

Take a SIP of This: Peer-to-Peer Promotion of Strong Instructional Practice

Tina Herring, Ann Morrison, Kathryn Young,
Elizabeth Kleinfeld, and Lunden MacDonald
Metropolitan State University of Denver

Post-secondary education remains mostly inaccessible to non-traditional students. Many colleges do not have the proper resources or programs to effectively support a wide variety of learners who all present with different educational challenges and needs. Universal Design for Learning (UDL) promotes diverse teaching methods to benefit all students. Although faculty and administrators are aware of the increasing diversity of college students and the need for greater flexibility in instructional design, many do not know how to successfully use UDL in their courses. This article discusses a grassroots effort by a group of professors to devise a no-cost, low-input, high-impact way to share strong instructional practices, all rooted in Universal Design for Learning, that could enhance teaching and learning across the institution.

Introduction

Historically, higher education in the United States has been primarily available to a professional class that was white, able-bodied, heterosexual, Christian, and male (Pliner & Johnson, 2004). The increase in students from traditionally minority populations in post-secondary education, along with recent key legislation such as the Americans with Disabilities Amendments Act of 2008 and the 2008 Higher Education Opportunity Act, has generated attention around the concept of accessibility in higher education for students with diverse learning needs (Newman et al., 2011; Pliner & Johnson, 2004; Raue & Lewis, 2011; Riggs, 2014; Snyder & Dillow, 2011). Although institutions of higher education serve an increasingly diverse student body, they have traditionally been resistant to change, especially in accommodating the needs of students considered minorities because of race, class, ethnicity, gender, disability, religion, nationality, or sexual identification or orientation (Pliner & Johnson, 2004). This can be seen in the fact that students who have disabilities, veteran/military personnel, low income students, and first generation college students all have graduation rates far below the general population (Newman et al., 2011; Raue & Lewis, 2011; Riggs, 2014). Effective approaches to support the success of these student populations have not kept pace with enrollment.

Rose and Meyer (2002) argued that the disconnect between an increasingly diverse student population and an unyielding curriculum would not produce the academic achievement gains expected of 21st-century global citizens. The authors challenge educators to think of curricula as disabled instead of viewing their students who struggle to be successful as disabled (King-Sears, 2014). The creation of higher education environments that support students with diverse needs is a difficult task that requires major transformations with regard to policy, procedures, and processes (Aune, 1995; Pliner & Johnson, 2004; Silver, Bourke, & Strehorn, 1998). In order to create inclusive

environments for diverse student populations, higher education must be totally reconfigured and will require a shift in educational practices (Pliner & Johnson, 2004). Administrative mandates and university-wide strategic plans may help instigate this shift, but ultimately, pedagogical innovations often happen because of the championing of grassroots leaders, such as faculty (Kezar & Lester, 2009). What happens in schools and classrooms is less related to the intentions of policymakers than it is to the knowledge, beliefs, resources, leadership, and motivations that operate at the grassroots level (Darling-Hammond, 2000).

As the landscape of higher education has changed over the past decade, the demands being made on professors with regard to pedagogical innovation and instructional delivery have become more intense (Izzo, Murray, & Novak, 2008). Academic achievement has always been within faculty purview, but now enrollment, retention, graduation rates, and other indicators of broader institutional health have come to be considered part of our professional obligation as well. The greater demands on faculty time and the nationwide reduction of economic capital available to higher education have left faculty with little time and few resources with which to enhance pedagogy at a time when the lion's share of responsibility for student success has fallen upon the shoulders of the professoriate. This paper details the steps of a grassroots initiative, led by a small group of university professors, to support strong instructional practice among the faculty at their large state university.

We use the term "strong instructional practice" (SIP) as an umbrella term for pedagogy based on the principles of Universal Design for Learning. According to the Higher Education Opportunity Act of 2008, the term Universal Design for Learning (UDL) means a scientifically-valid framework for guiding educational practice that encourages flexibility in the ways information is presented, in the ways students respond or demonstrate knowledge and skills, and in the ways students are engaged. UDL also reduces barriers in

instruction, provides appropriate accommodations, supports, and challenges, and maintains high achievement expectations for all students especially supporting those students who may learn differently or need varying degrees of support (King-Sears, 2014). Strong instructional practices are inclusive of equity-minded pedagogy and the creation of accessible learning environments for students with disabilities and diverse student populations, with and without disabilities. They are compliant with Sections 504 and 508 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act.

After characterizing our university setting and the challenges faculty face to learning about and implementing, strong instructional practices, we explain how our peer-to-peer model developed. We then describe how our model works so that faculty can adopt aspects of our model as appropriate to promote strong instructional practices at their own institutions.

The Local Context and Challenges

Effective pedagogy has long been a prominent part of the institutional identity of the academic experience at Metropolitan State University of Denver (MSU Denver). With 18,000 students, and located in the heart of downtown Denver, the university's mission dictates affordability and accessibility, and to this end our tuition rate is by far the lowest of any of the Rocky Mountains' state institutions. MSU Denver is a "modified open access" institution with a non-traditional student body who often lack the skills typically associated with academic success. The students attracted by our mission and geography consist of many students of color (35%), Pell Grant recipients (35%), and first-generation students (33%). MSU Denver has a relatively high percentage of students with disabilities (averaging about 5% per year over the last five years), and serves almost 1,000 military veterans. Growing enrollments of students in these categories at MSU Denver mirror national trends in growing student diversity (Newman et al., 2011; Raue & Lewis, 2011; Riggs, 2014). Effective instructional design and delivery require well-informed pedagogical approaches based on the wide array of our students' interests, abilities, and identities.

As at many institutions, faculty efforts toward thoughtful course design and pedagogy that result in student success are consistently complicated by cultural, structural, and financial barriers at MSU Denver (Knapper, 2008; Weimer, 2002). The professional culture of the university plays a fundamental role in instructional design and delivery at the institution, and this merits review as we consider the implementation of strong instructional practice at MSU Denver.

MSU Denver has invested significantly in human capital over the past ten years, resulting in over 58% of

faculty being full time with 62% holding terminal degrees in their field (Metropolitan State University of Denver Board of Trustees, 2016). Faculty at MSU Denver typically teach a four 3-credit hour courses a semester--a course load which, in combination with the demands of research, advising and service, can result in faculty adopting a survival mentality as opposed to a mindset of continued professional development. With more emphasis being placed on research and publication than ever before at MSU Denver, teaching can sometimes take a back seat to other aspects of the job.

The institution has made large investments in faculty support. Workshops, trainings, and practicums that touch on inclusive pedagogy, support of a non-traditional student body in an open-access institution, and adaptation to the constantly changing climate of higher education are offered with great frequency to both junior and senior faculty, but finding time and resources to take advantage of these opportunities, and thus for quality teaching, remains a challenge for all.

As is the case for many institutions, the economic challenges that MSU Denver confronts have a particularly intense impact on teaching and learning. Colorado is continuously among the five states with the lowest funding of public higher education (Sauter, 2013; State Higher Education Finance Report, 2014). This lack of economic resources is certainly felt at MSU Denver, where increasing tuition is not a viable means of boosting institutional revenue that might be because of our emphasis on being affordable. State funding to institutions of higher education in Colorado is determined to a great extent by performance measures tied directly to credit hour production and to the number of degrees granted each year. Desire to maintain funding levels contribute to a sense of urgency to encourage effective teaching and student support measures.

Supports for Strong Instructional Practice at MSU Denver

Despite these challenges, there is a high level of dedication among the faculty at MSU Denver, and a great desire to improve and sustain exemplary teaching. Student success is at the forefront of all faculty endeavors. MSU Denver also has cultural, structural, and financial supports for faculty development of strong pedagogy. Many of these supports emerged in the context of an increased institutional emphasis on student retention, legal and ethical responsibilities for accessibility for students with disabilities, equity-minded pedagogy, and creation of a supportive environment for a wide array of non-traditional students. The development of these supports illustrates the growing investment in student learning initiatives on campus.

Key among these supports is the University's Center for Faculty Excellence initiation of faculty learning

communities (FLC's), which are faculty-facilitated groups of self-selected professors who spend an academic year exploring a topic of common interest. One such FLC spent a year studying UDL by reading salient texts and meeting bi-monthly to discuss topics such as research on UDL, UDL-based assessment, and redesigning course activities with UDL principles in mind.

The Center for Faculty Excellence also handles new faculty orientations, which typically include some coverage of basic principles of UDL; however, the coverage is quite basic as the UDL portion of the orientation agenda is usually limited to about one hour. Concepts touched upon usually include allowing students multiple ways to demonstrate mastery of course concepts, incorporating visual elements into lectures, and offering students feedback to their work in writing or in audio format, depending upon student preferences. Because UDL is a new concept to the majority of faculty at the orientations, a significant portion of the presentation is devoted to simply defining and defending the concept.

Another important support is MSU Denver's Access Center, which is responsible for helping students with documented disabilities receive appropriate accommodations in their classes. It also provides the faculty with training and in-class support to help them implement accommodations for their students. For example, the Access Center staff teach faculty how to convert their course materials to formats accessible to students who rely on assistive technologies.

One of the primary ways the Access Center staff support student success is through promoting faculty use of UDL. The Access Center raises awareness of UDL throughout the university through an annual award recognizing one faculty member for their commitment to putting the principles of UDL into practice by emphasizing proactive and inclusive pedagogical practices to benefit a broad range of learners. Sponsoring the award gives the Access Center an opportunity to remind faculty at least once a year about what UDL is and to encourage all faculty to consider how they are using UDL in their own teaching.

Ongoing Confusion Among MSU Denver Faculty

Given that faculty who teach at MSU Denver are often attracted to the institution specifically because of the diverse student population it serves, they are typically motivated to enact pedagogies that emphasize interactivity and appeal to all learners, including inclusive pedagogy and accessibility. At the same time, it was common to hear instructors state anecdotally that rethinking their course design was just "one more thing" they were responsible for in addition to increased university service, higher research expectations, and a heavy teaching load. Many faculty who put in the effort

to make courses accessible for students with disabilities wondered why they should put so much time and energy into revamping their course materials when they may not have any students with disabilities in their courses. Despite, and perhaps because of, a broad array of opportunities and initiatives that grew over a period of one to two years, faculty at MSU Denver were often frustrated and overwhelmed by lack of clarity of the requirements for updating their pedagogy to meet federal mandates related to students with disabilities and were also frustrated by needing to update their pedagogy to teach a wide variety of students.

In 2013, aware of these frustrations, the MSU Denver Faculty Senate Instructional Resources Committee, a standing committee charged with making recommendations related to the use of, and budgeting for, instructional technology, classroom space and equipment, and training related to teaching, surveyed all faculty about their level of confidence regarding course accessibility and their perceived knowledge of UDL. One hundred sixty-two faculty responded, representing 17% of tenured and tenure-track faculty and almost 1% of affiliate faculty. The survey results indicated that, while faculty understood the importance of making their courses accessible, they were not highly confident that their courses were indeed accessible; in fact, 23% of respondents indicated that they were unclear whether their course materials were compliant with federal regulations for accessibility and 25% indicated the same with regard to online courses. The survey indicated that faculty wanted more information about what constitutes accessibility, and 61% of respondents specifically wanted training and professional development related to UDL.

In response to these findings, the Instructional Resources Committee had many meetings with the directors of the offices involved with supporting faculty in making their courses accessible, including the Access Center, which supports students with disabilities; the Center for Faculty Excellence, which supports faculty in developing teaching and pedagogical tools; the Educational Technology Center, which helps faculty with technology related to instruction; and Information Technology Services, which orders and maintains all technology on campus, as well as the Provost. All wanted to give faculty what they wanted and needed, but wondered how to do that in a way that would not exhaust already tight budgets nor appear to be top-down, administrative driven mandates. The Instructional Resources Committee's survey results and subsequent meetings indicated that there was a receptive mood on campus to an organized dissemination of pedagogical strategies to improve course accessibility, but with no resources to devote to such a project, conversations stalled.

Evolution of the SIPSQUAD

Aware of the receptive mood and the attendant limitations, the Director of the Access Center invited all of the previous recipients of the Universal Design for Learning Award to meet to devise a no-cost, low-input, high-impact way to support our own and our peers' acquisition of strong instructional practices that would enhance teaching and learning at MSU Denver in order to contribute to student success and institutional advancement. Ongoing meetings of the group led to the formation of a grassroots, faculty-led team that sends a weekly email out to all instructors with tips for strong instructional practices that are meant to be quickly read, easily understood, and immediately implemented. We agreed on a name for these tips: Strong Instructional Practices, with the catchy acronym "SIP."

In that first meeting we discussed our shared passion for expanding the use of strong instructional practices at the University. We acknowledged the challenges facing faculty, but also agreed that the bulk of our faculty genuinely care about providing high quality instruction, though they did not always know how to do so. We thought that if we could describe easy-to-implement strong instructional practices and provide examples and additional resources, many of our peers would adopt one or more of these approaches and make strides toward improving their instructional design and delivery.

Each member of the team came with the conviction that the larger purpose of higher education is to transform lives, as well as that every faculty member has a responsibility to ensure that every student can and will learn. One potential barrier that we navigated right away was the need to reconcile our own individual understandings of the relationships among accessibility, equity-minded pedagogy, and Universal Design for Learning. Our goal was to connect as broadly as possible to as many faculty as possible, and we agreed that the terms "accessibility" and "UDL" are often overused in relation to disability and underused in relation to teaching all students. We decided that rather than focus specifically on either of those ideas, we would instead promote strong instructional practices that include both accessibility and UDL.

Writing and Distribution of SIPs

We brainstormed a long list of general instructional topics we felt would benefit faculty across all disciplines. Examples include note-taking, class climate and learning environment, accessibility issues, attendance, inclusive discussion in face-to-face and online learning, use of electronic applications and other technologies, feedback and assessment, project-based learning, service learning, and Englishes and English

learners, among others. The initial list included about 50 topics which we narrowed down to 16. Each member of the team agreed to write three or four SIPs over the course of the semester. We came up with a schedule indicating who was responsible for writing the SIP each week and the topics. SIPs published in our first semester included facilitating inclusive class discussions, giving useful written feedback to students, creating a positive classroom climate, and implementing project-based learning. Examples of three SIPs can be found in Appendix A.

We decided to create a format for the emails that we could use consistently. We felt it was vital that our emails be short so that faculty could read them in a minute or two instead of feeling burdened with a lot of information during a busy day. We agreed that the SIPs should describe a concrete practice with examples and resources that would allow faculty to implement the pedagogy relatively immediately and with little additional investigation. Each SIP begins with a few sentences describing a common challenge for faculty in higher education. The next section defines the strong instructional practice, explains how it can help mitigate the challenge, and provides examples of how it can be used in a higher education classroom. The third section is a short list of electronic resources that provide additional information on the topic.

SIPs are practice-oriented, and although each of us is familiar with the research supporting the practices, we intentionally do not include references for research that demonstrate the efficacy of the approach. Our focus is to clearly and succinctly describe the practice and its application rather than the empirical support. In describing the potential uses of the practice we are careful to consider applications to disciplines other than our own and often provide several short examples. For brevity, we provide only a few (3-5) high quality resources.

We decided to send the SIPs out via email on the same day each week so faculty could become accustomed to receiving the SIPs regularly. We enlisted the aid of the Provost's office to send the SIPs to all faculty on our behalf. This both demonstrated institutional support and allowed individual members of the group to remain anonymous.

The group decided to keep the member's identities masked and instead chose to sign the weekly emails "Sipsquad." The motivation for this secrecy was three-fold. First, we wanted faculty to associate the instructional practices with pedagogy, not with an individual. Second, we wanted faculty to see these practices as being applicable not just to students with disabilities but to all students in their classes, and we felt that sending out weekly emails from a group of UDL award winners might have sent the message that these were strategies only for students with disabilities or techniques that should

only be practiced by “experts.” Lastly, as the members of this team were willing to add yet another meeting to already overcrowded schedules, the feeling of being part of a “secret society” added fun to this new venture.

Faculty Response

From the publication of the very first SIP, we received both positive and thoughtful responses from the faculty. It quickly became clear that faculty were not only reading the SIPs, but that they were implementing them. After the SIP on note-taking was published, for example, one respondent wrote the following:

I noticed for the first time last semester that instead of taking notes, my sophomores would just take pictures of me with their iPhones. It was weird and disturbing but at least they didn’t want autographs. I was wondering what I could do to help them build note taking skills, this is a great idea.

Another offered this perspective:

As an affiliate faculty, I receive a ton of MSU Denver emails that I just don’t read and usually just go to junk. BUT, I think these SIP emails you’re sending out are the most useful emails I get. I teach college and my wife is a high school teacher and she loves reading them as well. We’re always looking for small, simple things to improve our pedagogy and these are very nice. Thank you for sending these out :).

We found that faculty provided feedback to SIPs on topics with which they were highly familiar. In response to a SIP on effective instruction for students whose primary language is something other than English, one faculty offered this perspective:

As a teacher educator for Culturally and Linguistically Diverse Education teacher candidates, I just wanted to pass along that this SIP is excellent in the tips that it provides! Specifically, the idea that the home or primary language is so important to value and utilize in support of English! Kudos!

Other faculty offered clarification which kept us on our toes, such as the following:

Because of my work in universal design, I noticed that in today’s SIP #13 that faculty are encouraged to use voice recorded feedback.

What I didn’t see was any mention that recorded oral feedback is required to be ADA accessible.

Each clarification was well considered and beneficial to the Sipsquad, as we got a better sense of our audience and were encouraged to think even more deeply about our teaching practices and assumptions.

We also received comments, such as this one, about how faculty were expanding on SIPs:

On the theme of using screen-reader technology, I add a final ‘proofreading’ step to almost all of my professional writing and email correspondence by having my computer read aloud to me. . . . I find that hearing my words in another’s voice—perhaps especially in one that cannot interpret the meaning—helps me with assessing how someone else may read and interpret what I wrote. It also helps with catching those ‘typos’ (and ‘thinkos’) that escape my awareness because as the creator I know what I intended and thought I wrote.

As more SIPs became available to faculty, some readers asked if there was a place where all of the SIPs were archived. In response we built a website titled, “The Well”. The Well includes several features. First, it includes all of the prior SIPs and a comment section for each; second, visitors can submit their own SIP for consideration for publication; third, we continually curate a library of resources for accessibility, UDL, and strong instructional practice in higher education, and last, we include a twitter feed featuring Sipsquad tweets and retweets from people and organizations with similar interests to ours.

Additional Approaches

While we offer our Sipsquad model as a possibility for adoption at other institutions as a way to increase strong instructional practices in higher education, universities can undertake other measures to support strong instructional practices. They can encourage co-teaching whereby two faculty work together with the same group of students, sharing planning and teaching (Bacharach & Washut Heck, 2007). The institution can provide incentives for faculty to visit other instructors’ classrooms to see different ways to teach the same topic. Tenure and promotion guidelines can use peer review of teaching as a formative, not just a summative, tool (Hammersley-Fletcher & Orsmond, 2005). Universities can even create visual representations, like badges, on faculty member’s doors (Young, 2012) to signify that the faculty member is committed to strong instructional practices. Institutions can also

make strong instructional practices part of faculty evaluation systems, student evaluation systems of courses, and institutional rhetoric such as mission and vision statements.

Conclusions

Several factors have facilitated our ability to develop this program and gain readership:

- An institutional culture that values strong instruction and faculty who typically value the same has created a climate in which instructors have shared that they view the SIPs as a value-added rather than a burden.
- Keeping the Sipsquad a small, anonymous group made up of UDL award winners contributes to a team that is collegial, respectful, and supportive of one another. We look forward to meeting and often feel energized by one another's enthusiasm for the program and strong pedagogy. We learn valuable instructional approaches from one another.
- Because the SIP program is a grassroots effort by faculty, the program is not driven from the top down. The director of the Access Center is a valued member of the team but contributes collaboratively rather than as administrative oversight.
- As faculty who feel pulled in many directions on a daily basis, we developed the SIPs for ourselves and for our colleagues as small, digestible, weekly informational emails to improve university teaching practices. We believe that our efforts to make the SIPs succinct contribute to readership.

We share the development of the Sipsquad and the SIPs to showcase one example of how a faculty-driven initiative related to universal design for learning can be created and implemented at an institution for higher education without too much extra work on any one person's part. The collaborative effort added to the quality of the SIPs and to the collegiality created through meeting about this effort.

At this point we have not collected data examining if the creation and dissemination of SIPs increase retention, class completion, or graduation rates, but based on informal feedback we do know that the SIPs are impacting the academic conversation about pedagogy in higher education at our institution, which is a great beginning. We are currently considering how we could measure the impact of the SIPs. Our original goals were to increase student retention, course completion, graduation rates, and other indicators of broad institutional health. A fundamental assumption

was, and continues to be, that faculty use of strong instructional practices will result in those goals. It is possible that a multi-method study of faculty feedback on their pedagogical practices and utilization of SIPs, student feedback on response to instruction, and analysis of targeted groups of students for retention and graduation rates may provide the answers.

References

- Aune, B. P. (1995). The human dimension of organizational change. *Review of Higher Education, 18*(2), 141–73. Retrieved from https://www.press.jhu.edu/journals/review_of_higher_education/
- Bacharach, N., & Washut Heck, T. (2007). Co-teaching in higher education. *Journal of College Teaching & Learning 4*(10), 19-26. doi:10.1080/01626620.2010.10463538young
- Darling-Hammond, L. (2000). Policy and change: Getting beyond bureaucracy. In A. Hargreaves, A. Liberman, M. Fullan, & D. Hopkins (Eds.), *International handbook of educational change* (pp. 642-667). Norwell, MA: Kluwer Academic Publishers. <http://doi.org/10.1007/978-94-011-4944-0>
- Hammersley-Fletcher, L., & Orsmond, P. (2005). Reflecting on reflective practices within peer observation. *Studies in Higher Education, 30*(2), 213-224. doi: 10.1080/03075070500043358
- Izzo-Vreeburg, M., Murray, A., & Novak, J. (2008). The faculty perspective on universal design for learning. *Journal of Postsecondary Education and Disability, 21*(2), 60-72. Retrieved from <https://eric.ed.gov/?id=EJ822094>
- Kezar, A., & Lester, J. (2009). Promoting grassroots change in higher education: The promise of virtual networks. *Change: The Magazine of Higher Learning, 41*(2), 44–51. <http://doi.org/10.3200/CHNG.41.2.44-51>
- King-Sears, P. (2014). Introduction to learning disability quarterly special series on universal design for learning: Part one of two. *Learning Disability Quarterly, 37*(2), 68–70. <http://doi.org/10.1177/0731948714528337>
- Knapper, C. (2008, April). *Changing teaching practice: Strategies and barriers*. Paper presented at Taking Stock: Symposium on Teaching and Learning Research in Higher Education, University of Guelph, Ontario. Retrieved from http://cfl.mcmaster.ca/scholarship/pdf/strategies_and_barriers.pdf
- Metropolitan State University of Denver Board of Trustees. (2016, September). *Meeting minutes*. Retrieved from <https://www.msudenver.edu/media/content/boardoftrustees/july2016-june2017/PublicMeetingMaterials090916-FINAL.pdf>

- Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., & Shaver, D. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school: A report from the National Longitudinal Transition Study-2 (NLTS2) (NCES 2011-3005)*. Menlo Park, CA: SRI International. Retrieved from <http://www.nlts2.org/reports/>
- Pliner, S., & Johnson, J. (2004). Historical, theoretical, and foundational principles of universal instructional design in higher education. *Equality and Excellence in Education, 37*, 105-113. doi: 10.1080/10665680490453913.
- Raue, K., & Lewis, L. (2011). *Students with disabilities at degree-granting postsecondary institutions*. (NCES-2011-018). Washington, DC: U.S. Government Printing Office. Retrieved from <http://eric.ed.gov/?id=ED520976>.
- Riggs, L. (2014, December 31). First-generation college-goers: Unprepared and behind. *The Atlantic*. Retrieved from <http://www.theatlantic.com/education/archive/2014/12/the-added-pressure-faced-by-first-generation-students/384139/>
- Rose, D. H., & Meyer, A. (2002). *Teaching every student in the digital age: Universal Design for Learning*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Sauter, M. B. (2013, May 8). States spending the most on education. *24/7 Wall St*. Retrieved from <http://247wallst.com/special-report/2013/05/31/states-that-spend-the-most-on-education/>
- Silver, P., Bourke, A. B., & Strehorn, K. C. (1998). Universal instructional design in higher education: An approach for inclusion. *Equity & Excellence in Education, 31*(2), 47-51. doi: 10.1080/1066568980310206.
- Snyder, T. D., & Dillow, S. A. (2011, April). Digest of education statistics: 2010 (NCES 2011-015). Washington, DC: U.S. Department of Education, Institute for Education Sciences, National Center for Education Statistics. Retrieved from <http://nces.ed.gov/pubs2011/2011015.pdf>
- State Higher Education Executive Officers Association. (2014). *State Education Executive Officers Association finance report*. Retrieved from <http://www.shceo.org/sites/default/files/project-files/SHEF%20FY%202014-20150410.pdf>
- Weimer, M. (2002). *Learner-centered teaching: Five key changes to practice*. San Francisco, CA: Jossey-Bass.
- Young, J. (2012, January 8). 'Badges' earned online pose challenge to traditional college diplomas. *The Chronicles of Higher Education*. Retrieved from <http://chronicle.com/article/Badges-Earned-Online-Pose/130241/>
-
- DR. TINA J. HERRING is an Associate Professor in the Department of Special Education, Early Childhood, and Culturally & Linguistically Diverse Education at Metropolitan State University of Denver where she teaches in the area of special education. Tina's research interest includes making online learning accessible for students with disabilities and culturally sustaining practices in the classroom.
- DR. ANN MORRISON is an Associate Professor of Teacher Education at Metropolitan State University of Denver. She teaches courses on literacy, educational research, and the education of children who have unique needs. She holds a BA from the University of California at Berkeley, and earned her MA in Special Education and a PhD in Literacy Curriculum and Instruction at the University of Colorado. Ann's research interests include pedagogical content knowledge and multimedia learning.
- DR. KATHRYN YOUNG is an Associate Professor of Secondary Education at Metropolitan State University of Denver in Denver, CO and serves as the Faculty Fellow with the Office of Inclusion and Diversity. Her research interests include Disability Studies in Education, Social Geography, Inclusive Education, Culturally Sustaining Pedagogy, Diversity in Higher Education, and Microaggressions in Education and the Workplace.
- DR. ELIZABETH KLEINFELD directs the Writing Center and teaches courses in writing and rhetoric at Metropolitan State University of Denver. She researches student source use, academic integrity, and ways of teaching and assessing writing that promote inclusivity and social justice. Her pedagogy and research are informed by disability studies, feminism, and social justice theory.
- DR. LUNDEN MACDONALD is Director of First Year Success at the Metropolitan State University of Denver. She holds a faculty line as a Professor of Spanish in the Modern Languages Department and continues to explore 18th- and 19th-century Peninsular literature and the culture and civilization of Spain in the classroom. As an administrative practitioner, Dr. MacDonald has built upon the work she did at Princeton University in Enlightenment studies in order to focus on post-secondary studies as an avenue for democratic accessibility, dedicating her current efforts to outcomes equity and increased retention for students of color and first-generation students.

Appendix

Strong Instructional Practice (SIP) Example 1: The Class Notetaker*Thirsty for a Strong Instructional Practice?*

We want students to take notes during class, but they often don't know how to take effective notes.

Take a SIP of this: The Class Notetaker

One way to demonstrate the value of taking quality notes and to help students improve their note-taking skills is to build note-taking into class participation. Students could be asked to post their notes to BlackBoard within 24 hours of class; either one student could be designated as the person who needs to post their notes or the entire class could be asked to contribute. During the first several class meetings, a few minutes could be spent at the beginning of class reviewing the notes that have been posted and talking about what makes them effective or how they could be improved. Bonus: This practice makes it unnecessary to find an official note-taker for students with a note-taker accommodation.

Still thirsty? Take another SIP of The Class Notetaker

- Wiki How's "Take Better Notes." <http://www.wikihow.com/Take-Better-Notes>
- Vivian Zhu's YouTube video "How To Take Class Notes & Study For Tests." <https://www.youtube.com/watch?v=VbDG3gE8ias>
- CalPoly's "Notetaking Systems." <http://www.sas.calpoly.edu/asc/ssl/notetakingsystems.html>

SIP Example 2: Classroom Assessment Techniques*Thirsty for a Strong Instructional Practice?*

We all want to create the ultimate learning environment for our students. What does this look like? It may vary from discipline to discipline, or from lower-division to upper-division classes, but two aspects of a good learning environment are constant: student contribution and student safety. Every student should contribute to the learning community, and in order to do that, he or she must feel that it is safe to make mistakes and safe to give wrong answers. If students are concerned about "looking stupid" or being berated by classmates or the instructor because they miss the mark in a group conversation, they won't participate at all. So how can we create a learning environment that supports high standards for student learning while at the same time allowing students to learn from their own mistakes?

Take a SIP of this: Classroom Assessment Techniques

Integrate frequent, formative, low- or no-stakes classroom assessments into your daily plans to complement the summative assessments that structure your syllabus. There are many "Classroom Assessment Techniques" ("CATs") that can allow students to demonstrate their control of course content and, if their control is not strong, receive feedback from the instructor that can get them back on course.

The classic example of an effective CAT is a Minute Paper. Let students use the last couple of minutes of a class session (or assign this as a task in an online course) to answer three questions on a piece of paper: What is the most important thing you learned in class today? What questions do you have about the material from class today? Is there anything that you didn't understand? This low-impact exercise lets the student be honest about their control of the material, and it lets the instructor know what needs to be clarified or re-visited either individually or collectively at the next class meeting. When students see that the instructor is ok with mistakes and actually values input on content control, they are more likely to participate openly in class and gain a deeper understanding of the course content.

Still thirsty? Take another SIP of Classroom Assessment Techniques

There are many CATs that vary in intensity and preparation. Below are some resources to help you discover the CAT that is right for you and your course.

- Here's a link to Angelo and Cross's foundational work on Classroom Assessment Techniques (there are copies in the MSU Denver Center for Faculty Development—pop in to check them out without buying your own copy!): <http://www.amazon.com/Classroom-Assessment-Techniques-Handbook-Teachers/dp/1555425003>

- The Vanderbilt Center for Teaching has a nice website on CATs: <http://cft.vanderbilt.edu/guides-sub-pages/cats/>
- And the Iowa State Center for Excellence in Learning and Teaching has information on CATs that really digs into the psychological benefits that performing these assessments provides to classroom climate: <http://cft.vanderbilt.edu/guides-sub-pages/cats/>

SIP Example 3: Ice Breakers

Thirsty for Strong Instructional Practice?

Welcome to the first day of the new semester! Everyone is excited, the room is filled with promise. You don't want to kill the mood by spending the entire first day going over the syllabus, but when you enter the classroom and look at 25 new students, you wonder how you are going to get this ball rolling.

Take a SIP of This: Ice Breakers

First-day ice breakers may seem trite or overly enthusiastic, but they can go a long way toward setting the tone for a class and establishing your parameters while allowing students to get to know each other and know you. Community building starts on the first day and can often be that key element that shapes up a successful teaching and learning experience.

Here are two favorite icebreakers:

Listen to my name. Arrange students in pairs (in case of an odd number, you can pair up with the remaining student). Give each student two minutes to tell the story of his or her name—how was it chosen? Does it have special significance? Is it attached to a nickname? Etc. The student who is listening can't say a word. After two minutes, the two students switch roles. Finally, each student "introduces" his or her partner to the rest of the class. This icebreaker is a great demonstration of how to listen—what it feels like to be truly present without jumping in and replying. It is an excellent way of building confidence for students—their story, opinion, and point of view means something. It helps students to recognize how long two minutes really is (have you ever had that student who goes on and on, probably without realizing how much he or she is talking?). And by the end of the exercise, every student in the class knows each other's name—a fabulous first step toward community building.

Set common goals or learning outcomes for the class. Using your syllabus as a point of departure, take a look at your learning outcomes or course goals and expand to create objectives for classroom behavior or community experience. You may ask, for example, "How does this class feel about late arrivals?" This usually inspires a good conversation around how we feel when others arrive late, what we would like them to do when they arrive late (sneak in quietly and sit down, or publicly apologize?), or if it is even an issue. You may be surprised—little details that can drive a professor nuts might not be an issue at all to the students in the community. Other topics may include use of technology, food and drink, side conversations, etc. By setting common goals around these community behaviors, you can learn a lot about the personality of the class and also take some of the "policing" responsibility off of yourself.

Still Thirsty? Take Another SIP of Ice Breakers

- <http://www.cedu.niu.edu/~shumow/itt/Icebreakers.pdf>
- Primary and secondary school models can easily be adapted for more mature students in higher ed. Also look to business models for community building.