

For example, one student noted that they started at their school as someone who "barely talked in class" but they saw in their teachers' comments that they needed to "talk talk talk," so they said:

I'll work on that—like a goal—so, even if I didn't know the answer, I would just try to answer, try to speak up. The other students could either correct you or say, "oh yeah that's how it goes." So, it's like I'm more willing to say something even if I know it may or may not be correct.

Yet participation grades encouraged more than individual risk-taking. They also encouraged students to support *their classmates* in taking intellectual risks.

One student noted that because "40% of your grade in most classes is your participation grade, [you] sort of force yourself to enter the discussion." The student went on to comment that this

affected [their] ability to advocate for other people [because] if you see someone who's made a point and they've been asked for evidence and they can't find it, that's hard to see. I enter the discussion to say "Oh, well, I saw it here...," supporting your point of what you're saying. And it's like a lot of building off of other people's points.

Another student agreed that participation grades can help push students to advocate for others. They noted that there was a time when a student

didn't have her voice yet; she wasn't participating at all. And so, yes, I just wanted to help her get her participation grade, but also I thought she could benefit and contribute to the class. So when I've got everyone's attention I would say, "[name of other student], is there anything you want to say?" and just using my voice to help others to find theirs.

Again, we see how the participation grade contributed to this student's thinking around not only their own participation and risk-taking, but that of their classmates as well.

Although someone could argue that participation grades make it so that students are not *really* learning how to be intellectually courageous because they are not taking risks out of their own interest or motivation, it's important to note that Baehr describes intellectual virtues as habits that needs to be built and that that intellectual virtues are intrinsically motivated "at best."<sup>20</sup> Moreover, these students' comments demonstrate that participation grades are an assessment practice that allows students to practice

what Baehr describes as the *skill* element of the habit of intellectual courage (or risk-taking): "proper fear management."<sup>21</sup>

#### Assessment Practice 3: Whole-Class Reflection Process

Every class at Thistle Academy also engaged in a unique form of meta-cognitive self-assessment (e.g., reflecting on their own thinking and learning) that contributed to the culture of IRT at the school. This whole-class reflection process was designed to allow students and teachers alike to share feedback with each other on how classes—and often specifically discussions—were working for everyone. Through this process, teachers ensured that they were not the sole evaluators of success in the classroom and were actively responding to students' experiences and perspectives.

Typically, the way that this reflection process worked was that teachers would leave the room and students would discuss which elements of the class were working for them and also what they felt could be improved. The students would then present this information to the teacher who would respond accordingly. In the excerpt from our field notes below (edited slightly for brevity and clarity), students discuss elements of their teachers' approach to grading and exams:

**Student 4**: I think it takes forever to get our assignments back to us.

Student 5: I think it's normal. Who did you have last time?

Student 4: Ms. T—she got everything back the next day.

Student 5: But that isn't reasonable. He has, like, a family.

Student 3: I think Ms. T is an anomaly.

**Student 2**: How about getting stuff back before tests—should we put that up?

**Student 6**: What did you guys think about that one problem on the test?

**Student 1**: I just didn't understand the test.

**Student 3**: He genuinely believes that tests are learning experiences.

**Student 2**: Something to work on is, like, making sure that everyone understands the problems before they are on the test.

The discussion continued, and when the teacher re-entered the room the students shared this final list of how they felt the semester was going so far:

Pro: Homework load, tough but fair, respectful discussion

<u>To Work On</u>: Make sure to get all of the problems on the board, make sure everyone understands the problems before the test.

The teacher (after first asking the class if there were any other voices that would like to contribute) responded in this way:

I tend to agree. I think you guys have a good dynamic. The assessments—I don't expect you to understand everything on the test. I guess that's not conventional. I want you to see things you haven't seen.... I don't want you to be too focused on the tests.... I want you to think about how you can be stretched....

In this example, we see how the teacher not only responded directly to students' feedback, but also emphasized his belief in assessments as genuine space for intellectual risk-taking.

Interviews with students illustrated the ways in which these wholeclass metacognitive reflections contributed to a culture of IRT. For example, one student spoke at length about how these reflection sessions created space for thinking about how to foster a culture of "no bad questions" and ideas such as "you should be willing and open to ask questions"—key elements of intellectual risk-taking. They noted that these sessions often allow students to advocate for intellectual risk-taking:

[The teacher leaves] the classroom for 10 or 15 minutes and we write down the positives of the class and the negatives [together]. So, for instance, if we have too many pauses we can say, 'maybe we should come to class more with notes prepared or questions.' If we have a very dynamic class, maybe having more down time.

The student went on to explain that these sessions "help a lot of students because they're able to [think], 'well I think we should maybe give more quiet pauses, like 20 second breaks so the quieter [people] can get their point in."

Another student echoed these points, noting that the midterm reflections often allow for advocating for space for other student voices:

If a teacher thinks that someone's talking too much they'll be like, "maybe we need to have more class participation instead of having it be unbalanced in certain areas of the table." So it's not like you're pointing at a person and being like, "You talk too much," it's more like we need to learn a balance, and a lot of times you are able to be

self-aware enough to understand that yes, I have been talking a lot, and yes, I need to allow other people to speak.

As evidenced by the comments made here, the midterm evaluation is a time for students to reflect on their own discussion habits, but an interesting outcome of such reflection is that students created space for the growth of their own, *and others*', intellectual risk-taking. As Baehr writes: "if we can provide our students with rich and specific feedback about their intellectual character strengths..., this knowledge may bolster their commitment to growing in their intellectual virtues."<sup>22</sup>

Importantly, this kind of metacognitive self-assessment aligns with several of Baehr's assessment guidelines, including 1) approaching assessment work with intellectual humility, 2) using assessment information in positive and supportive ways, and 3) incorporating multiple perspectives. The willingness to engage in this reflective evaluation process is a clear indication of the ways in which teachers approached their work with intellectual humility and a desire to incorporate input from multiple perspectives. Similarly, the ways in which they genuinely listened to student feedback showed that they valued student voice and leveraged their feedback in order to support student growth.

#### Assessment Practice 4: Teacher Reflection

The final theme that stood out in our data was that many teachers reflected on the ways in which grades and formal assessments might impede student learning, motivation, and intellectualism more broadly. For example, one teacher reflected on how she hated grading student work because she felt that it negated the work she had done to set up an egalitarian environment (e.g., one with mutual respect):

I hate grading their papers. I don't mind commenting on them, but I hate having to give them the grade. I wish that this collaborative and non-hierarchical system that we have in the class could also translate into our writing program and our assessment because they're counter-intuitive.

Similarly, another teacher acknowledged that broader society (e.g., universities, achievement-driven expectations) necessitated teachers' use of grades, but he was unsure how to reconcile his own concerns about the negative impact of those grades:

We are always struggling here, frankly, with the battle against extrinsic motivation. I'm not naive; they are hoping to get into a good school—ideally a brand name school—and so grades matter. That has to play a part. I know that extrinsic motivation can sap intrinsic motivation—that worries me a lot. But I think my sense is that we give kids as much as any school does—the chance to really find their own intrinsic connection to the work.

We see this kind of grappling (which was echoed by several teachers we interviewed), in and of itself, as an important part of the ways in which these teachers' use of assessments aligned with Baehr's work: teachers approached their concerns with intellectual humility (e.g., they didn't feel they had a final answer yet and were constantly grappling with what approach would best serve their students), with great care (e.g., working to ensure that they were not diminishing the intrinsic motivation of the students), and with intentional support (e.g., using any information to guide their future instruction).

That teachers saw the nuance, talked through it, and leaned into the complexity, is also an important part of our own IRT model. Our framework emphasizes that teachers must be willing to think critically about the ways in which certain approaches are working (or are not working) for each one of their students.

#### **Two Final Thoughts**

As a qualitative case study of one school, these results are of course not broadly generalizable, but we hope readers find them instructive. While the four assessment approaches described here align with Baehr's guidance and with our own IRT framework, some of the findings also surprised us and encouraged us to look carefully at our own assessment practices to see how we might re-examine the assignments on our own syllabi.

We are acutely aware that all assessment practices can be wielded in harmful ways that can *absolutely* diminish the internal motivation and risk-taking of students. But the assessment practices at Thistle Academy illustrate that *some* assessment practices can have a positive effect.

To close, we share two take-aways that we identified in our data—touchpoints that we see as critical for all assessment practices (both virtue and academic) to help ensure that assessments help students thrive.

#### Individual and Collective Virtues

One central theme that stood out to us in our research was that the culture of intellectual risk-taking we observed was not just about individual students, or just about a certain teacher's pedagogical moves, but rather that the culture was a result of several elements from the teacher *and* students woven together in complex, iterative, and interconnected ways. Everyone we observed and spoke to seemed to recognize that this kind of culture could not thrive if only a handful of students felt confident taking risks, or if even a single student did not feel comfortable. This held true for the influence of assessments; we saw—and students consistently spoke about—the ways in which the assessments described above encouraged them to bolster not only their own, but also their classmates' intellectual risk-taking.

When we talk about virtues and character and social-emotional learning, often the conversation is about individual growth. While this is important, we must always return to the importance of creating a community where students look out for one another (which is also aligned with Baehr's principle of collaboration over competition).<sup>23</sup> This is of course much easier said than done, but it is also a critical component for equity considerations. For example, if a student in a class is not displaying intellectual courage, it is important not only to coach that individual student (e.g., Baehr suggests that if students are not participating during a discussion, a teacher might explicitly note that this could be a good time for them to practice exhibiting intellectual courage),24 but also for a teacher to look at their own practices, postures, and classroom community to reflect on the ways in which they and the rest of their class might shift to support that student.<sup>25</sup> This does not mean eschewing personal responsibility for individual growth, but rather reflecting on and adjusting systemic and contextual factors needed to support individual and collective growth.

#### Formative Assessments

Assessments are often used to evaluate student knowledge rather than to give students the feedback they need in order to "see where they are and [help] them move toward a point of greater understanding or mastery." Assessments focused more on student growth over evaluation are usually formative assessments: often students receive feedback via an assessment, are able to reflect on the feedback, and by doing so are able to improve their performance in some manner. As seen above, Thistle Academy used their homework, participation grades, and midterm evaluations in a formative manner: students saw these assessments as feedback on their learning rather than summative evaluations of their performance. For example, even though grades are often thought of as summative assessments,

in *this* case, many students spoke about how they were actually a form of feedback indicating whether they needed to be more active or not in discussions; this was feedback they could immediately learn from and use to become more intellectually courageous in later discussions. Baehr similarly discusses how he uses self-report assessments formatively for students in his college classroom to encourage reflection on their intellectual character.<sup>28</sup>

In the future, educators should continue to draw on formative assessment practices in order to cultivate IRT and intellectual courage in the classroom. Such assessments must be clear, supportive, give actionable feedback, and allow students to redo their work based on the feedback. This means that, if a teacher assigns a character grade on an end-of-year report card, this "grade" should be responding to specific, clear standards regarding character that were established earlier in the year. Moreover, the grade should offer some form of actionable feedback to the student that they—hopefully—would respond to and improve upon before the end of the year.

As researchers and teachers, we grapple with the benefits and draw-backs of assessments, for student growth generally and intellectual risk-taking specifically. We ultimately hope these four practices and two recommendations, developed in conversation with Baehr's work, can provide some guidance for how assessments, including even the practice of assigning grades, can bolster students' intellectual risk-taking in the classroom.

<sup>&</sup>lt;sup>1</sup> See Jason Baehr, *Deep in Thought: A Practical Guide to Teaching for Intellectual Virtues* (Cambridge, MA: Harvard Education Press, 2021); Ronald A. Beghetto, "Correlates of Intellectual Risk Taking in Elementary School Science," *Journal of Research in Science Teaching* 46, no. 2 (2009): 210–23; Bayram Cetin, Mustafa Ilhan, and Ferat Yilmaz, "An Investigation of the Relationship between the Fear of Receiving Negative Criticism and of Taking Academic Risk through Canonical Correlation Analysis," *Educational Sciences: Theory & Practice* 14, no. 1 (2014): 146–58; Shelby Clark and Madora Soutter, "Growth Mindset & Intellectual Risk-Taking: Disentangling Conflated Concepts," *Phi Delta Kappan* 104, no. 1 (2022): 50–55; Madora Soutter and Shelby Clark, "Building a Culture of Intellectual Risk-Taking: Isolating the Pedagogical Elements of the Harkness Method," *Journal of Education* 203, no. 3 (2021): 508–19.

<sup>&</sup>lt;sup>2</sup> See Joe Feldman, *Grading for Equity: What It Is, Why It Matters, and How It Can Transform Schools* (Thousand Oaks, CA: Corwin Press, 2019).

<sup>&</sup>lt;sup>3</sup> Christine Rubie-Davies, "Great Expectations: Pedagogical Beliefs and Instructional Practices," *Research Information for Teachers* 3 (2006): 34–38.

<sup>4</sup> Tova Stenlund, Hanna Eklöf, and Per-Erik Lyrén, "Group Differences in Test-Taking Behaviour: An Example from a High-Stakes Testing Program," *Assessment in Education: Principles, Policy & Practice* 24, no. 1 (2016): 4–20.

<sup>&</sup>lt;sup>5</sup> See Zeal: A Journal for the Liberal Arts 1, no. 2 (2023).

<sup>&</sup>lt;sup>6</sup> David Clark and Robert Talbert, *Grading for Growth* (New York: Routledge, 2023); Jane R. Shore, "*Gradeless or Grade Less*?" November 15, 2020, https://schoolofthought.substack.com/p/gradeless-or-grade-less.

<sup>&</sup>lt;sup>7</sup> Christina L. Dobbs and Christine M. Leider, "A Framework for Writing Rubrics to Support Linguistically Diverse Students," *English Journal* 110, no. 6 (2021): 60–68.

<sup>&</sup>lt;sup>8</sup> Shelby Clark, Madora Soutter, and Alison Lee, "Measuring Character: EL Education's Journey in Developing Tools for Improvement and Impact in Social, Emotional, and Academic Learning. Theoretical, Psychometric, and Educator Considerations," report written for EL Education, 2020; Madora Soutter, Shelby Clark, and Alison Lee, "Holding Schools Accountable for Equity in Character Measurement: Bridging Theory and Practice," *Journal of Character Education* 18, no. 1 (2022): 113–34.

<sup>&</sup>lt;sup>9</sup> Baehr, *Deep in Thought*, 195.

<sup>&</sup>lt;sup>10</sup> Ibid., 18–36.

<sup>&</sup>lt;sup>11</sup> Ibid., 59.

<sup>&</sup>lt;sup>12</sup> Soutter and Clark, "Building a Culture of Intellectual Risk-Taking." See also Beghetto, "Correlates of Intellectual Risk Taking in Elementary School Science"; Clark and Soutter, "Growth Mindset & Intellectual Risk-Taking: Disentangling Conflated Concepts"; and Margaret M. Clifford, "Risk Taking: Theoretical, Empirical, and Educational Considerations," *Educational Psychologist* 26, no. 3 (June 1, 1991): 263–97.

<sup>&</sup>lt;sup>13</sup> Baehr, *Deep in Thought*, 46. See also Carol S. Dweck, *Mindset: The New Psychology of Success* (New York: Ballantine Books, 2007).

<sup>&</sup>lt;sup>14</sup> Soutter and Clark, "Building a Culture of Intellectual Risk-Taking," 511.

<sup>&</sup>lt;sup>15</sup> See Stenlund, Eklöf, and Lyrén, "Group Differences in Test-Taking Behaviour."

<sup>&</sup>lt;sup>16</sup> Chris McMorran and Kiruthika Ragupathi, "The Promise and Pitfalls of Gradeless Learning: Responses to an Alternative Approach to Grading," *Journal of Further and Higher Education* 44, no. 7 (2019): 925–38.

<sup>&</sup>lt;sup>17</sup> Baehr, *Deep in Thought*, 10, 130.

<sup>&</sup>lt;sup>18</sup> Ibid., 137.

<sup>&</sup>lt;sup>19</sup> Edward L. Deci, Richard Koestner, and Richard M. Ryan, "A Meta-Analytic Review of Experiments Examining the Effects of Extrinsic Rewards on Intrinsic Motivation," *Psychological Bulletin* 125, no. 6 (1999): 627–68.

<sup>&</sup>lt;sup>20</sup> Baehr, *Deep in Thought*, 32.

<sup>&</sup>lt;sup>21</sup> Ibid.

<sup>&</sup>lt;sup>22</sup> Ibid., 172.

<sup>&</sup>lt;sup>23</sup> Ibid., 76.

<sup>&</sup>lt;sup>24</sup> Ibid., 102.

<sup>&</sup>lt;sup>25</sup> See further Clark, Soutter and Lee, "Measuring Character"; David Paunesku and Camille A. Farrington, "Measure Learning Environments, Not Just Students, to Support Learning and Development," *Teachers College Record* 122, no. 14 (2020): 1–26; and Soutter, Clark, and Lee, "Holding Schools Accountable for Equity in Character Measurement."

<sup>&</sup>lt;sup>26</sup> Lory Hough, "The Problem With Grading," *Ed. Magazine*, May 19, 2023, https://www.gse.harvard.edu/ideas/ed-magazine/23/05/problem-grading.

<sup>&</sup>lt;sup>27</sup> See Soutter, Clark, and Lee, "Holding Schools Accountable for Equity in Character Measurement."

<sup>&</sup>lt;sup>28</sup> Baehr, *Deep in Thought*, 138.