

FEATURED ARTICLE

¹Top 20 Evidence-based Humor Techniques for Online Teaching: Building on a Half-century of Research and Practice

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The COVID-19 pandemic upended higher education in March 2020 and has continued into 2022. Within days of the international lockdowns, an emergency conversion from face-to-face (F2F) to remote learning occurred. Educators scrambled to convert their in-class teaching into some version of online teaching. The transformations ignited a surge in e-learning platforms. Combining PowerPoint (PPT) or Keynote with those platforms enabled several forms of humor to be presented by any professor in online teaching. The research evidence on the educational benefits of humor is reviewed. The top 20 humor techniques initially tested in F2F classrooms are adapted to hybrid, hyflex, synchronous, and asynchronous delivery. Faculty have the opportunity to change their teaching back to F2F or adopt some form of online. That will involve a new teaching playbook. The intentional use of humor in F2F and online teaching will add value to their students' academic experiences with restorative and therapeutic effects in addition to all of the instructional benefits. The humor can be a game-changer in their pandemic teaching and after COVID-19.

Keywords: COVID-19, elearning platforms, emergency conversion, face-to-face teaching, humour, hybrid teaching, hyflex teaching, memes, multimedia, offensive humor, online learning & teaching, student engagement, social presence, value-added teaching

WARNING: As you enter this article, due to the surge in positive cases of COVID-19 and all of its variants following every national holiday, a stylish KN95 mask or other PPE and orange HAZMAT suit are required so we can keep an eyeball on you. Unfortunately, there are still more than 65 million unvaccinated people floating around. Masks cannot be donned and doffed at will. The reason is the infusion of humor throughout the running text. It can pop up at any time. The airborne droplets spewed from a chortle, guffaw, or convulsive laughter can infect a reader, reviewer, or editor. Proper protocol with at least an appropriate mask and social distancing can attenuate that transmission. Thank you for your compliance with this request.

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¹This article extends the work published in Berk (2014) to online teaching applications.

INTRODUCTION

Alexa, convert my face-to-face (F2F) course to online. “What? Are you kidding me?” Well, no. “I can’t do that.” I need to use humor in my teaching, but I have to convert to synchronous meetings. “I can play music for your students.” That won’t help; I need jokes for online delivery.

After two years and counting of COVID-19, don’t you think you and your students deserve a dose of humor? With the isolation and the loss of loved ones and colleagues, jobs, income, homes, and mental and physical health, humor can at least provide a coping strategy for the trauma and grieving so many educators and students have experienced (Klein, 1989, 1998, 2019; Mork, 2019). The psychophysiological benefits of humor can be very therapeutic (Berk, 2001a, 2002, 2004a, 2015; Gonot-Schoupinsky, Garip, & Sheffield, 2020; Martin, 2001; Martin & Ford, 2018; McGhee, 2010; Rindfleisch, 2018). But I digress.

Humor is for real; plus, it has a solid scientific base. There are more serious humor researchers than members of the Mormon Tabernacle Choir. And they take humor seriously, the researchers, that is, not the choir. You were forced to shift your teaching gears into some form of online teaching and back to F2F and maybe back to online again; this article shifts from Alexa to the educational benefits of humor.

Let’s begin with an unscientific, statistically-biased, sloppy survey. Are you currently using humor to teach your online courses? Has your online or flipping conversion thrown you for a loop? Are you loopy? Are you too scared and shaking in your flip-flops to try humor? Do you use humor with your urologist? If you answered “yes” to any of those questions, raise your hand. Okay, put it down. If you answered “no” and would like to add a new dimension to your teaching and shaking, stay on board. If you are already totally confused, that is fine. So am I.

INSTRUCTIONAL BREAKTHROUGH FOR HUMOR

Guess what? If you always wanted to use humor but did not, for any reason, now you can. It is YOUR time. For at least two decades, the burgeoning instructional technology has changed the form and execution of humor in teaching. You can now adapt the techniques in F2F classes to online teaching. With asynchronous teaching, you do not even have to be present for the humor. It occurs when the students interact with your posts.

COVID-19 pandemic interruption. Colleges and universities using synchronous or asynchronous methods pre-COVID-19 were well-positioned for the pandemic even though the academic continuity of their students was interrupted. Those schools with the pre-existing condition of online teaching in some of their programs had the faculty development resources to train and support their F2F faculty who were forced to convert (Leary et al., 2020). Faculty and students at those institutions did not experience the level of interruption that those at traditional F2F schools experienced. In spring 2020, that interruption took the form of a global shutdown of all schools. Everyone was sent home. A safety trifecta protocol went into effect: don masks, maintain six-foot social distancing, and wash your hands for 20 seconds.

F2F to online conversion. The pandemic of 2020–present, with international lockdowns, required faculty and students at F2F institutions to immediately adopt virtual learning (Dhawan, 2020). Educators scrambled to convert their in-class teaching into some version of online teaching (Chang-Bacon, 2021). It was an emergency conversion (aka “emergency distance learning” or “emergency remote teaching”) (Johnson, Veletsianos, & Seaman, 2020; Rutherford et al., 2021) that occurred within days of the lockdowns. Nearly a million faculty were involved in the emergency transition. There was no playbook or plan B to direct the scrambling (Holtzweiss, Walker, Chisum, & Sosebee, 2020; Ramlo, 2021). Everyone was in crisis mode.

“Equanimity under duress.” It was a test of our “equanimity under duress” (Leffall, 2014). Although the inclination to panic seemed perfectly natural, the most constructive responses to COVID-19 and its variants and the conversion were to exhibit composure and evenness of mind to make the right decisions. Sir William Osler, the “Father of Modern Medicine,” encouraged the

virtue of *equanimity* for medical students, physicians, nurses, and other health practitioners to function effectively during crises (Osler, 1889). Those first responders have been in crisis mode since March 2020. In retrospect, it also applies to all educators and students. The duress has not subsided and seems to be reoccurring with the effects of different variants. We need to keep it together with steadiness, control, wisdom, balance, and insight. The challenge is to strive for “coolness and presence of mind under all circumstances, calmness amid storm, and clearness of judgment in moments of grave peril, immobility, and impassiveness” (Osler, 1889).

Online conversions. Modest online facsimiles took the form of scheduling synchronous remote classes on Zoom or a similar platform, reducing the number of assignments and exams, shifting to pass/fail grading (Johnson et al., 2020), or assigning online “busywork” (Motz, Quick, Wernert, & Miles, 2021). A myriad of structures emerged. Variants of online teaching burst into the virtual world as new variants of COVID-19 such as Delta and Omicron continued to appear worldwide. That bursting included hyflex and full-blown, well-designed, state-of-the-art online teaching (Affouch, Salha, & Khlaif, 2020; Conklin & Garrett Dikkers, 2021). These changes to virtual teaching have not abated.

The online conversions continued with upgrades in the quality of instruction for the remainder of 2020 and into 2022. Faculty needed support, information, and training to sustain their online teaching and transition back to F2F (Holtzweiss et al., 2020). No one knows what to expect for 2022 and beyond: F2F, hybrid, hyflex, synchronous, asynchronous, or a combination of the preceding. For spring 2022, an increasing number of schools have mandated student, faculty, and staff vaccinations and boosters to open F2F classrooms. The verdict is out for other institutions.

Humor in online teaching. The transformation from F2F to online ignited a surge in e-learning platforms and learning management systems. The combination of PowerPoint (PPT) or Keynote with online teaching platforms and tools, such as Canvas, Panopto, BrightSpace (D2L), SoftChalk, VoiceThread, Echo360, and Zoom (Alameda, 2018; Enfroy, 2021; Mani, 2021; Raouna, 2020) provided the vehicles for several forms of print and multimedia humor any professor can present (Berk, 2010, 2011, 2012a, 2012b, 2014; Conaway & Schiefelbein, 2020). *These types of software permit anyone to present humor without saying a word, much less a punchline. (Note: If you wanted to say a word, that word could be a prerecorded narration or voiceover.)*

The technology tools permit any professor, even one with the personality of drywall, to deliver humor online. Your students will think you are hilarious, and all you did was convert oxygen into carbon dioxide. You did not tell a joke. You were not even present when your students read (or heard) the joke, although you did have an alibi racing in the Iditarod with all of your dogs. Could you and your students use a smidgen of humor in your teaching or a vacation with your pooches? You may not be able to land a job at Goldman Sachs or J. P. Morgan right now, but you can do this.

WHAT HUMOR IS NOT IN TEACHING?

Stand-up comedy. Humor is NOT about telling jokes to your class, comedy, or “Last Professor Standing” (Berk, 2014). Wow! Bummer. Few of us are trained to perform, although some of you may be gifted with that comic gene or have theater in your bone marrow or spleen. Creating humor involves writing (Berk, 2018a). *It is not a random act of entertainment* plugged into your module. When humor is intended for teaching, it is a legitimate teaching tool that is systematically planned with a specific learning outcome. Spontaneous humor is a bonus that is not part of that plan.

Offensive humor. Humor should NOT be offensive to your students. The various forms of offensive humor, such as put-downs, sarcasm, ridicule, vulgarity, profanity, and sexual innuendo, have no place in our teaching (Appleby, 2018; Berk, 2003, 2009a, 2014; Taylor, Zeng, Bell, & Eskey, 2010). With all the contentious issues that can pop up in our courses and the potential for

microaggressions (Berk, 2017) in discussion posts, blogs, and small-group exercises, your humor must be planned carefully and handled delicately. Mutual trust and respect in your relationships with your students are essential to the humor you select and its success. There are risks, but the benefits far outweigh those risks.

Before presenting humor in your posts, ask one or two colleagues and students to review them for possible offensiveness as well as funniness. Don't skip this step. That feedback can be critical to your success.

One alternative to the culturally popular put-down is the "self-down." Consider yourself in your joke pool. Self-effacing, self-deprecating humor can help break down barriers between you and your students (Berk, 2014, 2018; Frymier, Wanzer, & Wojtaszczy, 2008; Wanzer, Frymier, Wojtaszczy, & Smith, 2006). Self-downs also provide an infinite source of humor material.

The purposes of this article are: (1) to briefly review the research on humor and laughter, (2) to apply 20 humor techniques developed over the past 50 years to online teaching, (3) to suggest when and where to infuse humor in your online teaching, and (4) to proffer a few final thoughts.

REVIEW OF RESEARCH ON HUMOR AND LAUGHTER

For you "doubting Rons" out there and others, there are buckets of humor research on individual psychological, physiological, and educational benefits, plus teaching and training techniques. There are also more than 350 research papers (Nilsen, n.d.). Most critical reviews of the research appeared within the last two decades (Banas, Dunbar, Rodriguez, & Liu, 2010; Berk, 2001a, 2001b, 2002, 2004a, 2004b, 2014; Gonot-Schoupinsky et al., 2020; Jonas, 2019; Martin, 2001, 2003; Martin & Ford, 2018; McGhee, 1999, 2010; Nijholt, 2020; Provine, 2000; Raskin, 2008; Rindfleisch, 2018; Savage, Lujan, Thipparthi, & DiCarlo, 2017; Segrist & Hupp, 2015). Those reviews furnish a somewhat sobering, realistic assessment of the evidence to pinpoint what we know and what we don't know (but would like to know).

The mounting qualitative and quantitative research on humor in teaching that has accumulated over the past 50 years can be categorized as follows: (1) humor in F2F teaching, (2) humor in online teaching, (3) humor in multimedia teaching, and (4) humor as value-added teaching. As you can tell, the upcoming text will be a nail-biter.

HUMOR IN F2F TEACHING

There are 50 years of research on a wide range of planned, systematic humor techniques used in F2F teaching (Banas et al., 2010; Berk, 2002, 2003, 2007, 2009c; Deiter, 2000; Garner, 2006; Jonas, 2019; Morrison, 2012; Wanzer, Frymier, Wojtaszczyk, & Smith, 2006; Weaver II & Cotrell, 2001). There were print and multimedia methods developed in the 1970s–90s (Bryant, Comisky, & Zillmann, 1979; Hill, 1988; Kaplan & Pascoe, 1977; Kher, Molstad, & Donahue, 1999; Korobkin, 1988; Loomans, & Kolberg, 1993; Wanzer & Frymier, 1999; Ziv, 1988).

Over the following decade, the methods were applied and refined for teaching, and professors collected evidence on their efficacy (Berk, 1996, 2000, 2001b, 2002, 2003; Berk & Nanda, 1998). Researchers tested additional techniques over the next 20 years (Ageli, 2018; Appleby, 2018; Baysac, 2017; Berk, 2002, 2003, 2005, 2008a, 2008b, 2009b, 2014; Berk & Nanda, 2006; Bolkan, Griffin, & Goodboy, 2018; Daumiller, Bieg, Dickhäuser, & Dresel, 2019; Glaser & Bingham, 2009; Hackathorn et al., 2011; Jonas, 2019; Miller, Wilson, Miller, & Enomoto, 2017; Suzuki & Heath, 2014; Torok, McMorris, & Lin, 2004; Wanzer, Frymier, & Irwin, 2010).

There are even several studies of methods related to specific content areas, such as statistics (Berk, 1996, 2000, 2001b; Berk & Nanda, 1998, 2006; Friedman, Friedman, & Amoo, 2002; Lesser & Pearl, 2008; Lomax & Moosavi, 2002; Neumann, Hood, & Neumann, 2009; Schacht

& Stewart, 1992; Zeedyk, 2006). However, those studies suggest that professors can apply those methods generically to most other courses.

Based on the preceding collection of research evidence, here is an up-to-date summary of 20 specific effects of humor in “on-the-ground” F2F college teaching:

1. Improves overall mental functioning
2. Reduces stress, anxiety, and tension
3. Reduces test anxiety and improves performance
4. Enhances creativity
5. Stimulates attention and increases attention span
6. Facilitates communication
7. Increases engagement and participation
8. Improves understanding and comprehension
9. Increases retention and memory
10. Increases motivation
11. Improves problem-solving
12. Encourages open-mindedness
13. Fosters divergent thinking
14. Creates a relaxed atmosphere
15. Increases instructor-student rapport and connection
16. Enhances peer-to-peer relationships
17. Increases social interaction and a sense of community
18. Fosters a positive mood and attitude
19. Builds trust and self-esteem
20. Promotes a cooperative and safe learning environment

HUMOR IN ONLINE TEACHING

Lei, Cohen, and Russler (2010) identified 31 psychological, social, and cognitive benefits of humor on learning from instructors’ perspectives. The authors cited only one research article using online courses to support a few of those benefits (LoSchiavo & Shatz, 2005). Many publications on humor in online learning describe humor methods and research drawn from F2F teaching (Eskey, 2010; James, 2004; McCartney, 2020; Olah & Hempelmann, 2021; Shatz & Coil, 2008; Shatz & LoSchiavo, 2006; Stoll, 2016).

The research on online applications of humor over the past 20 years focused on issues related to communication, relationships, and engagement. The humor increases student interest, attention, engagement, motivation, enjoyment, participation in online discussion forums, instructor-student and student-student interactions, a positive learning environment, and appropriate instead of inappropriate uses (Anderson, 2011; Bacay, 2006; Borup, West, Thomas, & Graham, 2014; Ferguson & DeFelice, 2010; Fitzsimmons & McKenzie, 2003; Glaser & Bingham, 2009; Goldsmith, 2001; Heiman, 2008; Hübler & Bell, 2003; Martin, Wang, & Sadaf, 2018, 2020; LoSchiavo & Shatz, 2005; McCabe, Sprute, & Underdown, 2017; Ng, 2001; Shatz & LoSchiavo, 2006; Taylor et al., 2010). Another study examined the extent to which students laugh in response to humor in a blog, website, discussion, and email (Meyer & Jones, 2012).

Despite the progress made to furnish evidence on the effects of humor embedded in various technology-enhanced forms of instruction, the research on specific online humor strategies is in its infancy. The pandemic-induced tsunami of online learning can provide a global laboratory to test the efficacy of humor in instructor-created videos, discussion threads, assignments, posted memes and gifs, email messages, and other course elements (McCartney, 2020).

Can the 20 F2F effects be generalized to online environments? Sure. The content is the same. When a “top 10” is presented in synchronous mode, it is very close to F2F; it is the students’ audible response that is missing. In asynchronous, the delivery will rely on the animation and

prerecorded narration of the 10 punchlines. In other words, the online delivery may lose the live punch, but it still can provide many of the previous effects, especially from print and several forms of multimedia humor. However, no matter how a professor tries to finesse and adapt the humor techniques to online teaching, well-designed research needs to be conducted to determine the efficacy of online humor techniques compared to no humor and F2F humor on specific cognitive and affective outcomes.

HUMOR IN MULTIMEDIA TEACHING

In addition to the preceding benefits, when multimedia (images, music, videos) drive humor, there are several other effects. Humorous pictures, memes, cartoons, graphs, charts, diagrams, and various graphic designs can stimulate emotional reactions and *increase attention and retention of content* more than words alone (Lane & Wright, 2011). Animated visuals and infographics can *enhance learning* significantly more than static visuals (Höffler & Leutner, 2007; Tversky, Morrison, & Betrancourt, 2002; Yu & Smith, 2008).

Humorous music and sound effects elicit emotional reactions, set tone or mood, and engage nearly every brain area by involving almost every neural subsystem (Berk, 2008b, 2011, 2014). They also *release the neurochemical dopamine*, which sends “feel good” signals to the rest of the body (Salimpoor, Benovoy, Larcher, Dagher, & Zatorre, 2011).

Instructionally, a catchy melody and fast, up-tempo, major-key music, such as rap, activates sensory functions that create an emotional connection. It excites and *snaps your students to attention and sustains attention* while slipping the content into long-term memory (Berk, 2001b, 2002, 2005, 2007, 2008a). If the Broadway musical megahit “Hamilton” can bring our dead white founding fathers’ history back to life with rap, maybe it is worth applying to the content you teach. Try bouncing three rhymes in two couplets off the word “serendipity” (Kim, 2018).

Humorous multimedia (auditory/verbal and visual/pictorial stimuli) can *increase memory, comprehension, understanding, and deep learning* more than any single stimulus by itself (Kirschner, Kester, & Corbalan, 2011). Humor in instructional videos has demonstrated positive effects on *learning and motivation* (Aagard, 2014). Reviews of the research on cognitive load, working memory, and dual-coding theories (Berk, 2009b, 2010, 2011, 2012a) indicated that multimedia learning *promotes skill acquisition, retention, and transfer (application) of information* (Mayer, 2009; Mayer & Johnson, 2008).

Multimedia in online course design without humor does not impact learning that the prior studies found (Davis & Frederick, 2020). Images, audio clips, video recordings of lectures through lecture capture, picture-in-picture lectures, and multimedia pre-lectures yielded superior student performance (Bledsoe & Simmerok, 2013; Chen & Wu, 2015; Hegeman, 2015; Vazquez & Chiang, 2016). However, the results of related research were inconclusive. These applications of multimedia depend more on the skills of instructional designers than individual professors. The various multimedia are often integrated into the course to accommodate diverse learning styles. Researchers have not examined humor in any of the online designs.

HUMOR AS VALUE-ADDED TEACHING

Why bother to integrate humor into your online teaching and testing (Appleby, 2018; Esi, 2017)? Who cares? Is humor a characteristic of a “master teacher” (Buskist, Sikorski, Buckley, & Saville, 2002) and the “best, most effective teachers” (James, 2004)? Well, yeah!

Beyond the psychological and physiological impact humor can have on faculty and students' mental and physical well-being during and after the pandemic, the preceding F2F, online, and multimedia humor effects can add value to the lives of your students (Maxwell, 2015). It enables you to connect with them. That connection builds trust and a safe learning environment (Conklin & Garrett Dikkers, 2021; Hill, 1988; Pollio & Humphreys, 1996). Humor increases the positive impact of your content. It helps bookmark your message in your students' minds for easy retrieval later.

Online teaching forces you into the role of facilitator (Martin et al., 2018, 2020). The use of humor is all about your students. It is the add-on that is not part of the typical arsenal of teaching strategies. Adding value to their learning experience requires you to focus intentionally on them (Maxwell, 2012, 2015). It is what you do for them to improve their learning and academic experience. If you want to save 15% or more on car insurance, you switch to GEICO. It's what you do.

REVIEW OF TOP 20 HUMOR TECHNIQUES

The following 20 techniques were developed and tested over half a century, along with the chubby corpus of F2F and svelte body of online research cited previously. If you stick around until the end (or skip to the end), you will be rewarded with a bonus technique 21. I have grouped the techniques by level of risk for “bombing” in front of your students. That risk reduces to zero in asynchronous learning posts with no real-time interaction. You can apply the techniques to F2F, hybrid, hyflex, synchronous, and asynchronous courses (Conaway & Schiefelbein, 2016).

LOW RISK (PRINT)

1. Humorous Material on Syllabus
2. Descriptors, Cautions, & Warnings on Handout Covers
3. Humorous Problems & Assignments
4. Humorous Examples
5. Humorous Quotations, Proverbs, & Jokes
6. Humorous One-Shot Handouts
7. Humorous Test & Assignment Directions
8. Humorous Test Items (Multiple-Choice, Matching, Short-Answer, Open-Ended)

The low-risk techniques involve sprinkling your basic print materials with a verbal fusillade of humor that pokes fun at this relatively innocuous yet essential content. Your students will usually read these materials in your online assignments, tasks, discussion forum, emails, and other posts. You are not presenting your joke inserts in front of your students to hear and see their immediate responses. You will not know whether your humor was funny unless you stalk them and break into their dorm rooms to watch their reactions or install illegal mini-cams to record their laughter. To avoid arrest and, possibly, a restraining order, you could also solicit their feedback separately by just asking them.

Let us consider an example. Suppose you infuse your syllabus with humor in the title, prerequisites, your credentials, office/contact hours, teaching strategies, and reading list (*Accreditation Alert*: Make sure you keep a “serious” syllabus in the departmental files for accreditation review.). In asynchronous courses, students would read the syllabus on their time. (*Remember*: No break-ins!) Your efforts to be funny can have a profound impact on your students’ attitudes toward the course. The subject matter or professor’s reputation can produce anxiety, hate, or dread. You can ameliorate those feelings with humor (Field, 2009; Kher et al., 1999), meditation, hypnosis, or Xanax. Your choice.

After reading the jocular syllabus and handouts posted online and the side-effects from Xanax wear off, the students may change their attitudes and course game-plan. That adds value to your students’ experience. Maybe the course will not be as bad as they initially thought. That emotional shift can open them up to learn rather than struggle and to begin a positive relationship with you.

Humor inserted into items 1–6 is preplanned, with no potential embarrassment or risk to your dignity and self-esteem. It lightens up all of the massive content and problems the students will tackle throughout the course. The humor is a tone-changer. Instead of dread, students will look forward to each upcoming assignment (Kher et al., 1999). You can punch up every source

of course material with humor. There are tons of verbal humor examples you can use verbatim or with your spin in Berk (2002, 2003, 2018a).

There is mounting evidence that humor in test directions and the various test item formats (items 7 & 8) can significantly decrease pretest anxiety and increase final performance (Berk, 2000, 2002; Berk & Nanda, 2006; McMorris, Boothroyd, & Pietrangelo, 1997). The humor you use adds value to your students' achievement that otherwise might not happen. There are many prototypic examples in available sources to administer in class or online.

MODERATE RISK (PRINT & MULTIMEDIA)

9. Humorous Questions During Q & A
10. Humorous Anecdotes (Professional & Personal)
11. Humorous Images
12. Music and Sound Effects
13. Humorous Video Clips

This collection of techniques raises the ante of risk because it requires interaction with your students and presenting print and nonprint humor. Items 9 and 10 involve asking planned humorous questions and telling a story, respectively. They are most effective in F2F, hybrid, hyflex, and synchronous teaching (Berk, 1996, 2003). They will not work the same way in asynchronous mode; instead, print or prerecorded audio or video versions of anecdotes can be posted. The live delivery of the questions and stories may be uncomfortable for some professors, but a few practice runs will build confidence.

Humorous questions. Q & A is an integral part of teaching because it encourages engagement and snaps drifting students back to attention. In F2F, hybrid or hyflex in-class, synchronous, or prerecorded asynchronous video delivery, ask a serious question. Then provide two or three serious answers, followed by a punchline. For example, as I point to a graph in my PPT:

1. How many of you think this is positively skewed?
2. How many of you think this is negatively skewed?
3. How many of you don't care?
4. How many of you want to go back to bed (or to lunch)?

Answer 3 always gets a laugh with all hands up, although you may not hear or see anything. Choice 4 adds to the fun. Now everyone is engaged and listening.

Humorous anecdotes. Stories are a widely used type of humor, and, in academia, they are one of the most common forms (Friedman, Halpern, & Salb, 1999). They are at a lower risk level than formal jokes because they usually do not have a set punchline. They should be short and focused. As your story naturally unfolds, you can embellish your description of the actual event each time you tell it. It should get funnier and funnier unless you are a terrible embellisher. You can draw from two primary sources: (1) professional experiences and (2) personal events. Describe humorous, professional experiences in your career as stories related to the point you are trying to make. Also, tell true personal stories about yourself and your family and friends (with their permission) that may have a humorous spin.

These stories provide the opportunity to inject self-effacing humor related to disappointments, rejections, and failures. Students tend to connect with our negative experiences and the lessons we have learned more easily than our positive ones. They love to hear about our personal lives because many believe that we do not have any. Those stories connect with your students emotionally and can be as effective as a stand-up joke to reign them back in or illustrate a concept in synchronous mode. Asynchronously, prerecord your stories so students will not miss your message or humor.

Select multimedia items 11–13 for your PPT presentation in F2F, synchronous, or asynchronous mode. They can have a strong impact on your students because they can transcend

cultural and generational differences. You do not have to say a word. The image (with or without narrative or music), music (with or without lyrics), and the video say it all. You can stand by or sit and wait for the laughs, which you will not hear online because your students are muted. You will be waiting a long time.

In a F2F or hybrid or hyflex live class of socially-distanced, unmuted, masked students, you can hear the laughter but cannot see their faces. They look like a well-organized group of hostages or medical students in an operating theater waiting for the surgery to begin. Conducting a Zoom muted, unmasked, synchronous class with multimedia looks like “The Producers” performed by the Brady Bunch. You cannot hear their laughter. If you hear laughter online from your muted students, you should see an audiologist or Dr. Phil. In asynchronous mode, you cannot see or hear any reactions.

Humorous images. Images and memes (Baysac, 2017; Sebba-Elran, 2021; Srinivasalu, 2016) from Creative Commons, Flickr, Instagram, Pinterest, Facebook and LinkedIn posts, and other online sources are available on almost every topic for free. Still and animated images (pictures, memes, graphics, cartoons, comic strips) with a verbal punchline, narration, music, or sound effects can have a stronger humor impact than the images alone. The verbal content superimposed on the images can also interpret them.

Music and sound effects. Music with or without lyrics, raps, and sound effects alone can induce laughter (Berk, 2008b, 2011, 2014). Timing is critical. The metronomic rhythms of rap can change your entire F2F or synchronous classroom atmosphere. Students can play a prerecorded performance asynchronously. The lyrics have the same impact as a verbal punchline. Music with a still or animated image magnifies its humorous effect (Kirschner et al., 2011).

Humorous video clips. A short video clip of a commercial, humorous event, or movie excerpt can be a powerful moment in your presentation (Berk, 2009b; Mayer, 2009). It can be visually dazzling, entertaining, and packed with content to make your point. Your students may never forget it, perhaps close to the effect of MJ’s “Thriller” (Berk, 2012a). Select from millions of clips on YouTube or create your own. Students in online courses value instructor-generated videos of all types (Conklin & Garrett Dikkers, 2021). Embed a crisply edited clip or stream in the video. Now onward to High-Risk World:

HIGH RISK (PRINT & MULTIMEDIA)

14. Commercial Breaks with Video Clips
15. Stand-Up Jokes (1-Liners)
16. Multiple-Choice Jokes
17. Top 10 Lists
18. Skits/Demonstrations (with Music & Costumes)
19. Parodies (TV, Movie, Theater, YouTube)
20. Game Format for Exercises & Test Review

Print techniques 14–17 are four different stand-up joke formats. Commercial breaks can also contain images or videos. Plan the content, delivery, and timing carefully. The animation for each line is critical. Present your PPT in hybrid or hyflex course in-class meetings or synchronous classes. They will require more preparation time and practice than most of the previous techniques. Once you build a pool of these jokes that get thunderous responses you cannot hear, you will never go back. Asynchronous delivery requires narration, or a voiceover timed with the animation to simulate a live presentation.

Commercial breaks. We are constantly interrupted by commercials and pop-ups on every piece of electronic equipment we own. Everybody is selling something. Frequently, the commercials are far more animated, exciting, and viscerally entertaining than what we may be watching. When you need to reel in your students from thinking about their car payments, laundry, or NETFLIX renewal, insert humorous commercial breaks in hybrid, hyflex, and

synchronous courses. Plan on key break-points or call an audible if their eyeballs are dilated, if you can see them. One is adequate for 50-, 60-, and 90-minute classes; plan two or three breaks for three hours or longer. Also, plant timely breaks in asynchronous modules.

Make sure every break is different. Use a variety of humor formats to derail the presentation flow, grab wandering minds, snap everyone to attention, induce laughter as a release valve, and refocus your students' eyeballs and their minds on the content presented. You should insert these breaks systematically into all online PPT presentations.

Multiple-choice jokes. This format contains four or five punchlines as the choices in a multiple-choice joke. Create a serious "stem" question or incomplete sentence format, followed by the choices. Everyone knows multiple-choice. Instead of the "negative" image of a test item, the multiple-choice joke can change that image into something positive (Berk, 1998, 2002). Try to use actual course content or information in the humor to emphasize a concept or process.

Top 10 lists. Use Letterman's ubiquitous "Top 10" on any topic where you can generate 10 punchlines. It is a list of one-liners. Remember to put your best punches at the end as you count down to 1. A professor who is a firehose of charisma can turbocharge a Top 10. This technique is most effective when the 10 lines are parodies of the actual content you are teaching, such as the "Top 10 New York Times Worst-Selling Books on the Pandemic." (*Reader Reminder:* In asynchronous mode, execute the preceding four techniques in PPT using line animation, where each punch is revealed incrementally as it is being read with narration. We now move on to Broadway.)

Skits, parodies, games. The final three theatrical techniques (18–20) can add an entirely new dimension to your teaching. They are designed for the live classroom—F2F, hybrid, hyflex, and synchronous. They involve live theater. However, you can also use prerecorded videos of these techniques in asynchronous mode. Creating visuals of verbal and mathematical material with multimedia and live students can significantly increase your students' learning of that material and produce show-stopping fun in the process.

These techniques illustrate the colossal contribution that PPT can make where no verbal skill or oral joke delivery is required. Instead of being the actor, you are the writer, director, and choreographer of these humor forms. The constraints of verbal humor have been rendered obsolete by PPT. All professors can integrate humorous images, music and sound effects, and videos into skits, parodies, and games. These media can be presented seamlessly in any PPT without uttering a word. You have no lines to memorize or punchline to deliver. The media can be embedded in your PPT slides and suffused throughout any presentation to elicit laughter and increase skill acquisition, comprehension, understanding, retention, memory, and deep learning (Kirschner et al., 2011). It has never been so easy to provide the illusion that you are rip-roaring funny until now.

If you pick the appropriate media and click roll-in-the-aisle hilarious slides, your students will laugh their guts out. They will finish their assignment, thinking you are a comic genius, and you did not tell a single joke. You are a clicker, not a comedian. Do not get puffy and think you are ready to do stand-up yet.

Parodies of TV programs, movies, and Broadway musicals and plays can be unforgettable. Costumes and props are optional but highly desirable. Either do it right or not at all. Here are a few suggestions:

- "Stat Wars" with lightsabers,
- "Mission: Impossible" at $p \leq .0000001$ with sparklers,
- "Titanic" scene with the wind blowing using a leaf blower,
- "Mathterpiece Theatre" with a smoking jacket and pipe,
- "The Odd Couple" (Oscar/Oscarette & Felix/Felice),
- "Jeopardy," "Deal or No Deal," or "Who Wants to Be a Millionaire" test review, and
- A dozen students can act out a mathematical process or equation to "I Will Survive."

Implant your productions in your students' memory. Use different students for each skit and a code of silence to protect the element of surprise for the scheduled performance. The script and step-by-step procedures for executing these activities are available in Berk (2002, 2003, 2008a).

BONUS TECHNIQUE: COMMUNICATION

One technique that streams through the previous 20 and adds another facet to your humorous implants is all of your communication with your students via emails, texts, instructional videos, announcements, and synchronous meetings (Conklin & Garrett Dikkers, 2021; Heiman, 2008; Means & Neisler, 2021; Ng, 2001; Olah & Hempelmann, 2021). Establishing and maintaining your connection is more challenging with online delivery. Building your "social presence" is critical (Whiteside, 2015; Whiteside, Darrett Dikkers, & Swan, 2017). You and your students should access multiple communication formats to constantly contact and exchange timely feedback and messages throughout the course.

The variety of methods you can use in your online communication provides another opportunity for humor. Carefully placed humor can set the tone for your relationships and learning community to be caring, understanding, supportive, encouraging, empathetic, motivating, and informative. The humor may be text-based with emoticons and memes on posts to your discussion board, timely responses to inquiries with music and sound effects, and video commercials and parodies (Berk, 2008b, 2009b).

Students highly value professor-created videos for instructional content, announcements, blogs, and feedback (Borup et al., 2014). Humor in instructional videos has demonstrated positive effects on learning and motivation (Agaard, 2014). You can add an appropriate jocular insert to any communication with your students. Your messages will stimulate their interest in your posts.

BOTTOM-LINE APPLICATIONS

Among the 20 humor techniques, you can present 1–17 in all online formats. For techniques 18–20, abbreviated versions and videos of skits with students, parodies, and games can be developed for asynchronous viewing. A few tweaks may be necessary. You can create simulations and modified renditions of live presentations with voiceovers, animations, and transitions. The potential of these value-added techniques to your teaching is limited only by your imagination.

Research evidence needs to be collected on the effectiveness of the preceding synchronous and asynchronous variations of the F2F humor techniques. (*Parody Alert: Recently, top-secret researchers executed a large-scale, quadruple-blind clinical trial study to compare online humor with no humor and F2F humor. [Definition: "Quadruple-blind" means the faculty, students, data analysts, and principal investigator are blinded, so they have no clue what they are doing.] Resume This Section Already in Progress.*)

Five factors seem to bubble to the surface which require urgent attention: (1) all of the transitions, hardship, and duress faculty and students have had to endure during the pandemic, (2) the list of 20 positive effects from the F2F research, (3) the student performance effects from the few online studies, (4) the effects of multimedia on cognitive and affective behaviors, and (5) the fictitious preliminary results from the research-parody, quadruple-blind study. Consideration of these factors indicates that emergency use authorization must be sought with lightning speed or faster for faculty to apply the humor techniques in their online courses.

WHEN AND WHERE TO INFUSE HUMOR IN YOUR ONLINE TEACHING

So now, what are you supposed to do with these techniques? This heading suggests multiple injections, including a booster, or an IV drip. Overall, the humor can serve the same function as the loud, bumpy rumble strips (aka drunk bumps or growlers) in the center and side of highways

(Berk, 2014). Those strips are designed to alert drowsy drivers before they drive off the road into a water buffalo. The humor can startle your students as they start drifting off from the serious content. When and where will your students drift? You want your students engaged throughout your posts.

In addition to rumble humor, carefully calculate the critical points in your posts when humor can serve a specific instructional purpose (Berk, 2002, 2003, 2007). For example, exaggerate a concept to make sure it sticks, engage students in a humorous illustration, or summarize critical points with humorous triggers. Consider multiple doses of humor when your students least expect them, but do not overstuff your PPT and communications.

How much humor can you shoehorn into your online presentation, assignment, or message? Before you do any shoehorning, make sure to complete a draft of your “serious” post. That is the information you want to communicate. Now go back to the beginning and work your way through the text step by step. Roleplay your students. Get into their heads. Nod off when you think they will nod off, but do not forget to wake up. Where will they need a humor break to snap them to attention or emphasize a critical concept (Berk, 2014)? Here are a few suggestions on how and where to plug in those humor gems:

OPENING

Start with a bang to set the tone for your course, grab your students’ attention, and create an emotional, personal connection with your students (Berk, 2002). Their first impression of you and the course is at stake. Your opening should move them to the edges of their seats in anticipation of what is coming next.

Plan to begin with a sure-fire online anecdote, stand-up joke, “Top 10 Reasons Not to Take Statistics,” or provocative, humorous video or image with music (Berk, 2002, 2003). One of these should hook your students. Pick the form of humor that best fits your style and the content you are presenting. Eventually, you might try a skit like “Stat Wars.”

Prepare and rehearse thoroughly to make sure you nail the opening (Berk, 2014). Asynchronously, begin with instructions to students to blackout their room to build tension. The students should feel like they do when the theater goes dark before the movie, concert, or play begins. Then tell them to play the video or the image with music in your PPT. Embedded mode is more exact and dependable because the image is clean, without the YouTube shell, and does not require buffering.

DO NOT use humor only at the opening and then bore your students into a coma for the rest of your class (Berk, 2005, 2008a, 2014). You have experienced that effect with so many of your colleagues’ presentations. Please do not do it! That makes no sense. Instead, infuse or suffuse...

HUMOR THROUGHOUT YOUR POWERPOINT AND OTHER POSTS

Scan your presentation outline, storyboard, serious slide deck, assignments, or discussion for areas where the humor can be used to illustrate, embellish, or provide new content (Berk, 2011, 2012a, 2012b). Find the “humor sweet spots” where they can be most effective. Bookmark those areas. Also, as you rehearse your slides, think like your students. At what points would their eyeballs glaze over or pop out of their sockets and dangle from the optic nerves down to their knees? Where do they need a jolt of humor? Then determine the most appropriate forms of humor for each point. With diverse nationalities or generations in your class, select visual humor, if possible (Berk, 2014).

Humorous images and memes with verbal narration and animation or music can have a strong impact and are incredibly effective (Berk, 2012a). Videos are even better (Berk, 2010, 2011). Add as many multimedia elements as you can. You can always cut back in the final editing.

COMMERCIAL BREAKS

Planned breaks can effectively maintain students' attention on various topics. A multiple-choice joke or top 10 list can provide the portion of humor the students need. Even more compelling is an image with music, meme, or video clip, for which you need to prepare lead-in set-up lines for the break (Berk, 2002, 2003, 2014). Those multimedia options can be visually arresting and sneakily engrossing.

CLOSING

You want a monstrous, memorable finale other than telling your students: “Dismissed,” “See you Wednesday,” “Get vaccinated,” “Pull up your pants,” or “Have a good life!” It is the students' last impression of that session and the content. Your wrap-up could be in multiple-choice or top 10 format with a punchline or two at the end of the serious content choice summary (Berk, 2003). A humorous image or video could also serve as the final punch (Berk, 2002, 2005). It is your soaring last moment. Let your imagination explode with possibilities for a spectacular ending that your students will be texting to their buddies during the explosion.

MEASURING YOUR SUCCESS

One measure of your “success” in using humor to add value to your students' experience is “succession” (Maxwell, 2015, p. 131). What happens after your course is over and a colleague teaches it? How will your use of humor affect the way your course is taught? When will any of the add-on effects of the humor kick in, if at all? Did you make a difference that will change your colleagues and students in some way? Is their succession magnified by the humor risks you took to teach the substance of your course?

How can you measure success in this transition? Here are a five suggestions: (1) mid-course and end-of course student rating forms, (2) a one-page questionnaire with specific questions about the value of your humor strategies, (3) out-of-class informal student feedback, (4) meetings with your successor on how humor was used in your course, and (5) mentoring your successor on humor strategies that had a significant impact on your students.

1. The students' feedback during and after your course and comments on your students' rating forms will provide evidence of your impact. Midterm feedback, especially, can suggest whether your humor is having any effect (Berk, 2018b). That feedback enables you to make midterm adjustments to your humor techniques. End-of-course ratings may be even more informative. Your students may be changed forever or, at least, for a minute or two.
2. A one-page questionnaire that asks specific questions about the value of your humor strategies in your teaching and how they facilitated their learning can furnish even more specific feedback than the rating forms (Berk, 1996, 1998, 2000, 2002). It can be administered at midterm and end-of-course to pinpoint what strategies worked and which ones didn't contribute to their learning.
3. Your out-of-class contact and conversations and one-on-one office meetings F2F or online provide opportunities to ask your students about your specific techniques. Those casual exchanges can provide brutally truthful but very useful feedback.
4. Close encounters of your successor kind give you the chance to inform them of your most successful humor strategies. This is the critical transition period. Since the technology permits anyone to implement all of the available techniques, your successor can cherry pick those that fit their teaching style.
5. You need to mentor your successor in the specific techniques that they can integrate into their teaching. It is time to pass on the humor baton, your winning techniques and humor

material. Your successor can represent the legacy of your humor contribution to teaching in your field.

A FEW FINAL THOUGHTS

After wading through this bloated treatise on 20 strategies for integrating humor into your online courses, you are probably on the verge of dozing off, throwing up, or screaming at the water buffalo you nearly hit. Hold on to your verge for just a little longer. This section proffers a few final thoughts.

PRESS YOUR RESET BUTTON

Nothing will be the same after COVID-19. With all that you and your students have experienced and learned since March 11, 2020, the timing is ripe to press the reset button to reboot our lives. What will that look like for you? How much have you grown during the pandemic? Your priorities may have changed. You have approached several crossroads in your teaching. Online delivery has gained a lot of traction over the past two years. Within that timeframe and beyond you will have multiple opportunities to change your teaching back to F2F or adopt some form of online. Write a new teaching playbook that will make you better than ever.

CREATE YOUR NEW NORMAL

Should you include any of the humor techniques described in this article in that playbook? They will add value to your students' academic experience with restorative and therapeutic effects in addition to all of the instructional benefits. The humor can be a game-changer. We must consider the loss, isolation, and traumas we have experienced as we move forward. The original emergency conversion to online learning does not have to become the new normal. Your level of equanimity may have changed. It is the intersection of your pre-COVID-19 teaching and what you have learned since then. You will create your NEW normal. The intentional use of humor can add value to the next steps you take.

CUSTOM-TAILOR YOUR HUMOR TO YOUR STUDENTS

You should tailor the content of your humor to your students' world, not yours. Your connections, communications, and relationships with your students hinge on how accurately you can tap into their cultural interests—celebrities, social media, memes, music, TV programs, videos, and any other source. Remember that the humor is for them. Deliberately demonstrate your interest and commitment to build trust, respect, and a safe environment for humor to occur.

Survey their interests by simply asking them to identify three examples in each of those categories. It can be conducted online before or during the first class. Compile your total class results into frequency distribution lists for those categories, such as the top 10 musical selections to which they listen and top 10 videos they watch (Berk, 2001b, 2008b, 2009b). That is the material you can draw on throughout the semester for your print and multimedia humor (Berk, 2003, 2014). The frequency lists can help sensitize your humor to the diversity in your class and minimize the chances of offending anyone.

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