



JANUARY 2021 - VOLUME 5 ISSUE 1

---

JOURNAL *of* ONLINE HIGHER EDUCATION

---

Independence University  
4021 South 700 East, Ste. 400  
Salt Lake City, UT 84107

Journal of Online Higher Education  
2021 Volume 5 Issue 1  
Published: 29 January 2021

Sarah Fulkes, MAOL, MAET. Editor-in-Chief  
Joseph Dunlop, MBA. Board Member  
Debra Chittur, EdD. Board Member  
Janell Campbell, PsyD. Board Member  
Denise Harshbarger, EdD. Board Member  
Steven M. Wagner, PhD. Board Member  
Alana Howlett, MLS. Journal Manager

Journal of Online Higher Education website  
<https://ojs.iucdt.com/index.php/JOHE>



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

Articles published in Journal of Online Higher Education are under Creative Commons License CC BY-NC. This license permits users to share and redistribute the material. Appropriate attribution credit must be given and the material cannot be remixed, transformed, built upon, or modified.

---

**Table of Contents**

**Editorial Welcome .....1**  
Sarah Fulkes, MAOL, MAET

Peer-Reviewed

**The challenges of assessing and evaluating the students at distance.....3**  
Fernando Almeida, PhD  
José Monteiro, PhD

**The role of online databases in academic libraries .....11**  
Alana Howlett, MLS

Book Review

***Small Teaching Online* by Flower Darby with James M. Lang .....24**  
Denise Harshbarger, EdD

Reflection in Online Education

**Managing peer-to-peer implicit bias in the classroom: Educator options for promoting inclusive and equitable higher-education learning .....28**  
Jessica Giner, JD

---

Editorial

## **Editorial welcome: January 2021**

Sarah Fulkes, MAOL, MAET  
Independence University

---

---



Journal of Online Higher Education

ISSN: 2575-1204

This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

---

The Journal of Online Higher Education is pleased to release our Winter 2021 issue!

After the challenges presented by 2020, we continue to see the educational industry evolve to become more responsive, more technology-focused, and adapt to the needs of learners in an online environment. Questions continue to be asked regarding the efficacy of instructor engagement and how best to meet the needs of students in an environment that is neither face to face nor geographically local. In light of that, a new set of best practices is being developed as educators and administrations navigate the transition from in-person instruction to online modalities. This issue explores some of these emerging discussions.

This month's issue includes articles on databases in online environments, promoting inclusive and equitable learning, and assessing and evaluating students in a distance environment. The book review this issue discusses *Small Teaching Online* by Flower Darby, advocating deliberate, practical online education.

As always, we hope you find the information contained here helpful and thought-provoking. As we continue on through 2021, we encourage any reader who has an interest in publishing their research to submit their work to the journal for consideration.



Sarah Fulkes

Editor, Journal of Online Higher Education

---

Peer-Reviewed Article

## The challenges of assessing and evaluating the students at distance

Fernando Almeida, PhD  
University of Porto & INESC TEC

José Monteiro, PhD  
Polytechnic Institute of Gaya (ISPGAYA)

---

**Abstract:** The COVID-19 pandemic has caused a strong effect on higher education institutions with the closure of classroom teaching activities. In this unprecedented crisis, of global proportion, educators and families had to deal with unpredictability and learn new ways of teaching. This article aims to explore the challenges posed to Portuguese higher education institutions and analyze the challenges posed to evaluation models. To this end, the relevance of formative and summative assessment models in distance education is explored and the perception of teachers and students about the practices adopted in remote assessment is discussed. On the teachers' side, there is a high concern about adopting fraud-free models and an excessive focus on the summative assessment component that in the distance learning model has less preponderance when compared to the gradual monitoring and assessment processes of the students. On the students' side, problems arise regarding equipment to follow the teaching sessions and concerns about their privacy, particularly when intrusive IT solutions request the access to their cameras, audio, and desktop.

**Keywords:** online education, COVID-19, blended learning, summative education, formative education

---



Journal of Online Higher Education

ISSN: 2575-1204

This work is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nc-nd/4.0/).

---

### **The Response of Portuguese Higher Education Institutions to COVID-19**

In early March with the declaration of the State of Emergency in Portugal, the higher education institutions (HEIs) had to stop their presential classes. This measure was not applied exclusively in Portugal and was also followed across the European Union countries. As a result of this decision, the Ministry of Science, Technology, and Higher Education (MCTES) stated that Portuguese HEIs must adopt teleworking and distance learning processes (Agência Lusa, 2020).

The biggest challenge of higher education was to adapt to a new distance model that would ensure the continuity of teaching activity. The first question that emerged was how to ensure that all students have the internet and the necessary means (computers or smartphones) to access online classes. Kotowicz (2020) highlights that the problem of lack of technical resources to access online classes is more visible in basic education because about 20% of students do not have this equipment at home, and this number rises to approximately to 1/3 when we consider only public schools. In higher education these numbers are less worrying. Data from Statistics Portugal indicate that only 0.4% of students over 16 do not have the internet (Instituto Nacional de Estatística, 2019). Nevertheless, even though these values are relatively residual, higher education institutions have to consider and support these students.

A second question that emerged was which online platforms should be chosen to teach the classes. It was also questioned whether to follow an asynchronous or synchronous model. The HEIs in Portugal followed different approaches; in most cases, each university dean and polytechnic higher education president only established a set of recommendations, without imposing any model or platform to teach the online classes (Tomé, 2020). The decision was left to the teacher responsible for each course and discipline. Accordingly, classes proceed with the timetable defined by the synchronous classes, but through platforms such as Microsoft Teams or Zoom. Lessons were recorded to later disseminate in the internal information systems of each HEI. Also, the participation on the discussion forums has grown and became an important mechanism for students to expose their doubts. Moreover, email has also gained greater predominance, with a very significant increase of its use to answer questions submitted by students.

---

A third issue—less discussed but also challenging—was conducting tests remotely. The impact of this issue was very heterogeneous considering the specificities of each course. Two types of questions were raised: (1) how to evaluate students with a concise and strong method in courses whose assessment model was initially defined to be based exclusively on written tests and (2) how to evaluate subjects in which laboratory practice is a component of extreme importance. Although these were two questions asked on opposite sides of the balance, the answer given to them was somehow similar. In the answer to the first question, HEIs sought to conduct written tests through the synchronous platforms or their replacement by essays developed individually or with the cooperation of two or more students; in the answer to the second question, it was mainly recommended the use of simulators to provide to the students the perception of the laboratory activity.

The impact of COVID-19 on Portuguese HEIs cannot be limited to the period of the declaration of the State of Emergency. Even after this period, it will be necessary to implement several safety and hygiene measures, such as the maintenance of social distance, hygiene, and disinfection of spaces and the adaptation of spaces for teaching activities. The Portuguese Ministry of Science, Technology, and Higher Education (MCTES) recommended to maintain the teleworking directives and the adoption of the distance learning. In the same sense, it was recommended to follow distance assessment approaches and avoid traditional evaluation procedures in a classroom to reduce the risk of infection. Furthermore, this distance learning and assessment model is to continue after the COVID-19 pandemic, which offers new perspectives to simultaneously explore classroom teaching with distance learning. There is a political perception that it should be possible to teach with less teaching load, and distance learning can make an important contribution to achieving this goal.

### **Mechanisms for Assessing and Evaluating the Students at Distance**

In addition to the way of teaching, the COVID-19 pandemic exposed the challenge of remote learning assessment. Several authors in the higher education field emphasize the importance of formative and summative assessment in the teaching-learning processes (Bognar & Bungić, 2014; Taras, 2008). The formative evaluation aims at the feedback of the whole training process and is carried out throughout the process or action, in all learning situations, on each objective; while the summative evaluation makes a balance of the learning and skills

---

acquired at the end of a training module or unit. Both evaluation processes are simultaneously responsible for assessing the student's academic performance, measuring his or her evolution throughout classes, and proving the effectiveness of the teaching methodology adopted by the teacher.

The classic models that quantify the student's knowledge based exclusively on written assessment and that dictate the student's approval or disapproval had already been subject to criticism before the current scenario. However, now with mass remote education, an opportunity arises to rethink these practices and discover new forms of assessment suitable for the virtual environment. It is also an appropriate time to reconcile these practices to build the future "classroom" teaching.

Tsai (2009) states that remote evaluation should be seen primarily as a form of diagnosis rather than a classification. In this sense, the evaluation process needs to be continuous and diverse, both in methodologies and tools. Consequently, the choice of the learning environment is a key element in this process, and tools that offer various forms of interaction should be preferred.

In addition to the adoption of a platform that is complete and innovative, with instruments capable of evaluating different skills and competencies, distance learning is more individualized and student focused. In a distance learning model, the student has more freedom and space to manage his own time, without the routine being completely focused on his studies. It will tend to favor productivity, concentration, and motivation. Furthermore, the adoption of a distance learning model based on an innovative technological platform with diversified learning elements will allow the implementation of the education 4.0 paradigm, in which student learning is personalized and supported by a diverse set of collaborative tools (Almeida & Simoes, 2019; Hussin, 2018).

The distance learning format encourages and facilitates the continuous evaluation process, which changes the traditional paradigms of written tests at the end of each semester. With this approach, immediate feedback about student performance is provided and the next step in their path is determined. The activities provided virtually also allow automatic correction, which helps facilitate the teacher's work and reduces bureaucracy. The teacher's role thus becomes more focused on the student's learning than on their grade.

---

The spaces for discussions between student and teacher in the forums are incentives for the active construction of knowledge. The student should be encouraged to develop projects that call for involvement with other students and the use of diversified technological tools (e.g., audio, videos, storyboards, etc.). Gamification is another element that can help motivate the student to learn. It increases healthy competition among students and also recognizes progress in student learning. Alomari et al. (2019) state that through gamification it is possible to transform routines of work or study and make people feel more receptive to the tasks and challenges that each situation requires.

Another element that should be promoted in distance education is the interdisciplinarity of content. It is desirable that students have a holistic view of the themes, less focused on the evaluation processes, but instead on how it can be applied in companies and society. In this sense, points of convergence between disciplines should be considered so that the student's knowledge can be applied in multiple areas in an integrated way. The student's evaluation should consider their performance over multiple perspectives and according to the learning outcomes of each class.

### **Perceptions from Teachers and Students Community**

One of the challenges that was felt at the beginning of the process was that not all teachers were at the same level of preparation for distance learning. Due migration to distance learning was not planned, nor there was time for plan and training on the subject, and some teachers with lower technological affinities felt a little bit lost. The challenge for each HEI IT center was to provide technical support to these teachers. Besides this more formal technical support, the teachers shared informally among themselves various experiences and platform solutions to be adopted in their online classes.

One concern that emerged early on was how the assessment of students should be carried out. There was an excessive focus on the summative component of assessment, as the models adopted and based on a classroom approach were too centralized in this process of competence assessment. Avoiding fraud in the assessment process was a central concern. Several Portuguese HEIs have adopted proprietary and open-source solutions such as ProctorExam, Exam.net, TestWe, and Respondus. These tools allow integration with e-learning Learning Management System (LMS) platforms and offer several mechanisms to verify student identity

---

and environment. Furthermore, they offer other features such as suspicious behavior recording and detection, screen blocking, keyboard shortcuts, screen sharing, 360° smartphone vision. However, despite all these features, none of these solutions are perfect and unequivocally prevent academic fraud.

In isolation, none of the solutions are perfect. Each alternative should be part of an integrative assessment solution that uses both summative and formative approaches. This is also an opportunity to migrate the assessment processes in Portuguese HEIs, excessively focused on the summative component. Furthermore, the solutions proposed by the teachers must receive the agreement of the students. Indeed, students must participate in these processes to ensure that the established assessment model takes into account the development of students' skills and their various rhythms of learning. It is also essential that the technological solution proposed considers the heterogeneity of students' equipment because not all students have the same technical resources at their disposal. Additionally, it is equally important that the assessment is carried out without breaking the students' privacy and comply with the norms defined by the General Data Protection Regulation (EU GDPR) (e.g., implementing a distance learning policy that explicitly indicates the information collected, the reasons for its collection, and for how long and obtaining consent prior to data collection). This is a new area for educational institutions and EU GDPR is gaining greater visibility with distance learning.

---

### References

- Agência Lusa. (2020, March 13). Ensino Superior deve estimular aprendizagem a distância. *Diário de Notícias*. Retrieved from <https://www.dnoticias.pt/2020/3/13/65079-ensino-superior-deve-estimular-aprendizagem-a-distancia>
- Almeida, F., & Simoes, J. (2019). The role of serious games, gamification and industry 4.0 tools in the education 4.0 paradigm. *Contemporary Educational Technology*, 10(2). <https://doi.org/10.30935/cet.554469>
- Alomari, I., Al-Samarraie, H., & Yousef, R. (2019). The role of gamification techniques in promoting student learning: A review and synthesis. *Journal of Information Technology Education: Research*, 18, 395-417. <https://doi.org/10.28945/4417>
- Bognar, B., & Bungić, M. (2014). Evaluation in higher education. *Život i škola*, 60(31), 139-159. Retrieved from <https://hrcak.srce.hr/125302>
- Hussin, A. A. (2018). Education 4.0 made simple: Ideas for teaching. *International Journal of Education & Literacy Studies*, 6(3), 92-98. <https://doi.org/10.7575/aiac.ijels.v.6n.3p.92>
- Instituto Nacional de Estatística. (2019). 80% dos utilizadores de internet participam em redes sociais. *Inquérito à Utilização de Tecnologias da Informação e da Comunicação pelas Famílias*. Retrieved from [https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\\_destaques&DESTAQUESdestboui=354447559&DESTAQUESmodo=2&xlang=pt](https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaques&DESTAQUESdestboui=354447559&DESTAQUESmodo=2&xlang=pt)
- Kotowicz, A. (2020, April 15). Alunos sem computador são mais do que se pensa. Nas escolas públicas, quase um terço dos alunos do ensino básico não tem equipamento. *Observador*. Retrieved from <https://observador.pt/2020/04/15/alunos-sem-computador-sao-mais-do-que-se-pensa-nas-escolas-publicas-quase-um-terco-dos-alunos-do-ensino-basico-nao-tem-equipamento/>
- Taras, M. (2008). Summative and formative assessment: Perceptions and realities. *Active Learning in Higher Education*, 9(2), 172-192. <https://doi.org/10.1177%2F1469787408091655>
- Tomé, J. (2020, June 6). Ensino remoto veio para ficar... mas só como complemento. *Diário de Notícias*. Retrieved from <https://www.dn.pt/edicao-do-dia/06-jul-2020/ensino-remoto-veio-para-ficar-mas-so-como-complemento-12389539.html>

---

Tsai, M.-J. (2009). The model of strategic e-learning: Understanding and evaluating student e-learning from metacognitive perspectives. *Educational Technology & Society*, 12(1), 34-48. Retrieved from <https://www.jstor.org/stable/jeductechsoci.12.1.34>

---

Peer-Reviewed Article

## The role of online databases in academic libraries

Alana Howlett, MLS  
Independence University

Note: The author of this article is a member of the Journal of Online Education editorial staff. Because the author was not involved in facilitating the double-blind peer review process, the Journal believes that any conflict of interest has been nullified.

---

**Abstract:** An overview of the role online databases play in academic libraries. The value of online databases in all academic institutions is affirmed and emphasized as a necessity for online institutions. A wide variety of databases is encouraged, including multidisciplinary databases, subject databases, open access databases, and institutional repositories. Databases should provide materials in different formats, including articles, books, reference materials, and other formats that fit students' research needs. Funding issues may make it difficult to provide access to electronic resources and alternative acquisition models may be necessary.

**Keywords:** library databases, online learning, library resources

---



Journal of Online Higher Education

ISSN: 2575-1204

This work is licensed under a [Creative Commons Attribution-NoDerivatives 4.0 International License](https://creativecommons.org/licenses/by-nd/4.0/).

---

## Introduction

Academic libraries play a critical role in the development of higher education students. While many facets of the academic library are undeniably important—information literacy initiatives, infrastructure, library staff, etc.—how its collections support the needs of the institution should be a key factor in evaluating the library’s effectiveness, given the “positive relationship between student use of library resources and academic success as measured through GPAs” (Allison, 2015).

In most modern libraries, collections include both physical and digital materials, with a stronger emphasis on the latter. This can be seen as far back as 1999, when researchers noted that “users more often prefer electronic resources to print, and have become accustomed to information being accessible on demand, whether by E-mail, Internet or fax” (Carr & Wolfe, 1999, p. 2). The emphasis on ensuring that resources are available digitally has only become more pronounced, with Breeding (2016) noting that “academic libraries have seen an almost complete transformation of their collections from mostly print to largely electronic in the last 2 decades” (p. 9).

This is not to say that print collections have become superfluous—except in situations when the library is physically inaccessible to students, a significant number of patrons will continue to check out the print resources available to them—but it should be clear that because so many students rely on electronic resources, it is imperative that the academic library’s digital collections have the breadth and depth to support the learning requirements of its student population. This is especially the case for online campuses, which generally lack the flexibility to make resources available in non-electronic formats and thus are wholly reliant on what they can provide digitally.

Online resources became ubiquitous in academic libraries in large part because of the early efforts to create infrastructure to support electronic resources. In 1999, Crossref began working on a project that enabled collaborative reference linking and established Digital Object Identifiers (DOIs) as a standard of academic publishing (Pentz, 2016). In 2001, it was estimated that 6% of academic journals were available online (Carlson, 2001); by 2005, it was estimated to be as high as 91% (Ninety percent of journals, 2006), and today it is likely much higher. Because so much of the work to retroactively digitize and assign metadata to print works has

---

already been done (and publishers today take into account the fact that their products will be available in electronic formats during the publication process), it is relatively simple for the library to provide digital materials to its patrons in large quantities.

### **Types of Online Databases**

Library patrons today are often accustomed to having a single search box on the library homepage where they can input their query and search all the library's holdings simultaneously. This process—often called “federated search”—will search all of the library's resources without requiring the user to know which database they need. Even though patrons may no longer be required to go to each individual database directly, the selection of databases that the library is able to provide will drastically affect their research experience. Broadly speaking, academic libraries will usually provide four categories of databases: multidisciplinary databases, subject databases, open access databases, and unique digital collections.

#### **Multidisciplinary Database**

One of the most commonly used types of digital collections—not only in academic libraries, but also in school and public libraries—is the multidisciplinary database. This category of database does not aim for specialization, but rather acts as a collection that, theoretically, will have something for all areas of inquiry. For an electronic resources librarian, subscribing to multidisciplinary databases like EBSCO's Academic Search databases, JSTOR, or Gale Academic OneFile is a tremendous time-saver because these resources can quickly establish a baseline level of coverage without having to adopt thousands of titles individually. A multidisciplinary database, however, is not a panacea for the academic library's every need and it alone will seldom contain the depth necessary to keep up with the full research demands of the institution's population.

An academic library should strive to have multiple databases that focus on the same discipline. The need for a diversity of databases is supported by research by Hood and Wilson (2001), who found that (1) accessing the top database alone only provided around 1/5 of the scholarly literature of a given field, (2) to reach of the level of 80% access would generally require 5-10 databases, and (3) a progressively higher number of databases was needed to increase the percentage of coverage (p. 1251). Hood and Wilson also note that “coverage is very topic dependent,” so these figures may vary, but overall, any topic with higher interdisciplinarity

---

requires more databases to reach adequate coverage, while more insular subjects can suffice with fewer databases (p. 1253).

### **Subject Database**

Subject databases have a narrower scope than multidisciplinary databases, containing only resources that are relevant to the discipline. A subject database may be perceived to have higher quality resources than a multidisciplinary database, due to vendors having a vested interest in putting the more prestigious journals of the field in the more exclusive package. The notion that prestige is correlated with quality, however, is misleading, as there is evidence that highly prestigious journals are not significantly more reliable than other journals in the field (Brembs, 2018). The more valuable asset of the subject database is in how it increases the number of publications available for that subject.

As a general rule, the coverage of a particular topic will be higher in a subject database than what a multidisciplinary database will cover for the same subject. This makes intuitive sense—as there would not be much point in acquiring a subject database otherwise—but it is also supported by the findings of a study by Nisonger (2008), who found that database Library Literature & Information Science Full Text was superior to Academic Search Premier in the number of library and information science journals it contained, even with the latter being “known to have significant library and information science content” (p. 8). Assuming that this trend holds true across all disciplines, academic libraries should primarily rely upon subject databases for covering any topics that are particularly important for their population to research, thus allowing the multidisciplinary database’s role to be more about reaffirming the subject databases and helping to address inquiries that are outside anticipated avenues of research.

### **Open Access Databases**

Open access databases also play an important role in providing students access to additional content. Much like the subscription multidisciplinary database, an open access database is a tool that allows the library to provide access to a wide variety of content that does not require excessive labor on the librarian’s part to curate. The added benefit here is that, unlike a subscription database, the monetary cost for providing students with open access databases is essentially zero. Open access databases, however, feature certain biases that may be less pronounced in subscription databases. Open access as a field is weighed heavily towards fields

---

in which open access publishing is widely accepted. This means that fields that were early adopters (such as physics, astronomy, or information technology) or that place a strong emphasis on sharing information (such as the medical sciences) will have more free resources to work with, whereas fields where open access is not the norm (such as chemistry or engineering) will have to continue relying more on paid resources (Severin, Egger, Eve, & Hürlimann, 2020). Additionally, open access databases often also have little to no curation, which makes them more susceptible to including less reputable sources. One study of student bibliographies found five cited journals that were on Beall's List of Predatory Journals; none of these five journals were indexed in the subscription-based Academic Search Premier or Web of Science, but all of them were findable using the freely available Google Scholar (Schira & Hurst, 2019, p. 11). This is not to say that predatory journals cannot find their way into reputable databases (they can, as seen in the research by Nguyen et al. (2020)), nor does this mean that open access databases are inherently unreliable, but librarians should make sure that students are aware of potential pitfalls in the databases that are made available to them.

### **Unique Digital Collections**

Libraries also regularly house unique materials, which the ACRL notes includes digital collections (ACRL Board of Directors, 2018, p. Performance Indicators 5.3). Academic libraries supporting graduate-level programs will usually include the electronic dissertations and theses of its graduate students in an institutional repository. Other scholarly resources created by the institution, such as "article pre-prints and manuscripts, technical reports, conference proceedings, data sets, and software," may also be included in institutional repositories (Association of College and Research Libraries, 2020). Since unique academic library collections are not part of a package developed by a third party, it is incumbent on the library to ensure that digital materials are preserved in the long term. Arnepalli and Rao (2020) identify several strategies for digital preservation, including periodically copying the materials from one medium to another, relocating data to different software or hardware, ensuring materials can accommodate updates in technology, and supporting materials that are preserved in software to be compatible with other software (p. 6).

---

### **Types of Electronic Resources**

It is also important that databases have differences in the kind of resources they contain. In a study by Lantz et al. (2016), the top three source types that students used in their annotated bibliography assignment were journal articles (39% of sources cited), books (37% of sources cited), and reference sources (18.5% of sources cited) (p. 259). Each of these source types should be readily accessible in an online academic library's digital collections.

#### **Journal Articles**

Journals (also called serials) are regularly published publications that combine several articles into a volume or issue. Journal holdings at most libraries have gone digital to the point that many students at ground campuses are unaware of the existence of print periodicals in their library (assuming that it even has them), having only ever accessed their digital counterparts. Electronic journal articles have the advantage of being extremely convenient: they can be read in a single sitting, their full text can be viewed in a browser or downloaded as a PDF file, and they can be quickly evaluated based on whether they are peer reviewed or not. In nearly all respects, journal articles are well-suited for the online learning environment.

#### **Books**

Books (also called monographs) are the quintessential feature of the library and are used by almost everyone, from new students to tenured faculty and from the career professional to the casual consumer. Despite the widespread use of books—and maybe, to some extent, because of it—the transition from print books to eBooks in academic libraries has been neither quick nor smooth. A ProQuest (2016) analysis of academic library book purchasing trends showed that despite 89% of academic libraries now offering eBooks, in 54% of libraries eBooks only accounted for 20% or less of the overall monograph budget (p. 8).

Books fill so many niches that it can be difficult to have a consistent infrastructure to support them. It is not uncommon for eBooks to lack of uniformity in the technology used to access and read the book, have problems with digital rights management and licensing, or have significant differences between the library market and consumer market (Plum & Franklin, 2015). Wiersma and Tovstiadi (2017) are particularly critical of the barriers to discovery that eBooks are much more likely to face, noting that the metadata provided by third-party eBook vendors is often substandard and may lack support for full text searching, even though “most

---

users expect to have the ability to search the full text of an e-book” (p. 630). While librarians could theoretically make corrections to eBook metadata to improve findability, Wiersma and Tovstiadi observe that this degree of quality control is usually impracticable “due to the high volume of e-books purchased by academic libraries” (p. 639). Despite these challenges, however, eBook databases are undoubtedly valuable and, though they may see less use than print books in some cases (Plum & Franklin, 2015), eBooks are clearly in demand for a significant portion of the student population and thus should be actively sought after. As the eBook industry moves forward, academic libraries should be mindful of any difficulties that their students may encounter while accessing library eBooks and do whatever they can to improve the eBook experience for their patrons.

### **Reference Sources**

Reference sources historically were mainstays of the library; now that many are already freely available online, this is less often the case. Students today are more inclined to check places like Wikipedia, Dictionary.com, or Google Maps instead of visiting the library for an encyclopedia, dictionary, or atlas. This is not inherently a bad thing—even if some professors prohibit citing these sorts of sources, reference websites can still be valuable for early phases of the research process, as they can help establish a baseline understanding of a new topic and may lead to a rabbit hole for further research. Though many reference websites are available outside the library, academic libraries can still seek ways to incorporate reference materials into their online collections. East (2010) notes that the best place for reference materials today is not in print, but rather online, and further explains that “being online is not enough: they must be easily findable and ideally cross-searchable so that we can leverage the variety of content and viewpoint in our entire electronic encyclopedia collection” (p. 168). Academic libraries can include the online versions of general and subject-specific encyclopedias, dictionaries, thesauruses, handbooks and manuals, almanacs, atlases, timelines, bibliographies, directories, compilations, and other reference materials in their collections and have these materials be discoverable through the library search interface. Libraries can also subscribe to reference databases designed to guide students through the research process that often contain quick tips for research, visualizations of how keywords are related, background articles explaining key concepts, links to relevant sources in the library’s collections, and other tools for teaching

---

information literacy. Reference materials, though they may not be in as much demand as they once were, still have an important role to play towards the enrichment of student knowledge, and thus should be made available in ways that students will see their value and come to rely upon them.

### **Other Source Types**

Beyond the trifecta of articles, books, and reference materials, libraries will regularly adopt online databases containing other types of sources. There are many databases in a variety of subjects that enable students to view images, listen to sound recordings, stream video, examine archival materials, or export datasets. There are also certain situations where a very particular type of database is necessary because it has a specific type of resource that will not be found elsewhere. For example, a medical student looking for interactions between medications should access a drug interactions database. A business student who needs company records, however, is better served by a market research database containing company profiles and economic data. Furthermore, a law student investigating legal precedent would seek out related court cases in a law database containing case reports. While subject databases can get these students to the general area of inquiry, if the database focuses on the wrong type of resource, it will be much more difficult for the student to obtain the information they are actually looking for. It is thus vital that the library understands what types of sources their students will need to perform their research and provide these source types to them.

### **Acquiring Electronic Resources**

#### **Funding**

The determining factor for whether libraries can adopt an online database is usually whether or not they have enough money to do so. Funding in academic libraries will usually be provided by the parent institution, though other potential sources include “research grants, special projects, gifts and endowments, and fees for service” (American Library Association, 2015). Libraries also frequently join consortia to share resources and spread the cost burden between the libraries that can pay and those that cannot. Regardless of the source of library funding, however, the financial support for any database subscriptions needs to be consistently present from year to year and be able to accommodate changes in database pricing.

---

Getting that consistent funding has often been a difficult task for libraries. In a survey conducted in 2015, ProQuest found that 29% of academic library resource budgets had decreased, with the primary reason being due to budget cuts (ProQuest, 2016, p. 4). For libraries that had an increase in their resources budget, the most frequent reason for it doing so was that the price of the resources they subscribed to had increased, not because they acquired new resources. Many libraries faced with higher serials pricing have also resorted to decreasing their monograph budget to have enough to pay for it. Academic libraries looking to acquire new databases must work to get buy-in from their institution and other invested parties to ensure that the library can keep up with the growing demand for quality resources. Libraries will also need to monitor database usage—both in raw numbers and anecdotally—to best understand how their population actually uses the library’s resources and use this information to bolster the argument for when the library needs to continue providing a particular database or when they can let it go.

### **Alternative Acquisition Models**

In addition to database subscriptions, many vendors provide other means for the library to acquire electronic resources. For example, if the library uses an online service like Get It Now or The Academic Collection to supplement its interlibrary loan, students can also get easy access to individual articles from journals that the library does not subscribe to. A ProQuest blog post about eBook acquisition identifies the following models that could be used besides database subscription: perpetual access (can be for individual or bundled titles), demand driven acquisition (DDA) (only purchasing eBooks used by patrons), short term loan (STL) (eBooks are loaned for a short time for a fraction of the price), and Access-to-Own (ATO) (loan spending on a title will contribute to the library owning it) (ProQuest, 2016). In 70% of libraries, more than one of these models are used to acquire eBooks and will choose what method will best suit the needs of the library’s population and budget.

### **Conclusion**

Electronic databases and the resources they contain are of prime importance to almost any academic library, whether the campus is on-ground or online. Databases are diverse in nature and academic libraries should embrace this diversity to find the best assortment of databases to fit all of their institution’s needs. Though many electronic resources are freely available, open-access databases will usually not be sufficient on their own and academic

---

libraries should not rely wholly upon them. Though academic libraries will invariably be restricted by what is available in their budget, they may be able to utilize different acquisition models to obtain the resources they need for their students and researchers to succeed.

---

### References

- ACRL Board of Directors. (2018, February). *Standards for libraries in higher education*. Retrieved from American Library Association: <http://www.ala.org/acrl/standards/standardslibraries>
- Allison, D. (2015). Measuring the academic impact of libraries. *Portal: Libraries and the Academy*, 15(1), 30-40. <https://doi.org/10.1353/pla.2015.0001>
- American Library Association. (2015). *Library operating expenditures: A selected annotated bibliography*. Retrieved from <http://www.ala.org/tools/libfactsheets/alalibraryfactsheet04>
- Arnepalli, K., & Rao, K. S. (2020). The pace of digital libraries: Academic libraries perspective. *Library Philosophy and Practice*, 1-10. Retrieved from <https://digitalcommons.unl.edu/libphilprac/3840/>
- Association of College and Research Libraries. (2020, October 10). *Scholarly communication toolkit: Repositories*. Retrieved from LibGuides at ACRL: <https://acrl.libguides.com/scholcomm/toolkit/repositories>
- Breeding, M. (2016, July/August). Divergence and convergence: Trends in academic and public libraries. *Computers in Libraries*, 36(6), pp. 9-10.
- Brembs, B. (2018). Prestigious science journals struggle to reach even average reliability. *Frontiers in Human Neuroscience*, 12, Article 37. <https://doi.org/10.3389/fnhum.2018.00037>
- Carlson, S. (2001, November 16). The deserted library. *Chronicle of Higher Education*, 48(12), pp. A35-A38.
- Carr, J. A., & Wolfe, A. (1999). Core journal titles in full text databases. *ACRL Ninth National Conference*. Detroit, MI. Retrieved from <http://www.ala.org/acrl/sites/ala.org.acrl/files/content/conferences/pdf/wolfe99.pdf>
- East, J. W. (2010). "The Rolls Royce of the library reference collection": The subject encyclopedia in the age of Wikipedia. *Reference & User Services Quarterly*, 50(2), 162-169. <https://doi.org/10.5860/rusq.50n2.162>
- Hood, W. W., & Wilson, C. S. (2001). The scatter of documents over databases in different subject domains: How many databases are needed? *Journal of the American Society for Information Science and Technology*, 52(14), 1242-1254.

- 
- <https://doi.org/10.1002/asi.1191>
- Lantz, C., Insua, G. M., Armstrong, A. R., & Pho, A. (2016). Student bibliographies: Charting research skills over time. *Reference Services Review*, 44(3), 253-265.
- <https://doi.org/10.1108/RSR-12-2015-0053>
- Nguyen, M. D., Dang, V. H., Pham, M. T., Zunic, L., Zildzic, M., Donev, D., . . . Masic, I. (2020). Predatory open access journals are indexed in reputable databases: A revisiting issue or an unsolved problem. *Medical Archives*, 74(4), 318-322.
- <https://doi.org/10.5455/medarh.2020.74.318-322>
- Ninety percent of journals now available online. (2006). *Outlook on Science Policy*, 28(6), 62-63.
- Nisonger, T. E. (2008). Use of the checklist method for content evaluation of full-text databases: An investigation of two databases based on citations from two journals. *Library Resources & Technical Services*, 52(1), 4-17. <https://doi.org/10.5860/LRTS.52N1.4>
- Pentz, E. (2016, September 16). *History*. Retrieved from Crossref: <https://www.crossref.org/about/history/>
- Plum, T., & Franklin, B. (2015). What is different about e-books? A MINES for Libraries® analysis of academic and health sciences research libraries' e-book usage. *Portal: Libraries and the Academy*, 15(1), 93-110. <https://doi.org/10.1353/pla.2015.0007>
- ProQuest. (2016). *Academic library book purchasing trends*. Retrieved from [http://contentz.mkt5049.com/lp/43888/438659/D187\\_Ebooks\\_Aquisition\\_whitepaper\\_v5.pdf](http://contentz.mkt5049.com/lp/43888/438659/D187_Ebooks_Aquisition_whitepaper_v5.pdf)
- ProQuest. (2016). *How to balance ebook access with ownership*. Retrieved from ProQuest Blog: <https://about.proquest.com/blog/pqblog/2016/How-to-Balance-Ebook-Access-with-Ownership-.html>
- Schira, H. R., & Hurst, C. (2019). Hype or real threat: The extent of predatory journals in student bibliographies. *Partnership: The Canadian Journal of Library and Information Practice and Research*, 14(1), 1-16. <https://doi.org/10.21083/partnership.v14i1.4764>
- Severin, A., Egger, M., Eve, M. P., & Hürlimann, D. (2020). Discipline-specific open access publishing practices and barriers to change: an evidence-based review [version 2; peer review: 2 approved, 1 approved with reservations]. *F1000Research*, 7:1925.

---

<https://doi.org/10.12688/f1000research.17328.2>

Wiersma, G., & Tovstiadi, E. (2017). Inconsistencies between academic e-book platforms: A comparison of metadata and search results. *Portal: Libraries and the Academy*, 17(3), 617-648. <https://doi.org/10.1353/pla.2017.0037>

---

Book Review

***Small Teaching Online* by Flower Darby with James M.  
Lang**

Denise Harshbarger, EdD  
Independence University

---



Journal of Online Higher Education

ISSN: 2575-1204

This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

---

Whether you are new to teaching online or already an experienced faculty member, *Small Teaching Online: Applying Learning Science in Online Classes* will inspire you to take a step back, breathe, and engage with your practice in a different way. This book is based on the small teaching principles that were devised by James Lang. Lang, an author of multiple books related to instruction in higher education, created the small teaching concept as a way to engage busy higher ed faculty in the process of thinking deliberately and practically about their instruction. In this collaboration, Lang provides the introduction and some theoretical perspective while Darby speaks specifically to faculty who specialize in higher education that is online. Darby draws from her wide experiences in online learning as both an instructional designer and faculty member.

One of the many elements of this book that sets it apart from others is that Flower Darby is not only a skilled writer, but also a skilled teacher in her narrative. Each chapter begins with a relatable instructional anecdote. Notably, these are written with a focus on instruction and are relatable for anyone who has any instructional experience, whether face to face or online. In one chapter, Darby recounts her experience as a dance teacher attempting to move her students toward mastery. She notes the dual method by which most teachers begin any teaching career: “emulating my favorite teachers of the past and by trial and error” (Darby & Lang, 2019, p. 27). From this fundamental start, she explains how she built a successful instructional practice by paying careful attention to both student successes and failures and reflecting on the instruction that she had provided and how it impacted those successes and failures. These themes run through the book and provide the foundation upon which Darby builds the small teaching principles that fit into the online higher education experience.

This book is a practitioner’s dream. It is ideally designed to provide just-in-time tips and tricks for busy faculty to adopt and implement in their online courses quickly and confidently. The chapters, while logical to read chronologically, are also very reader friendly and can stand-alone. This is particularly useful for faculty to find “in the moment” inspiration and excellent advice, indexed by topic, to provide ideas for immediate needs. In addition to the well-organized format, the content covers what I have found to be the trifecta of online instruction. Chapter topics are situated under the broad concepts of design, teaching humans, and motivating online students.

---

Right from the start, Darby reels you in, situating your understanding of the online learning environment, then she turns the tables and provides a learner's perspective. The chapters, themselves are engaging anecdotes and analogies to underscore the importance of the principle being discussed. Once you're leaning in for more, you receive a well-explained theoretical underpinning that is carefully framed in terms of online learning. Like any good teacher, Darby ties up the chapter lesson by providing easy to implement quick tips and a conclusion that anchors back to the rationale for this instructional practice.

In addition to a scaffolded presentation, Darby practices what she is preaching by infusing Universal Design for Learning (UDL) principles across the continuum of this book. UDL is a framework for instruction that is designed to remove barriers from learning (CAST, 2018). In this book, Darby does just that by providing engaging and relevant scenarios that all learners can relate to, clarity surrounding the theoretical curriculum underpinning, and different examples of how the practices in question can look in an online classroom setting.

*Small Teaching Online* is an excellent book for your personal library. The reading is light and relatable, the tips are reasonable and carry significant student impact—not to mention that the writing is very inspirational. Darby writes in a way that encourages you to want to do better for your students and reflect on your processes as a teacher. The reading experience is cozy and more closely mirrors having coffee and conversation with a trusted friend than reading a book about teaching online. As an experienced educator, I found significant value in this book and have made a home for it close to my computer for quick reference. If you teach online, you need a copy of this book. Your students will thank you.

---

References

CAST. (2018). *UDL and the learning brain*. Retrieved from <http://www.cast.org/our-work/publications/2018/udl-learning-brain-neuroscience.html>

Darby, F., & Lang, J. M. (2019). *Small teaching online: Applying learning science in online classes*. Jossey-Bass.

---

Reflection in Online Education

## **Managing peer-to-peer implicit bias in the classroom: Educator options for promoting inclusive and equitable higher-education learning**

Jessica Giner, JD  
City University of Seattle

---

**Abstract:** Some manifestations of bias amongst students may be more immediately apparent to instructors than others. While the urgency to address all forms of racism must not be overlooked, higher-education teachers may be more readily equipped to address explicit bias, as it is often most recognizable due to its overt nature. Yet an even greater looming threat for ensuring equity in the classroom is the necessity of addressing peer-to-peer implicit bias in the classroom.

This article attempts to provide solutions for higher-education instructors to address peer-to-peer bias in the classroom by: encouraging self-evaluation for implicit bias, discussing (both online and in-person) course structure and management strategies to prepare a neutral environment, providing tools to understand the impact of students' own implicit biases upon self-perception or performance, and engaging with implicit bias response as a process rather than a "fix." With a commitment to addressing ever-prevalent implicit bias in the classroom, educators may be well-positioned to improve classroom equity and respond to the injustices their students may experience.

**Keywords:** implicit bias, inclusion, equity, management, learning, classroom environment

---



Journal of Online Higher Education

ISSN: 2575-1204

This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/).

---

## Introduction

On May 25, 2020, George Floyd, a black man, died during an arrest for allegedly utilizing a counterfeit \$20 bill at a grocery store in Minneapolis, MN. Mr. Floyd's death, and the harsh reality of the arresting officers' racially motivated actions, ignited a global firestorm of grief, anger, and unrest that has left virtually no person in the United States untouched by its reverberations.

Public demonstrations and rallies filled the streets of our cities across the country. Corporations have responded by reviewing equity policies and taking swift action to terminate employees who demonstrate disregard for equality. Media management companies have cancelled television shows glorifying police actions or refocused resources to provide continuous news coverage of our nation's varied responses. City governments have made assurances of immediate action to remedy inequities and address injustices. While many of these responses have been delivered swiftly on the heels of public outcry, it is yet to be determined if all (or any) of these responses will be sufficient to heal the pain of vulnerable communities.

Educators, however, are left alone in their classrooms to help some of those most significantly impacted by these events: students.

Higher-learning teaching professionals are called upon to engage with students who possess a maturity and a desire to engage with social justice, many of whom have had the opportunity to develop life experience, knowledge, and a personal belief system. While a 2019 UCLA national survey of undergraduate freshman students reported that 11.1% expected to participate in a protest during their college years (Stolzenberg, et al., 2019, p. 47), recent events may allow for a logical inference that this number may increase as students take to the streets to express their outrage at government systems. However, these passionate outcries do not fall aside at the threshold where street meets academic building. Educators must be prepared to address these convictions in the classroom as well.

In the spring of 1968, an elementary school teacher similarly faced the task of explaining a racially motivated assassination to her third-grade classroom. On April 4, 1968, the day after Dr. Martin Luther King, Jr. delivered his landmark address "I've Been to the Mountaintop," he was assassinated in an act of prejudice (Martin Luther King, Jr. Research and Education Institute, n.d.). Jane Elliott, a teacher in Riceville, IA, arrived at school the next morning to face

---

a room of nine-year-olds and their questions (Bloom, 2005). Understanding that her students would be impacted by familial influence, a lack of developed cognition about the events surrounding Dr. King's murder—and a need for guidance that would lead them to develop an understanding of discrimination and prejudice—Jane Elliott utilized this moment of national suffering to teach a (now infamous) lesson.

Elliott conducted what she termed an “exercise,” during which all brown-eyed students were told that they were the “better” people in the room and were both cleaner and smarter than the blue-eyed students (Bloom, 2005). Elliott assigned special privileges to the brown-eyed students, such as longer recess breaks and preferential placement in class lines and observed as the brown-eyed students became emboldened by their preferred status and asserted themselves over the blue-eyed students.

The following school day, Elliott reversed the directions and told the blue-eyed students that they were now dominant (Bloom, 2005). While the blue-eyed students were observed to have a slight reduction in the degree of aggressiveness towards the brown-eyed students (thought anecdotally to be the result of the blue-eyed students having the fresh perspective of experiencing disparity the prior day), nevertheless the same behaviors resulted. At the conclusion of the exercise, Elliott gathered the students together to share and discuss their experiences. Elliott explained to the class that the actions they had engaged in or borne consequences of were discrimination. Elliott explained that discrimination had been the reason for Dr. King's assassination and urged her students to record their reflections of the experience.

Regardless of whether one may critique or applaud Elliott's methods, her response to an act of incredible violence, grief, and blatant prejudice in the classroom demonstrated the significant role educators play in responding to social inequities that manifest not just on a national or global scale, but in the classrooms of small towns as well. While higher-education teaching professionals still face the ever-prevalent task of confronting blatant discrimination in the classroom—a recent study from Stanford University has shown that evidence of homophily is present amongst student groups even in an online course setting (Baker, Dee, Evans, & John, 2018)—an even greater looming threat for ensuring equity in the classroom is the necessity of addressing peer-to-peer implicit bias in the classroom.

---

The prevalence of implicit bias has been a well-documented component of human existence. When describing the occurrence of implicit bias, some researchers have utilized the term “pervasive,” arguing that “everyone possesses them” (Staats, Capatosto, Wright, & Contractor, 2015, p. 63). One may logically assume, therefore, that not only do educators introduce their own unconscious bias into the classroom, but also that students contribute their implicit biases as well.

The subject of implicit bias is both a rapidly developing field of study and trending topic of professional training. Implicit bias study has been used to establish informed and diversified hiring practices, improve equity in the workplace, improve unconscious bias in the justice system, and conduct medical research (Brownstein, 2019). By 2018, the United States Department of Justice had presented implicit bias training to more than 28,000 of its employees, demonstrating the importance of shifting our collective focus towards understanding and confronting unconscious bias in the workplace (Sleek, 2018).

Yet, despite the growing understanding of the critical role implicit bias plays in both personal and professional decision-making, relatively few resources exist to support those in management roles in addressing manifestations of peer-to-peer bias in either the workplace or the classroom. While regulating the thought process of others may be difficult, if not entirely impossible, teachers still face the insurmountable task of ensuring equitable classrooms in which all students are able to navigate both course content and peers in manner that ensures engaged learning. Ready, or not, teachers are called upon increasingly to manage peer-to-peer bias in their classrooms.

### **Awareness of Personal Implicit Bias**

Many working professionals today have benefitted from the opportunity to engage in implicit bias training. Generally, educators serving in institutions that receive federal funds are required to attend Title IX and VI training sessions that frequently addresses diversity awareness and explicit bias response training (U.S. Department of Justice, n.d.) The frequency and widespread availability of this anti-discrimination training in higher education is supported by a 2015 report by the US Department of Education Office for Civil Rights, which stated that approximately 7,000 post-secondary institutions receive federal financial assistance and are required to adhere to Title IX requirements (including training) (Office for Civil Rights, 2015).

---

While it is a safe assumption that most educators are all too acutely aware of the existence of bias and discrimination in their classrooms—either through first-hand observation or through exposure during institutional training—it would be remiss to not discuss the significant connection between instructor implicit bias and the resulting prevalence of peer-to-peer implicit bias.

Implicit bias as a component of the human experience is well-documented as a persistent and intrusive factor in perception and decision-making processes (Brownstein, 2019). Left unexamined, unconscious bias may result in the biased and inequitable decision-making. As leaders in a classroom, educators set the tone for classroom decorum. If impacted by implicit bias, teachers may unknowingly cultivate an environment in which bias and discrimination seed and become the weeds that impact a student's ability to grow and flourish in knowledge. Should instructors not address their own personal bias, many good-faith attempts to extract racism from classrooms may not be successful (Benson & Fiarman, 2019).

The impact of a teacher's perception upon a classroom has been a long-examined topic. A 1968 study of elementary school teachers demonstrated, with clarity, how a teacher's perceptions of the classroom may directly impact the environment and student performance (Rosenthal & Jacobson, 1968). Researchers in this study began by administering a standardized test to elementary school classes to measure levels of student performance. After the testing, the researchers identified the "highest achievers" for each classroom to the teacher. The teachers were carefully instructed to not reveal the test results to the students or make any adjustments to the amount of time spent with those students. Researchers then readministered the standardized testing at the end of the school year and determined that those identified at the beginning of the school year as high achievers were, in fact, the highest achievers in their respective classes at the end of the year. The catch? Those students identified as "high achievers" at the beginning of the school year had, in fact, tested as average achievers during the initial test. The conclusion drawn from the study was that the teacher's own beliefs on the achievement capabilities of those students caused implicit teaching practice changes that ultimately impacted students' abilities to learn and achieve.

The lessons learned in 1968 about a teacher's ability to impact student performance based solely upon the teacher's own perception of ability emphasize the importance of educator

---

commitment to identifying and addressing implicit bias (Rosenthal & Jacobson, 1968). As this study suggests, a teacher's unconscious perceptions play a significant role in the teacher's treatment of individual students. An impact to the overall classroom environment—particularly with adult learners in higher education who are likely to better recognize subtle differences in teaching approaches—is a reasonable extension of these findings.

One manner by which instructors may develop a better understanding of individual implicit bias is to engage with learning tools designed to aid in identifying potential areas of bias. For example, Harvard University has developed an array of popular tests as part of its “Project Implicit” aimed at assisting users in identifying potential areas of implicit bias (Project Implicit, n.d.). The Harvard Implicit Associations Tests (IAT) allow users to explore personal hidden biases by answering a series of questions and engaging in tasks assigned within the tool. Upon completion of a test, users will receive results indicating areas of potential bias on topics including race, gender, weight, age, disability, sexuality, etc. While it is important to recognize that implicit bias tools may not be able to measure the precise amount or degree of bias, using these resources may provide a valuable opportunity to self-assess how unconscious bias impacts each educator's learning environment.

Identifying personal biases goes beyond merely making an instructor aware of their existence, but may also allow for opportunities to examine how these biases may manifest in the instructor's own teaching practices. Using colloquial terms such as “you guys” (which applies gender-specific pronouns favoring a traditionally favored gender) in addressing the class, assigning gender-normative roles for characters in a case study, making behavioral assumptions based upon race or ethnicity, or assuming equitable access to resources may result from the instructor's implicit bias and have a significant impact upon individual student's ability to thrive and learn in the classroom environment (Pinsker, 2018). Similarly, instructors may consider use of other gender-normative language, such as “ladies and gentlemen” when addressing a class in order to avoid excluding nonbinary or trans individuals. When educators become aware of specific areas of personal unconscious bias, they are more capable of reviewing specific teaching actions (such as lecture preparation or the preparation of an online classroom environment) to determine if implicit bias may be present.

---

Educators may also wish to review their individual teaching practices to determine if they are equitably applied to all students. While many instructors would strongly assert that their personal practice is to grade in accordance with assessment guidelines and grading standards—rather than based upon perception of a student’s race, gender, ethnicity, age, or other identifying characteristics—statistical data supports a finding that teacher perception of student background impacts grade determinations. A 2018 study from the University of Mannheim reported that teachers who perceived a student to have a “migrant background” (based upon the student’s name) issued them a lower grade than for similarly situated students who were perceived to have “non-migrant backgrounds” (Bonefeld & Dickhäuser, 2018). The power of a name, or other identifying characteristics, to influence decision-making must not be undervalued.

Whenever possible, “blind” grading practices—or those which conceal identifying characteristics of the student submitting the work—should be substituted for those that reveal the student’s name or other identifying factors. Examples of blind grading practices may include utilizing anonymous grading tools available in online learning platforms (such as those available in Canvas), concealing student names, or ensuring assignments are submitted in electronic format to avoid identifying handwriting (Poorvu Center for Teaching and Learning, n.d.). By adopting these (or similar) practices, educators may issue grades based upon merit and adherence to assignment guidelines rather than implicit bias contaminating the process. Blind grading practices, when applied on a consistent basis, may develop a consistent record for an instructor of equitable grading rather than discretionary grading impacted by implicit bias (Hardré, 2014).

Instructors may also wish to advise students of their intent to grade using a blind grading system. Not only will this discussion promote transparency in grading practices, but it may also develop trust and encourage a dialogue regarding equity in higher-learning practices. Student perception of the instructor’s efforts to promote equity and take affirmative steps towards reducing implicit bias may improve student perception of the instructor and promote improved student achievement.

When grading, instructors may also wish to review the nature and type of feedback presented to students, as the feedback itself may demonstrate implicit bias. Ensuring that feedback is focused on constructive criticism and cites policies or assessment instructions may motivate students to improve achievement. Providing feedback that students perceive as being

---

without bias may be promoted by grading based upon institutional rubrics and adherence to assignment guidelines. Utilizing grading metrics provided to students as the model for assessment feedback lends credibility to grading decisions and demonstrates the instructor's reliance upon equitable practices rather than broad discretion.

The importance of tone and content in instructor feedback is demonstrated by a 1999 case study of feedback provided to both students identified as both Black and White (Cohen, Steele, & Ross, 1999). Researchers in this study examined student responses to positive and negative feedback in the classroom. The researchers concluded that both groups (African American students and Caucasian students) responded favorably to feedback that combined citing achievement standards and performance praise. On the other hand, critiques of student work that were perceived as "unbuffered criticism" (without adherence to achievement standards) were responded to less favorably by African American students.

Instructors should also be cognizant of the format by which praise is delivered. Additional research supports the conclusion that students belonging to culturally stigmatized groups tend to view positive feedback provided by an instructor belonging to a culturally dominant group more negatively than students belonging to culturally dominant groups (Lawrence, Crocker, & Blanton, 2010). The delivery of instructor feedback may be equally as important as the feedback itself. Educators may wish to work towards providing uniform quantities of praise that are based upon institutional grading and achievement standards in a race, age, and gender-neutral language.

Educators utilizing these practices to conduct a self-examination and confront and address implicit bias in personal teaching practices may be more well-positioned to approach teaching with the goal of equitable achievement and promoting classroom respect. While personal bias is, to some degree, within the individual instructor's control, educators are also tasked with moderating the exchanges that occur within their classroom environments as well. Regulating one's own bias is a significant task. Managing the subconscious bias of others is daunting. However, teachers must also develop a learning environment designed to facilitate equity and learning amongst students.

---

### **Understanding the Role of Student Implicit Bias**

In times of radical social change—such as contemporary calls to reform criminal justice systems, address racial equity issues, and respond to a global pandemic—instructors may likely find students expressing a desire to engage with these weighty global issues. Particularly in higher education settings, instructors may more readily expect to teach students who are committed to advocating for political or social justice issues. As cited above, as recently as 2019 UCLA college freshman reported that one in ten students expected to participate in a protest during their college years (Stolzenberg, et al., 2019). When considering the significant number of impactful social issues that have arisen since the completion of that study, it may not be unreasonable to speculate that rates of student activism are likely to exponentially increase.

While open conversations related to student engagement with important contemporary issues may flow within an online classroom discussion board or a physical classroom, not all student personal belief systems, political or societal opinions, or perceptions of classmates may be as readily apparent. In addition to the important work of cultivating a respectful dialogue that addresses and explores the relevance of contemporary social issues to the classroom subject matter, instructors must be prepared to manage and respond to manifestations of implicit bias in the classroom in order to preserve the learning environment and create equitable opportunities for achievement. In order to ensure classroom accessibility for all learners, educators must attempt to understand both the explicit and implicit biases students bring to the classroom.

One of the most impactful and well-documented manners in which student implicit bias may present in the classroom is the student's own implicitly biased perceptions of themselves. Unconscious bias not only impacts the manner in which students view and relate to their classroom peers but also the way in which they regard themselves. This unconscious self-image may have a significant impact upon student achievement in the classroom environment and impact peer-to-peer relationships.

While there may be little educators can do to change the nature and type of implicit bias amongst their students numerous studies have demonstrated the critical role that class management strategies may play in supporting academic achievement.

Research since the late 1990s has consistently shown that student self-perception significantly impacts achievement (Shih, Pittinsky, & Ambady, 1999). For example, student

---

self-disclosure of social identifying characteristics prior to standardized testing has been documented to impact performance during the test and subsequent test results. Researchers have concluded that reporting on identity prior to testing may trigger a student's implicit biases and expectations of performance based upon social identifying stereotypes. Test administration practices that require students to report race prior to taking a test have been demonstrated to adversely impact the test taker's ability to perform amongst African American students (Stricker, Rock, & Bridgeman, 2015). The manner in which students view themselves and their potential for achievement contributes significantly to their academic successes or failures.

One study particularly emphasized the impact of student self-identify perception upon academic achievement: in this 2007 study, researchers evaluated a panel of Asian American women's ability to perform based upon gender or racial stereotypes (Shih, Pittinsky, & Trahan, 2007). During the study, the researchers administered two separate standardized math tests to the panel. In the first testing scenario, researchers suggested to the panel that "female identity was associated with inferior ... mathematical reasoning skills" immediately prior to administering the test. During the second testing scenario, the researchers suggested to the same panel that "Asian ethnic identity was associated with positive stereotypes." While neither the level of difficulty nor the nature of the standardized testing varied between the two rounds, the panel performed better on the second test when primed with a positive stereotype rather than a negative stereotype. This study demonstrates the important role that self-perception plays in a student's ability to attain success in the classroom and the importance of instructor support of a student's positive self-image.

### **Educator Priming Approaches for Managing Bias and Promoting Equity**

The responsibility of conducting a classroom in a manner that empowers all students to equitably achieve and explore the subject matter is a significant responsibility. While investing considerable effort into exploring personal bias is a strong first step, instructors must also consider how to regulate manifestations of bias between the student peer relationships within the classroom environment. If addressing and remedying one's own personal bias seems to be an extraordinary task, managing the bias of others may seem to be an insurmountable obstacle. Once a critical examination of personal implicit bias has begun, educators may next turn towards examining the classroom environment itself to determine how the teacher's management

---

approach is displayed to students and to be certain that students are provided with academic models that demonstrate and support inclusivity.

Successful management of a classroom environment should not include attempts to change or alter a student's self-perception or image. However, establishing a classroom environment of positive "priming" may improve equity and encourage student academic success. Current research has suggested a positive correlation between instructor "priming" of students and improved academic outcomes (Shanks, et al., 2013). Priming may be described as the practice of subconscious influence of behavior outcomes in another person. Priming may be the "passive, subtle, and unobtrusive activation of relevant mental representations by external, environmental stimuli, such that people are not and do not become aware of the influence exerted by those stimuli" (Moskowitz & Grant, 2009, p. 128).

One study addressing the potential impact of priming in a classroom asked study participants to describe either a "typical professor" or a "soccer hooligan" prior to taking an unrelated general knowledge test (Shanks, et al., 2013). Study participants primed to think about a "typical professor" trended higher scores than those who were primed to think of the "soccer hooligan." While the researchers administering the study acknowledged that results may be specific to this study alone, the results are nevertheless indicative of the potential power of positive suggestion and scholastic achievement. If the language deployed within the classroom environment bears the potential to improve or support student assessment scoring, instructors may similarly find it appropriate to prime their students for a respectful and equitable classroom environment in order to promote equal access to education and achievement opportunities.

While priming should not be utilized to manipulate students, change their personal beliefs or opinions, or impede the sharing of personal perspectives, priming may be used to encourage students to approach their course content in a neutral and respectful manner. Bearing in mind the ability of language to shift perceptions, educators should be aware of the manner in which classroom materials are presented to students to ensure unbiased priming to engage with course content.

One way in which priming may be implemented for this purpose is to consider how the classroom environment is presented to the students. Whether online or in-person, student perception of the subject matter, professor, and classmates may be impacted by encounters with

---

the organizational structure of the course itself. Higher-education instructors should examine course materials to determine whether the resources, assessments, and assessment instructions may impede student academic performance. Instructors should strive—whenever possible—for race, gender, age, or sexual orientation neutral language when engaging in discussion boards or developing assignments or participation instructions. Weekly announcements or class emails should also contain neutral language free from gendered or racial assumptions and avoid over-familiarity when appropriate.

When necessary for course objectives, identifying factors in the classroom should be deployed in a balanced manner to provide all students an equitable opportunity to perform. For example, in an online economics course, the instructor may post a web-based case study to illustrate purchasing habits of differing racial communities. While case study language identifying race is not typically neutral, instructors should ensure that the language deployed to introduce the case study to students is—to the highest degree possible—neutral and respectful in order to ensure inclusion of all students. Instructors should demonstrate transparency and provide students with context for use of the particular case study in order to foster understanding and dialogue related to the content. For example, the economics instructor in this example may wish to explain why racial or cultural differences are relevant to a cited course outcome and create an opportunity for students to engage constructively with the topic.

Similarly to the Cohen (1999) case study above, in which students responded more favorably to constructive criticism when it was presented within the context of institution policies or assignment directions, students may also be more receptive to discussions of community differences if they relate directly to the objectives of the assignment or course. Educators should—whenever possible—ensure that differences of race, gender, sexual orientation, or age are not deployed to isolate peers or promote division, but are rather facts in academic dialogue used only as necessary and supported by course or program learning objectives.

Educators should consider how use of language might impede a student's ability to engage with the course materials. One example might include a criminal justice ethics course essay assignment that uses an online case study involving a religious minority individual as the criminal actor in a hypothetical scenario. The instructor of this course should consider, first,

---

whether this identifier is necessary for the assignment. If so, the instructor should also examine whether other religious affiliations are being portrayed equally as criminal actors in the course and ensure that this same religious minority is also being portrayed equally in a positive manner. Course content negatively portraying a vulnerable or minority community may impact a student of the same social identification's ability (or, furthermore, students of any minority or vulnerable community's ability) to perform—and in this way be primed for failure.

Instructors should also examine course materials to ensure that they utilize positive images and words to describe and include diverse groups. For example, images utilized in online course modules, course textbooks, or included in classroom presentations should ensure individuals of a diverse range of racial, gender, ethnic, etc. communities are represented. Educators may also wish to ensure that course materials balance positive and negative associations with communities of color, genders, sexual orientations, or economic statuses. As higher-education professionals, instructors will want to ensure that classrooms properly prime students for success by striving for neutral language or, alternatively, ensuring a balanced use of social identifying information within the course content.

The organizational structure of a course sets the tone for student expectations of the course materials, the professor, and each other. By developing an awareness of student perception and potential responses to the materials—and adapting a practice of transparency and accountability—instructors may take an important step towards priming improved student perception of the classroom environment to foster an inclusive and equitable learning environment.

### **Managing Equitable Classroom Engagement**

Respectful priming techniques may assist instructors not only in supporting a student's engagement with the course organizational structure, but also in creating positive engagement amongst peers as well. One of the most significant instructor opportunities for improved peer-to-peer relationships within the classroom environment is the educator's own engagement with the class.

Research has supported the finding that educator participation in the classroom may serve as a model for support and conflict resolution amongst students (Hendrickx, Mainhard, Boor-Klip, Cillessen, & Brekelmans, 2016). Occasionally referred to as the “invisible hand” in the

---

classroom, teachers have long been considered to have an impactful role upon the perceptions and relationships of their students (Farmer, Lines, & Hamm, 2011). A 2016 study of instructor influence upon “peer ecology” in a classroom environment supported the conclusion that instructors “function as a model or social referent for students regarding how to interact and form relationships with others” (Hendrickx, Mainhard, Boor-Klip, Cillessen, & Brekelmans, 2016, p. 39). Educators were found to not only influence the teacher-to-student relationships, but also the manner in which peer-to-peer relationships approached support and conflict resolution in the classroom. It is critical that educators utilize this influence in order to role model positive interactions, and in this manner prime students to engage positively with each other.

Instructors may find it helpful to review course syllabi, schedules, or participation instructions to ensure that students are provided with guidelines for respectful peer interaction. For example, in an online course environment, a brief “netiquette” guide may provide an explanation to students on how to interact with one another virtually. The instructor in this setting may wish to include a written explanation of classroom engagement goals (e.g. respect, diversity, and inclusivity), as well as provide instructions for how students may wish to address peers (by username, first name, or formal title), use appropriate content (with an explanation of how inappropriate content will be managed), and use appropriate language.

Educators teaching in-person may similarly create written instructions for their environments, including respect policies and guidelines for peer interactions. In-person environments may also present instructors with additional opportunities to support these guidelines by adjusting the physical structure of the learning environment as well. For example, in order to encourage students to develop respectful peer dialogues, an instructor may wish to foster an environment in which students are encouraged to become familiar. The instructor may wish to encourage students to create online profiles that include the student’s preferred name, pronoun use, and an avatar in order to foster relationship building and encourage students to address each other by name. Online instructors should also ensure that they are respectful of names and pronouns when addressing students (in the online classroom environment as well as individually) in order to establish a tone of respect and inclusiveness.

Instructors may also find value in developing guidelines for student conflict resolution amongst their peers. By providing students with a roadmap for addressing discomfort with

---

actions or language used by their peers, educators may empower students to develop a dialogue to both resolve the impact of statements of implicit bias as well as create learning opportunities for students to become aware of their own subconscious biases. Peer conflict resolution may include mediation by the instructor or may invite students to conduct the process independently. However, expectations, procedures, and any possible consequences should be clearly communicated with students and be implemented in accordance with institutional policies and practices.

While respectful student interactions may seem obvious and not worthy of written instructions, instructors may find these materials helpful for a several purposes. First, these guides or instructions provide students with affirmative steps they may take to contribute to an equitable environment. Second, written instructions may contribute to an atmosphere of accountability, as the instructions demonstrate the educator's commitment to respect and equity and their mindfulness of these critical issues by taking the time to address them at the start of the course. Last, the instructions also reassure students who may have been subject to incidents of bias or exclusion in prior courses that their current instructor is mindful of these issues and working to create an atmosphere of equity. To demonstrate inclusivity, teachers should also follow their own instructions and policies. As one of the strongest tools an educator possesses, instructor influence should be utilized to role model positive classroom ecology.

Invitations for student participation should also be primed for inclusion. Educators should examine courses to ensure equitable opportunities for students from minority communities to express their viewpoints. Instructors should also consider which course topics may require students to comment on topics of potential areas of bias. Healthy and respectful discussion should never be discouraged in an academic environment, but rather ought to be strongly and consistently encouraged. Instructors should actively engage with their students and environments to model inclusivity and empower respectful peer dialogue.

To better model an environment primed for respectful peer dialogues, instructors should also be aware of the language used to instruct students on the type and manner of their peer engagement. For example, educators should reconsider instructing students to "debate" each other rather than to "engage" each other. Instructors should question whether one format of instruction bears a more confrontational connotation (debate) versus the implication of

---

collaborative dialogue (engage). Bearing in the mind the aforementioned studies on the impact of priming, the language used to assign student assessments may influence student performance and peer ecology.

Similarly, instructors may also wish to review the method by which teams, lab partners, or work groups are assigned. Student self-selection may be impacted by implicit bias, as may instructor-assigned methods. When possible, educators may wish to consider methods of randomly assigning partnerships to promote diverse collaboration and expand student interaction.

Classroom environments should also be primed to ensure equitable access to resources. Instructors should ensure that all students are able to see, hear, and engage with peers and the instructor in the classroom as well as provide equal opportunity to observe and interact with labs and learning resources. Educators may wish to create invitations for student contact should the student require support or additional resources and provide opportunities for students to make contact outside of the presence of peers. These communication options should be included in any course syllabi or instructions provided to students.

Instructor modeling and active engagement with the class may not only have the benefit of managing manifestations of bias, but may also enable the instructor to become more attuned to how and when these situations arise. By understanding the circumstances that impede inclusivity and equity in a classroom, instructors may become better prepared to make future course adjustments that will further promote the goal of an unbiased learning environment.

### **Understand Addressing Implicit Bias Takes Time**

Much like the students who fill higher-education classrooms, many educators may be eager to see changes implemented that provide immediate relief for inequity in education. While instructors—earnest in their attempts to manage implicit bias—may commit to classroom engagement, positive priming, understanding student implicit bias, and confronting their own personal subconscious biases, the harsh truth is that these efforts are not likely to eradicate bias overnight. Rather, instructors must recognize that addressing implicit bias in an intentional and impactful manner takes time.

Educators should not be discouraged by the ongoing nature of resolving implicit bias. Rather than viewing the recommendations outlined above as a “quick fix” to resolve

---

subconscious bias, instructors should instead view addressing implicit bias as a process. These recommendations are not intended to be one-time measures but instead should be reevaluated on an ongoing basis. This process will allow instructors the opportunity to reflect upon the impact each recommendation has had in their learning environment and consider how it may be adapted for future courses in order to create a greater positive change.

Additionally, just as instructors may wish to review their syllabi, assignment instructions, respect policies, and other course organizational tools on an ongoing basis to determine areas of growth, educators may also find value in reevaluating their own progress in addressing personal implicit bias. Self-assessment tools, such as the IAT, may be taken more than once to continue assessing for additional subconscious bias or to examine whether other previously identified areas of bias have been reduced. Instructors should feel comfortable reassessing periodically for implicit bias and confident that tools for continued efforts to address this important issue are available.

Instructors should also be encouraged to speak freely with colleagues regarding their experiences in managing peer implicit bias as well as confronting their own subconscious biases. Open conversation regarding manifestations of bias and techniques for responding to implicit bias in the classroom will establish an open exchange of information amongst educators and provide opportunities to share strategies for classroom environment management. Collaborative efforts to approach managing peer-based implicit bias will promote innovation and expanded availability of resources.

This dialogue may also allow individual educators to feel supported in addressing and managing their bias as well as contribute to the de-stigmatization of addressing personal bias. Developing open communication regarding a sensitive or generally reserved topic may result in more positive resolution of the issue. One study conducted at James Madison University, identified the strong reciprocal relationship between communication and stigma (Smith, 2015). In this study, Smith observed that students were more willing to discuss mental health issues with friends than family members or mental healthcare providers due to concerns regarding stigma. When students were able to communicate with friends regarding their mental health concerns, they were more likely to obtain care to address the issues of concern. Similarly, instructors should find support in discussing attempts to improve leadership and personal bias

---

amelioration skills with colleagues, and in this manner continue to address and resolve areas of subconscious bias.

Resolving personal implicit bias and creating a learning environment that successfully manages peer implicit bias and promotes equitable student achievement is a significant undertaking. However, instructors should feel encouraged by noting that the potential for large-scale benefits to students may be far outweighed by the investment of time and learning the instructor may contribute to accomplish this result. Educators committed to this process must recognize that meaningful and impactful change takes time. Finding academic community support and viewing managing implicit bias as a process—rather than a “fix”—will provide educators with additional strength in their journey to equity.

### **Conclusion**

The process of creating an inclusive and equitable learning environment is perhaps one of the most significant challenges faced by educators today. Much as Jane Elliott stood in her Riceville classroom—preparing to explain racism, assassination, and discrimination to her third-grade students—contemporary educators find themselves leading classrooms of students during a national upheaval fueled by racism and bias. Impacted by the subconscious bias of students and their own personal perspectives, the course materials, the subject matter, and peer relationships, instructors face a great challenge in creating inclusive learning. As students and teachers alike process the social impact of recent events, it is the educators who must lead academic environments in a manner that promotes respect, equity, and inclusiveness.

While higher-learning professionals are not alone in facing the task of confronting and addressing implicit bias in their professional roles, these educators face the additional responsibility of managing the manifestations of implicit bias in others—understanding that the presence of bias may significantly impact the ability of their students to learn and achieve. Yet educators now more than ever may be uniquely positioned to create inclusive learning environments supported by the commitments to social justice and equity of their students. Teachers—the invisible hands of the classroom—may bear the great responsibility of not only teaching, but impacting the ability of their students to relate to their peers and the world beyond their classroom walls. With time, a commitment to addressing implicit bias, and a willingness to

---

innovate, educators may become the catalyst for equity and change needed to create an accessible education for all who desire it.

---

### References

- Baker, R., Dee, T., Evans, B., & John, J. (2018). Bias in online classes: Evidence from a field experiment (CEPA Working Paper No.18-03). Retrieved from <https://cepa.stanford.edu/wp18-03>
- Benson, T. A., & Fiarman, S. E. (2019). *Unconscious bias in schools: A developmental approach to exploring race and racism*. Harvard Education Press.
- Bloom, S. G. (2005, September). Lesson of a lifetime. *Smithsonian Magazine*. Retrieved June 15, 2020, from <https://www.smithsonianmag.com/science-nature/lesson-of-a-lifetime-72754306/>
- Bonefeld, M., & Dickhäuser, O. (2018). (Biased) grading of students' performance: Students' names, performance level, and implicit attitudes. *Frontiers in Psychology*, 9(481). <https://doi.org/10.3389/fpsyg.2018.00481>
- Brownstein, M. (2019, July 31). *Implicit bias*. Retrieved from Stanford Encyclopedia of Philosophy: <https://plato.stanford.edu/entries/implicit-bias/>
- Cohen, G. L., Steele, C. M., & Ross, L. D. (1999). The mentor's dilemma: Providing critical feedback across the racial divide. *Personality and Social Psychology Bulletin*, 25(10), 1302-1318. <https://doi.org/10.1177%2F0146167299258011>
- Farmer, T. W., Lines, M. M., & Hamm, J. V. (2011). Revealing the invisible hand: The role of teachers in children's peer experiences. *Journal of Applied Developmental Psychology*, 32(5), 247-256. <https://doi.org/10.1016/j.appdev.2011.04.006>
- Hardré, P. L. (2014). Checked your bias lately? Reasons and strategies for rural teachers to self-assess for grading bias. *The Rural Educator*, 35(2). <https://doi.org/10.35608/ruraled.v35i2.352>
- Hendrickx, M. M., Mainhard, M. T., Boor-Klip, H. J., Cillessen, A. H., & Brekelmans, M. (2016). Social dynamics in the classroom: Teacher support and conflict and the peer ecology. *Teaching and Teacher Education*, 53, 30-40. <https://doi.org/10.1016/j.tate.2015.10.004>
- Lawrence, J. S., Crocker, J., & Blanton, H. (2010). Stigmatized and dominant cultural groups differentially interpret positive feedback. *Journal of Cross-Cultural Psychology*, 42(1), 165-169. <https://doi.org/10.1177%2F0022022110383569>

- 
- Martin Luther King, Jr. Research and Education Institute. (n.d.). *"I've Been to the Mountaintop"*. Retrieved from Stanford University: <https://kinginstitute.stanford.edu/encyclopedia/ive-been-mountaintop>
- Moskowitz, G. B., & Grant, H. (2009). *The psychology of goals*. Guilford Press.
- Office for Civil Rights. (2015, April). *Title IX and Sex Discrimination*. Retrieved from US Department of Education: [https://www2.ed.gov/about/offices/list/ocr/docs/tix\\_dis.html](https://www2.ed.gov/about/offices/list/ocr/docs/tix_dis.html)
- Pinsker, J. (2018, August 23). The problem with "Hey guys". *The Atlantic*. Retrieved from <https://www.theatlantic.com/family/archive/2018/08/guys-gender-neutral/568231/>
- Poorvu Center for Teaching and Learning. (n.d.). *Blind grading*. Retrieved from Yale University: <https://poorvucenter.yale.edu/BlindGrading>
- Project Implicit. (n.d.). Retrieved June 22, 2020, from Harvard University: <https://implicit.harvard.edu/implicit/>
- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development*. Holt, Rinehart & Winston.
- Shanks, D. R., Newell, B. R., Lee, E. H., Balakrishnan, D., Ekelund, L., Cenac, Z., . . . Moore, C. (2013). Priming intelligent behavior: An elusive phenomenon. *PLOS One*, 8(4), e56515. <https://doi.org/10.1371/journal.pone.0056515>
- Shih, M., Pittinsky, T. L., & Ambady, N. (1999). Stereotype susceptibility: Identity salience and shifts in quantitative performance. *Psychological Science*, 10(1), 80-83. <https://doi.org/10.1111%2F1467-9280.00111>
- Shih, M., Pittinsky, T. L., & Trahan, A. (2007). Domain-specific effects of stereotypes on performance. *Self and Identity*, 5(1), 1-14. <https://doi.org/10.1080/15298860500338534>
- Sleek, S. (2018). The bias beneath: Two decades of measuring implicit associations. *Observer*, 31(2), pp. 11-14. Retrieved from <https://www.psychologicalscience.org//observer/the-bias-beneath-two-decades-of-measuring-implicit-associations>
- Smith, E. D. (2015). Let's chat: Willingness to communicate and the development of a destigmatizing campaign. James Madison University. Retrieved from <https://commons.lib.jmu.edu/cgi/viewcontent.cgi?article=1038&context=master201019>
- Staats, C., Capatosto, K., Wright, R. A., & Contractor, D. (2015). *State of the science: Implicit bias review 2015*. Kirwan Institute. Retrieved June 21, 2020, from

---

<http://kirwaninstitute.osu.edu/research/understanding-implicit-bias/>

Stolzenberg, E. B., Aragon, M. C., Romo, E., Couch, V., McLennan, D., Eagan, K., & Kang, N. (2019). *The American freshman: National norms Fall 2019*. University of California, Los Angeles, Higher Education Research Institute. Regents of the University of California. Retrieved from <https://www.heri.ucla.edu/monographs/TheAmericanFreshman2019.pdf>

Stricker, L. J., Rock, D. A., & Bridgeman, B. (2015). Stereotype threat, inquiring about test takers' race and gender, and performance on low-stakes tests in a large-scale assessment. *ETS Research Report Series, 2015*(1), 1-12. <https://doi.org/10.1002/ets2.12046>

U.S. Department of Justice. (n.d.). *Educational opportunities section*. Retrieved from <https://www.justice.gov/crt/educational-opportunities-section>



---

JOURNAL *of* ONLINE HIGHER EDUCATION