



Error Terror: The Value of Thinking and Acting Like a Child

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“Error marks the place where education begins,” Mike Rose posits as one of the central themes of his book *Lives on the Boundary*. Error is a signal of stepping outside the confines of our comfortable knowledge base, of taking that risk and transcending what we already know; yet it is precisely error that is punished. If trial repeatedly ends up as punished error, the fear of error may hinder the curiosity proclivity of young children who then develop “error terror.” For those who are marginalized in society, the awareness of their likelihood for error, of the stereotypes associated with lack of ability, increases the propensity for mishaps in classroom performance.

Experts identify the importance of students thinking and acting like children when learning new material. Children have a natural inquisitiveness about their environments, which develops their cognitive abilities and capability for perspective taking. Very young children, when nurtured in positive environments, do not experience shame for trying new things—in learning how to pronounce a new word, for instance. They will try repeatedly until they get it right. They do not feel “stupid” for not knowing something. Children develop this incapacitating feeling through interactions with others. They begin to know ahead of time, even before trying something new, the impending judgments associated with a trial of their curiosity. There is something about the socialization process that pummels to a lifeless pulp this inclination to

express our curiosity. Particularly for minorities, failure looms as a shadowy figure in the background.

Error terror becomes a debilitating reality, especially for the marginalized of society, as displayed in the multitude of research on the consequences of stereotype threat in and out of the classroom. African-Americans, for example, are well aware of the negative stereotypes that surround their academic performance, with the idea that others will see a failure as indication of an inherent and global personal flaw as opposed to simply something that occurs on a bad day. Similarly, compared to those from high socioeconomic status, those from a lower socioeconomic background have significantly poorer performance on tests that measure intellectual ability. Females are cognizant of the stereotypes surrounding a presumed lack of skill in the math and sciences, which impacts their performance on math tests. Error terror is especially commonplace for those who feel they are already behind and need to prove themselves to establish credibility. They are “IQ guilty” until proven innocent.

Though the research results are in, a fatalistic mentality need not apply. In the classroom, there is a plethora of responses educators can take to combat this impact. For example, having a discussion emphasizing that intelligence is not “fixed” can decrease anxiety for those confronted with performance testing. Awareness of the existence of stereotype threat is important in inhibiting its influence. Also, affirming one’s preexisting qualities and skills enhances overall confidence, as opposed to dwelling on flaws and foibles. A teacher can remind students that although portions of the

coursework may be challenging, they are confident in their students’ abilities.

More significantly, perhaps, error should be placed within a different framework in the classroom and in public discourse. Teachers can discuss error as an issue or a concept in and of itself, as opposed to error being exclusively something that ends up punished as result of poor performance. In relation to writing papers, for example, Mike Rose argues that “before we shake our heads at these errors, we should also consider the possibility that many such linguistic bumbles are signs of growth, a stretching beyond what college freshman can comfortably do with written language.” (p. 188) Mistakes are emblematic of risk taking, of going outside the confines of a comfortable knowledge base. They are a reflection of the unalloyed curiosity proclivity.

As educators, it is important that we be reminded that there is tremendous value in thinking and acting like a child. Curiosity has yet to be dethroned, and the fear of error has yet to demarcate our

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- Write directly to the audience, remembering that this is a newsLETTER.
- Keep the article short; generally between 2 and 3 double-spaced pages.
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Does It Matter How Students Feel about a Course?

A line of research (done mostly in Australia and Great Britain) has been exploring what prompts students to opt for deep or surface approaches to learning. So far this research has established strong links between the approaches taken to teaching and those taken to learning. If teachers are focused on covering large amounts of content and do so with few attempts to involve and engage students, students tend to learn the material by memorizing it, often without much understanding of it. This new work involved a 388-student cohort enrolled in a first-year biology course and explored the relationship between the ways students emotionally experience a course and the approach that they take to learning in the course.

Researchers had to start by constructing an instrument that captured students' emotional responses to a course. Several different instruments have been developed and widely used to identify whether students are using learning approaches associated with deeply understanding the content or with superficially memorizing details. But no appropriate instrumentation was available to measure the emotional responses of students to courses, although related research provided a good starting point. The 18-item instrument these researchers developed contains three subscales: one with questions associated with positive emotions such as pride, hope, and confidence, and two that measure negative emotions, one associated with frustration, anger, and boredom and the second with anxiety and shame.

To explore the relationship between emotions and approaches to study, students filled out the new Student Experience of Emotions Inventory and the Revised Study Process Questionnaire (a 24-item inventory developed by Biggs, Kember, and Leung). They did so based on their experiences in a biology course. Researchers analyzed the data using three methodological approaches: correlation analyses, principle components

factor analyses, and cluster analysis.

All three of these analyses "show significant relations between students' emotional experience, their approaches to learning and their learning outcomes." (p. 816) For example, the cluster analysis identified a group of students "who report, on average, experiencing relatively higher positive emotions, [who] also report using more of a deep approach to learning and achieve statistically higher learning outcomes. These same students also report lower negative emotions, and adopt learning approaches that have fewer surface elements. In the sample, another cluster of students who report relatively stronger negative emotions in learning, and adopt more surface approaches, have lower learning outcomes on average, and report lower positive emotions and less deep approaches to learning." (p. 820) The higher and lower learning outcomes or academic achievements were measured by final course grades in this research.

In some ways these results are not surprising. They would be what most teachers would predict. If a student is not feeling positive about experiences in the course, that certainly affects the motivation to study and the amount of effort put into the course. The more pragmatic question involves what teachers can do to help student have positive emotional experiences in the course. Some might argue that the emotional responses of students are not something that should concern teachers, but if students' emotional responses end up impacting how well they learn the material, which this research seems to indicate they do, that makes it more difficult for teachers to discount their importance.

Reference: Trigwell, K., Ellis, R. A., and Han, F. (2012). Relations between students' approaches to learning, experienced emotions and outcomes of learning. *Studies in Higher Education*, 37 (7), 811-824. 🌳

Evaluating the Absurd: A Lesson in Critical Thinking

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For the past few semesters, I have been using a critical thinking and information literacy activity in my College Success course for first-year students. Usually new college students begin the research process by executing a keyword search in Google. With those Google retrieves, students begin searching through Web page links for material they can use to complete their research assignments. Few are giving any critical thought to whether the information is timely, accurate, biased, or even relevant. Google searches aren't necessarily bad or inappropriate first steps. The problem is finding valid, authentic, and peer-reviewed information among the many links in Google. That search can cause frustration, discouragement, and ultimately a negative experience, not to mention a poor product, especially if the student doesn't know what valid and authentic information looks like.

The College Success course taught at Polk State College introduces library resources and support services available to students. In this particular assignment, students are supposed to learn how to differentiate between a valid Web page and one that is questionable. They use problem-solving strategies to evaluate website validity. That process is guided by a rubric that helps them identify the credibility, accuracy, reasonableness, support, design, and technology of the website.

I have students start the assignment in groups. After looking at a sample of popular magazines and journals, they brainstorm the similarities and differences between magazines and scholarly journals. We use the group lists to generate a comprehensive class list that includes elements of design, layout, and written content. The next step is to talk about the differences between printed resources

and Internet resources. I invite a librarian to join this discussion. We focus on the similarities and differences between electronic resources, including Web pages and articles retrieved from subscription research databases. The librarian takes some time to teach students how to access electronic resources available through the college library.

After this instruction, I assign the groups different websites (both valid and absurd ones) and provide a rubric they are to use when evaluating the sites. Here are some examples, first of absurd sites and then of valid ones.

Feline Reaction to Bearded Men

This study suggests that cats were exposed to bearded men and their reactions were collected and analyzed.
www.sree.net/stories/feline.html

Pacific Northwest Tree Octopus

This is an informational site promoting advocacy to save the tree octopus
<http://zapatopi.net/treeoctopus/>

Aluminum Foil Deflector Beanies

This information discusses how to make the beanies and why it is so important to use them.
<http://zapatopi.net/afdb/>

The Ova Prima Foundation

This site discusses the support of the egg in answer to the controversial question "Which came first?"
www.ovaprima.org/

Dihydrogen Monoxide

Another scientific name for water, though the word "water" is never used in the website. Students will research this site for a week and often not realize it's talking about water.
www.dhmo.org/

Chocolate and Fair Trade

Fair Trade gambit. (2006). *Candy Industry*, 171(9), 18-23.

Pythons in the Everglades

Raloff, J. (2012). Pythons squeeze out local species in South Florida. *Science News*, 181(4), 5-6.

Bariatric Surgery

Dajer, T. (2006). Why does her belly hurt? *Discover*, 27(3), 24-25.

Tattoo Removal

Poljac, B., and Burke, T. (2008). Erasing the past: Tattoo-removal programs for former gang members. *FBI Law Enforcement Bulletin*, 77(8), 13-18.

Wellness Programs at Work

Bolch, M. (2012). Wellness works. *Financial Executive*, 28(6), 26-29.

Using the rubric, each group then presents an evaluation of its website to the rest of the class. The presentations generate both laughter and deep discussion. Discussing the absurd websites promotes critical thinking. Students recommend ways to improve both the appearance and content of their sites in order to increase their validity and authenticity. Reviewing the valid research articles reinforces the physical and cognitive considerations necessary to determine whether a source is valid.

The main "aha" moment comes when students realize that they really cannot trust all websites on the Internet even though some look professional and present their content realistically. Furthermore, students realize that there is research material available beyond Google and that the library is much more than a place to study and store books. 🌳

In Defense of Teaching

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Mark Twain once remarked that “All generalizations are false, including this one.” It seems that we are in a time—an educational crossroads of sorts—when teaching is overgeneralized to the point where it can be difficult for professionals to have meaningful conversations. Tired descriptors such as “sage on the stage” and “guide on the side” have permeated the pedagogical literature for more than two decades now even though they greatly oversimplify what really takes place in the college classroom. Most teaching occurs on a continuum between these two extremes. But now the term “lecture” is equated with using didactic instruction and nothing else. It is regularly blamed for a multitude of pedagogical problems in the academy. Articles in various educational journals regularly associate teaching with telling and continue to recommend that this traditional method be completely abandoned in favor of more student-centered strategies that promote active learning.

Educational research findings do need to be applied more regularly to teaching, and there is no doubt that student-centered approaches are integral to student success. We are in a robust time of pedagogical design aided in some measure by technological development and faculty creativity. However, at times the emphasis on student learning ends up devaluing teaching and diminishing all that it contributes to student learning.

Many educators now opt for metaphorical descriptions such as guide, mentor, coach, designer, choreographer, and tutor rather than calling themselves teachers. In fact, in his Nov./Dec. 2001 *Change* article “The Case Against Teaching,” Larry Spence ends with the sentence “It’s not the teaching, it’s the learning, stupid.” Although a provocative statement drawn from presidential politics of the time and one that challenges educators to think about the very nature of teaching and learning, it’s not useful to pit teaching against learning.

We reject the notion that teaching is just telling and feel that the focus on learning diminishes the critical contributions teachers make in the lives of their students. Indeed, we believe that good

teaching embodies a wide variety of metaphors used to describe it. At times, students need a sage who challenges them to think analytically and critically. Other times students need a guide to help them while they construct their own ideas and apply problem-solving techniques to different issues. Some students need to be motivated, and others need a mentor who offers advice on educational and career paths.

It is time to reassert the role of teacher as a multifaceted individual who contributes to learning inside and outside the classroom. Teachers positively impact students on many levels, including curriculum design, intellectual challenge, personal growth, career guidance, and other less tangible areas. Our students do not know us only as teachers who designed their course, but they also know us as the people who listen to their aspirations and struggles. Indeed, students’ memories and experiences with teachers are often just as important to their success as the skills they develop and the knowledge they acquire. Mark Twain might consider that one of those false generalizations; we’d be inclined to disagree. 🌲

Assignment Options

The article referenced below raises the possibility of giving students some choice over the kinds of assignments they complete. In previous issues of the newsletter, we have shared systems that give students some discretion in the weighting of various assignments. Letting them decide whether they will take exams, write papers, prepare online materials, make presentations, or use other assignment options goes a step further. This article explores the various issues and objections associated with the approach.

Two benefits accrue when students are given some choice about assignments. The first is motivational—when students

select the method they will use to master the material, they can pick an option they think they’d like to complete. And if an assignment option looks appealing, that increases the chance that students will spend more time working on it and more learning can then result. Second, the practice confronts students with themselves as learners. With teacher guidance, they can be challenged to consider why they find some assignments preferable. They can be encouraged to consider what skills the assignment involves and whether those are skills they have or need to work on developing. A strategy such as this moves students in the direction of

autonomy and maturity as learners.

It is an approach that raises questions, starting with whether students will make good choices. If a student doesn’t like to write or doesn’t think he or she writes well enough to get decent grades, would that student choose writing assignments? It would be irresponsible to let students with poor writing skills complete a course or a degree program without trying to redress this skill deficiency. This problem can be solved by how the options are designed. Students can be given choices within parameters. There are four cate-

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What Is the Public Face of Your Field?

Required introductory courses—that’s how most students meet our disciplines or, as John Zipp says, they are the “public face” of the field.

Triangulating data from several sources, Zipp raises a number of questions about these first and, for most students, final encounters with his field. He estimates that between 1.5 and 2.0 million students per year take Introduction to Sociology. Between 6.4 and 8.5 percent of those students end up majoring in sociology. One in eight students who gets an undergraduate degree in sociology continues on to graduate school. “They constitute a mere .02 percent of those who take Intro.” (p. 304) Zipp’s point is simply that what students do or don’t learn about a discipline happens in the introductory course.

In sociology any number of surveys have inquired about what faculty believe is appropriately taught in the course. There is an overall degree of consensus. “We have derived these understandings among ourselves, paying little attention to what skills or knowledge our students want and/or need.” (p. 310)

Zipp reports on data documenting the skills sociology grads say they use daily

and the skills employers have indicated colleges and universities should place more emphasis on. They are not what’s being taught in the typical intro course.

His conclusion: “Perhaps because too much emphasis is placed on Introductory Sociology to be a comprehensive introduction to what is a wide-ranging and divergent discipline, an uneasy tension exists between pressures to cover more substantive material ... and the needs/interests of our Intro students.” (p. 309) In sociology, as in many disciplines, textbooks end up contributing to the coverage problem. Zipp considers three successful intro texts. The shortest is 640 pages; the longest is 800 pages. “In many respects, this type of book is not far from an annotated bibliography of thousands of studies, ranging from classical work that perhaps all college graduates should know to some research that I dare say most sociologists would not have come across unless they used that particular Intro. book.” (p. 307)

The “public face” of sociology as seen in its introductory course is also a function of who teaches the course. Zipp starts with the type of institution where students take the course, which is mostly

research universities and community colleges. At research institutions, the bulk of the beginning courses are taught by graduate students or part-timers. Zipp thinks that many who teach at community colleges are in those two groups as well. He knows that much good instruction is being delivered by graduate students and part-timers, but “it is probably not a stretch to contend that proportionately these groups of instructors are less likely to be as well integrated into the profession as are many of their colleagues.” (p. 305)

The issues and analysis offered in this article raise questions and concerns relevant to every discipline that offers non-majors a course. Zipp’s basic point is relevant to all of us. “If Introductory Sociology really is our public face, we clearly need to spend a considerable amount of time making sure this is how we want to be seen.” (p. 310)

Reference: Zipp, J. F. (2012). 2011 Hans O. Mauksch Address: Teaching for Whom? *Teaching Sociology*, 40 (4), 301-311. 🌳

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gories of assignments. Students must complete an assignment in each category, and, of course, one of the categories contains writing assignments. But this kind of teacher control may not make clear the necessity that learners have to self-assess and remediate deficiencies.

When I gave students some choice about assignments and then asked for the reasons one assignment was selected over another, the most common answer was that the chosen assignment looked “easier” than the other options.

The solution here involves clearly identifying the desired learning outcomes first. That’s where course design needs to

start. With those identified, then assessment options can be developed. An example included in the article makes this clear. Say one of the desired learning outcomes for the course involves being able to construct a coherent, well-structured, critical argument. Students could demonstrate their ability to do that in a traditional essay assignment. But they could also do it by creating a Web page, by regularly writing reflective blogs or journal entries, or by making a video production. As the authors point out, “If the assessment criteria are clear about the desired learning outcomes, then students could use a variety of formats to meet those outcomes.” (p. 774)

There’s another fairness concern: When everyone takes the same exam,

student performance can be compared; but when students are completing different assignments, that is not possible. Giving students assignment options is not an approach that works well in competitive classroom environments. But when students are being evaluated on how well they meet previously established criteria, how their performance compares to that of other students is largely inconsequential.

Reference: Irwin, B., and Hepplestone, S. (2012). Examining increased flexibility in assessment formats. *Assessment & Evaluation in Higher Education*, 37 (7), 773-785. 🌳

Reading Circles Get Students to Do the Reading

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In my course, the required reading is intensive and extensive. Students must read multiple texts that range across disciplines, genres, history, and culture. The goal of this interdisciplinary course is improvement of critical reading, writing, and thinking skills. My students, like many others, live complicated lives. Add to that the fact that many are not particularly good readers or people who like to read, and the result is students arriving in class not having done the reading. When that happens, the teacher becomes the best student in the room. She talks about the text while students dutifully listen—or appear to listen.

The findings from the reading compliance research have remained consistent over the years. Hobson reports (in IDEA Paper No. 40, published by Kansas State University) that on any given day and for any given assignment, 20 to 30 percent of the students have done the reading. He writes, “Faculty face the stark and depressing challenge of facilitating learning when over 70% of the students will not have read the assigned readings.” When students don’t do the reading, they hear about the text, but they do not actually experience it or do anything that develops their reading skills.

Given these realities, I decided to revisit Literature Circles, first introduced in the mid-1990s by Harvey Daniels for grades 3 through 8 in Chicago and described as small, peer-led discussion groups whose members have chosen to read the same text. Basic educators have found them enormously successful. I wondered whether they might work in my undergraduate course. Since not all the reading in my course is literature, I decided to call them Reading Circles.

I told my students that the success of their Reading Circle depended on two things: everyone coming prepared by having read the assignment and everyone

participating. In my humanities course, the four texts are traditionally chosen by the teacher, but wanting to be student-centered, I decided to let the students choose two of the texts. Annotated bibliographies were distributed early to help students make informed choices. I formed the groups based on their choice of text. In some cases, two groups needed to be formed, as I limited group size to six, given the roles I wanted students to fill in the groups:

- Discussion director, whose job was to keep the group on task, help the group understand the reading, ask good detail questions as well as general questions, listen intently to the group members and respond to ideas, and make sure everyone participates.
- Summarizer, who presents a brief, concise summary of the day’s reading, places everything in chronological order, and is able to answer any clarifying questions.
- Illustrator, who uses details from the text to help group members better understand the reading and selects significant elements that make connections to course themes.
- Literary luminary, who selects quotes that are especially significant, descriptive, or controversial; makes an interesting or engaging plan to have group look at particular passages; and is able to explain the significance of passages.
- Connector, who makes strong detailed connections cross-textually, historically, and culturally to the notion of what it means to be human and engages other group members in making similar connections.
- Questioner, who uses a mixture of various levels of questions to engage group members and engages the group with critical thinking of the issues and course themes.

I gave students the rubric I used when evaluating how well they filled their roles. When I joined a Reading Circle I did so as an observer and guide, not as a

teacher or participant. Each circle made a 20-minute presentation of one significant aspect of their text in any way they chose. There have been dialogues, interviews, plays, speeches, and debates. The structure of the activity can be adapted to fit a variety of reading assignments.

After a semester of using this technique, overwhelmingly my students reported that the activity “greatly impacted” their learning. On average, with four sections students self-reported their reading compliance rate to be 38 percent in an ESL section and 55 percent in my three other sections. After the activity, students reported a rise to 66 percent in compliance in the ESL section and 85 percent on average in the other sections.

Reading Circles empower students by letting them choose what they read. The assigned roles give them a purpose to read. They gain self-confidence as they learn to be responsible for their learning. Their reading skills develop. They have experience presenting their ideas. And they discover the joy of working with others to understand textual material. For me, observing the students at work in these groups was immensely satisfying. My students were in class having done the reading. 🌳

ERROR TERROR FROM PAGE 1

receptiveness to learning. It isn’t about getting the words just right; it is about being mindful of and open to the process, something that adults need to remember. Robert Fulghum, in his widely read *Everything I Need to Know I Learned in Kindergarten*, describes his own understanding of error: “Once I thought that getting the words just right was essential. Now I know the words will never be just right. A well-lived life is always under construction.” (p. 218) Error marks the place where not only education but life begins. Mishaps and all. 🌳