OLC RESEARCH CENTER FOR DIGITAL LEARNING & LEADERSHIP

DIGITAL ACADEMIC REVOLUTION
MENTORSHIP COMPETENCY

#1 THE DECLARATION:
Mentoring the Process of Learning with Screencast Assessment – Plugging into Students' Digital DNA a Decade Later

BY MARTIN **MEHL** & LUANNE **FOSE** | NOVEMBER 2016

KEYWORDS

Assessment | Common Core | Competency Education & Critical Thinking | Digital Academic Revolution | DAR | Digital Commentary Grading Project | Digital Grading| Digital Mentorship Learning | Instructional Design |Least Restrictive Environment | Mentorship Matrix | Professional Development | Reflective Learning | Screen-capture Feedback | Screencasting Assessment | Special Education & Adaptive Learning | Teaching & Training Process | Transformative Teaching | Workforce Leadership

PREAMBLE

The in-depth segments of the Mehl/Fose research from motivation to conceptualization to adaptation through adoption and diffusion are featured in a multi-part series by the Online Learning Consortium Research Center for Digital Learning and Leadership. The Digital Academic Revolution: Mentorship Competency Series shares with OLC members the "inside scoop" and transparency of digital mentorship competency in teaching and learning.

RESEARCH ABSTRACT

Spanning the **2015-2016** academic year, Cal Poly Communications Studies Sr. Lecturer, Martin Mehl, and Lead Instructional Designer, Luanne Fose, from the Cal Poly Center for Teaching, Learning, and Technology, conducted a formal, institute-wide research pilot on whether or not video assessment can improve faculty feedback for student assignments. Initially, the academic and administrative ramifications were restricted and limited to the scope of Professor Mehl's four introductory Communication Studies classes in spring of 2015. Upon generating 1) best practices; 2) course design suggestions; 3) syllabi organization; 4) rubric optimization; and 5) assignment clarification, the Digital Commentary Grading Project (DCGP) was expanded to be a formal, year-long campus-wide study at California Polytechnic State University, San Luis Obispo.

The study included recruitment of faculty representing all six divisions of the university including the College of Agriculture, Food and Environmental Sciences, College of Architecture and Environmental Design, Orfalea College of Business, College of Engineering, College of Liberal Arts, and College of Science and Mathematics. The series of articles that will follow in the OLC Research Center for Digital Learning and Leadership for the next few months will outline the process of the study, lessons learned, and provide leadership on how others can succeed in promoting mentorship at their own campuses and corporations. The whitepaper of the research was shared at the *OLC Innovate Conference* in New Orleans, in April 2016.

YOUR MENTORSHIP TRAINERS: Why Us, Why Now?

In 2003, Martin Mehl and Luanne Fose met at California Polytechnic State University, San Luis Obispo where they formed a deep academic and personal friendship based on mutual respect, teaching philosophies, and technology appreciation. The first publication they formally collaborated upon tackled the landscape of the changing world with a focus on the to-be-released smartphone and podcasting dynamics in academia of 2006.

In September of the following year, Luanne Fose and Martin Mehl published a formal article titled *Plugging into Students' Digital DNA: Five Myths Prohibiting Proper Podcasting Pedagogy in the New Classroom Domain* in the MERLOT *Journal of Online Learning and Teaching*, which merged with OLC's *Online Learning* Journal in 2014. The article (Fose & Mehl, 2007) discussed the scope and scale of their project, where Fose & Mehl experimented in a formal pilot to examine if podcasting technology was truly a viable asset for improving teaching and learning outcomes. At the time, many early adopters were experimenting with podcasting technology, but few were discussing the impact upon university students from a pedagogical perspective. The Fose/Mehl study analyzed the preconceived notions at the time (i.e., myths of podcasting pedagogy) and the device's design propensity for educational impact through both quantitative and qualitative methodologies.

TEN-YEAR TRANSFORMATION (2006-2016)

A decade has passed from the time of that first publication and the landscape of digital infrastructure and the co-authors' mindsets, capabilities, and households have changed and progressed. Digital communication now includes mobile and portable technology becoming mainstream, easily accessible and omnipresent in formats of portable multimedia hardware/software tools, social-networking apps, and e-book proliferation that challenge the traditional educational domain.

Martin Mehl is now a naturalized-dual citizen and proud dad of twin boys entering 3rd grade, one of whom has an IEP (Individualized Education Plan). He has become intimately familiar with the Common Core State Standards and the challenges of primary and secondary education. Luanne Fose is now legally married to her soul mate and celebrating the long-awaited judicial progress in the state of California. These challenges have increased their understanding of the mindset, needs, challenges and adversities of students that experience alienation, anxiety, struggles and setbacks and have made both of them stronger, more sensitive, and more prepared as scholars and mentors. In fact, academically, Martin has been recognized twice by his department and students with the Outstanding Educator Award in GE Courses, both as the inaugural winner in 2012 and a finalist in 2016. Promoted as the Lead Instructional Designer in the Center for Teaching, Learning, and Technology at Cal Poly, Luanne has pushed the

technological environment at Cal Poly (San Luis Obispo) by working with her team to successfully transition from Blackboard to Moodle, spearheading hybrid and flipped classroom instruction and quality assessment towards eventual campus adoption of online teaching, leading campus iPad initiatives and training, and continuing to influence the campus-wide ADA Compliancy Strategic Plan as well as newer UDL Initiatives.

In the October 2013 Time Magazine Special Edition Class of 2025 – How They'll Learn and What They'll Pay" (Meacham 2013), L. Rafael Reif, the President of MIT states: "To understand the potential [of online learning], it's important to focus on what digital learning is good for. At least at the moment, it is surely not very good at replacing a close personal connection with an inspiring teacher and mentor."

As two instructors who thrive in mentorship roles and have seen that Reif's statement is true in regard to the current state of affairs when it comes to digital learning, we began to ask ourselves the following question:

> *"Is it possible to merge mentorship with flipped, hybrid, online, and digital classroom technology?"*

The simple answer is yes; however, the more complex answer is Ted Talk worthy. Using an across the curriculum methodology, we needed and obtained a "proof-of-concept" analysis.

MENTORSHIP MINDSET

As more and more faculty have experienced an increase in the student to faculty ratio due to budget cuts in the state of California and as many have redesigned their courses for the online classroom as well, there seems to be a climate and culture of more and more dissatisfaction with teaching as a career across the curriculum from primary to post-secondary education.

We have identified that this is largely due to the decrease in opportunities for teachers to act in a mentoring role by fostering more meaningful, impactful and significant one-on-one relationships and guidance with students. Those who view teaching as a "calling" initially entered the career because they saw the value in changing lives as a mentor, despite the long hours and low salary. Now that there are less opportunities to mentor and remain sane with the heavy workloads that faculty must handle, we see more and more faculty doubting if it is really worth the struggle to remain in a teaching career. With teachers craving to serve in mentoring roles once again, we see an increase in the popularity of hybrid and flipped formats among instructors. Recruiting, convincing and training the change agents, early adopters, mentors and major challengers that we respect at California Polytechnic State University, we decided to test if the concept of digital mentorship through video-screencasting assessment was feasible, pragmatic and

scalable. We allocated a year for training of Cal Poly faculty in screencasting assessment feedback for student learning, data collection of the results, and academic rigor. It worked and it is beautiful! We discovered the effectiveness, scope and scale of screencasting assessment for mentorship was even better than we had ever imagined.

*"What exactly is it about this approach? Why is it such a big **game changer**?"*

First of all, it isn't just digital feedback to students; it is the mindset to align, overlap and pioneer the paradigm that education has to have transparency in its approach. Contrary to popular belief, the concepts of "how we learn" and "what we learn" can actually merge. Quantitative and qualitative scholarship are no longer mutually exclusive; together they forge a formal symbiotic relationship beneficial to students and teachers (which is fundamentally the reason this article is shared with you in this format and in this forum).

By 2016 travel agencies have virtually disappeared and libraries have morphed into learning hubs with hardly a trace of physical books on the shelves. The library substitute has become downloading, "YouTubing," and "Facebooking" through a self-serve approach. The mentality of "let me Google that," or let me "ask Siri" predominates and challenges post-secondary education's traditional approaches. Instead of viewing it as a threat, we need to shape it into a intentionally-designed environment where mentors approach the realm as caterers rather than servers. Customer service is as much about the experience as it is about the atmosphere and structuring, designing, and controlling is our job as educators & trainers. We are not in the customer service industry; we are in the user-interface connection business.

Leadership inside the classroom needs to be a transfer of knowledge, guidance and understanding. Digital communication means awareness of the medium, the means and the "me." In this day and age, reaching a student goes beyond mere connection by establishing the ability to transform learning through caring and customization. Our connection must be approachable leadership where experience trumps the craving for easy access and yet ease of access is still operative. We need to accept the fact that *COMPETENCE* and *CONVENIENCE* have finally merged. We need to put the quality back in higher education teaching environments while embracing the quantity of information that is available.

However, quantity of information is useless without its digestion and implementation by creative minds striving for solutions. In the July 2015 edition of Forbes Magazine (George, 2015), the article titled *That 'Useless' Liberal Arts Degree Has Become Tech's Hottest Ticket*, MIT professors Erik Brynjolfsson and Andrew McAfee argue that "today's tech wave will inspire a new style of work in which tech takes care of routine tasks so that people can concentrate on what mortals do best: generating creative ideas and actions in a data-rich world."

"Teaching: It is no longer just about what you know, but how you share it.
The medium ***captures, keeps and maintains*** the knowledge."

Content needs to be generated, captured, reviewed, refined, critiqued and digested. It is time for the higher education revolution! We have established the digital tools and the digital infrastructure and now it is time to adapt, adopt, and diffuse the digital mindset of mentorship for post-secondary faculty and ultimately the teaching principle of optimal knowledge transfer, which should include, at its core, both supervision and guidance. Yes, there is information to be gleaned from the data of the Information Age, but how does today's student determine what is true and what is not? The guidance of a knowledgeable mentor sorting it all out and helping students creatively apply this data to solve real-world problems is of utmost importance for authentic maturation of today's students. In a sense, teachers need to optimize their roles as Sherpa's and expert navigators who shape learning through creative manipulation of the medium.

THREE MENTORSHIP MODULES

OUR DECLARATION: There are clearly three different scaffolding modules, which we are coining the Digital Academic Revolution (DAR): Mentorship Competency, which capture revolutionary change, ranging from K-12, via Higher Education to Professional Development.

1. REVOLUTIONARY CHANGE: **PRIMARY & SECONDARY (K-12) EDUCATION**

Common Core Curriculum Teacher Training

Screencast grading will change the landscape of the common core curriculum of K-12. The communication competency pedagogy extracted from this type of assessment is unprecedented and possesses a definitive domino effect. While the Khan Academy currently focuses on "mastery education," the core focus of our teacher training is "mentorship/reflective learning," which empowers mentorship teaching in post-secondary education and incorporates a trickle-down effect to K-12 certified instructors in core competency.

In primary and secondary education this means that teachers can reach their pupils at the most significant stage of their learning curve. The cliché concept of "you learn for yourself, not your teacher," is proven untrue. The approach of "you learn for a transparently caring and inspirational teacher" finds its match by permitting the instructor to capture their love for learning and share it with the pupil to experience over and over again in their preferred environment. Teachers are asked to comply with the new Common Core State Standards, but the resources and training has not caught up with the demand. We are intending to change that.

In primary and secondary education this means that parents can be actively involved in the *process* instead of the *product* of teaching. The transparency of feedback, accessibility and comprehensive overview of video assessment allows the parent-teacher partnership to have consistency of instruction and partnership in furthering the child's education. In addition, it will reduce the necessity of the traditional parent-teacher conferences as an updating and check-in mechanism. Teachers can instead focus on the *quality* of feedback instead of the *forum* of feedback and in the process save time as well. In primary and secondary education this means that administrators have a cost effective approach of increasing teacher morale, while optimizing time allocation on school grounds.

It is the first time the "learning process" can be captured, framed, reviewed, directed and dissected. Khan Academy is product-focused in their assessment of mastery learning. The key is not video lecture for convenience, the key is multimedia guidance and feedback -- fostering progress and pedagogical outcomes based on transparency and knowledge transference. What this means is that there is a home for teachers who crave mentorship in the environment of digital learning; however, it isn't in content generation but in content digestion guidance (see **graph 1.1** below):

Mehl/Fose

Digital MENTORSHIP Methodology MATRIX

using screen-capture multimedia feedback, recommended tool: Screencast-O-Matic

Traditional Grading Feedback — **Graph 1.1**

TIME	SPACE	COST	CLARITY	SCOPE/SCALE	QUALITY
written feedback	linear	cheap	overwhelming	unique	interpretive
(slow) grading	analogue	inconvenient	discouraging	rational	discouraging
	physical	unproductive	examples limited	visual	ambiguity
	legacy	reliable		accurate	negative
					annotations

DIGITAL COMMENTARY GRADING PROJECT

TIME	SPACE	COST	CLARITY	SCOPE/SCALE	QUALITY
oral feedback	legacy	cheap	multimedia	customizable	*EDUCATOR VALUE ADDED:*
organic	transparency	reliable	nuanced	emotional	motivational
intuitive	asynchronous	efficient	expanded/modeling	audio/visual	modeling
fast grading	availability	convenient	encouraging	precise	mentorship
					PUPIL & PARENT VALUE ADDED:
					accountability
					demonstration
					in-depth justification
					semiotics
					rhetoric

COMMON CORE standards (K-12) *
(1) Research- and evidence-based
(2) Clear, understandable, and consistent
(3) Aligned with college and career expectations
(4) Based on rigorous content and application of knowledge through higher-order thinking skills
(5) Built upon the strengths & lessons of current state standards
(6) Informed by other top performing countries in order to prepare all students for success in our global economy and society

* **Source:** *California Department of Education* > www.cde.ca.gov/re/cc/

In his book, *A Whole New Mind: Why Right-Brainers Will Rule the Future*, Daniel Pink discusses the transitions taking place in our society today as America migrates from an Information Age to a Conceptual Age economy. Pink (2006) proposes that creative thinkers will hold the majority of high-paying jobs in the future. Pink believes that in the evolving Conceptual Age, America will begin to truly value the inventive, empathic and big-picture thinkers over the current focus upon "knowledge workers" of the Information Age (i.e., accountants, lawyers, programmers, and engineers) who merely acquire facts and connect them with data.

Furthermore, Pink believes that the Department of Education's reaction to the mandates of the Bush administration spearheaded a "teach to the test" mentality that will only serve to provide corporations with an abundance of cheap labor performed by left-brained thinkers. Mentoring faculty will know how to take the individual creative strengths of their students, appreciate them, recognize their value and encourage further creative thought, reflection, and action.

Special Education & Adaptive Learning

Cheap/Fast/Good: The old wisdom of "pick any two" is no longer satisfactory; all three converge for mentorship that optimally serves students. We reduced the student to faculty ratio to one-on-one so that the pupil accesses their mentor when it is most advantageous for them -- merging both convenience and competence. We have created an on-demand infrastructure for all students that embraces a key value to those that may not pro-actively seek assistance and guidance due to pride, intimidation, fear, or adaptive learning due to special needs.

Least Restrictive Environment (LRE) is a requirement of the Individuals with Disabilities Education Act (IDEA) for mainstreaming, integration, and full inclusion of students with disabilities. IDEA says "to the maximum extent appropriate," children who receive special education should learn in the least restrictive environment. This means pupils should spend as much time as possible with peers who do not receive special education. The potential through the mentorship competency is to create a uniquely customized environment with a voice where there is currently none (in the feedback process) and non-verbal communication where it is most needed and most useful. This is a wonderful opportunity to empower faculty, parents and students to succeed in unprecedented ways.

As this article is going public, millions of children return to the classroom and the Paralympics in Brazil will have lit the cauldron of the 15th summer games. We want to ignite that spirit of "Mind, Body, Mentorship" in the academic flame burning inside of you, as you read and learn about the Digital Academic Revolution and strive to serve through the application of a least restrictive technology-centric online learning environment.

Underserved & Affordability

This is a pedagogy-driven project, not vendor-driven or funded, using already existing resources to improve the experience of instructor and student. The screencasting tool, free to both and doesn't exceed $15/year to the individual instructor who desires to implement the Pro version that includes additional editing capabilities. With the *Screencast-O-Matic* © software applied instructor grading time was reduced by 30-50% with no loss in quality of feedback.

Mentorship competency goes beyond technique and tool; it introduces a methodology mindset that frames a new breed of infrastructure that doesn't select technology as a supplement or substitute for teaching, but transforms the communication medium into a learning outcome. We are engaged in capturing the learning process, not the learning product. Scaffolding the mentorship approach gives rise to a win-win-win approach serving faculty, students and administrators in creating a successful by-design environment in the 24-hour "on demand" infrastructure of current higher education expectations. Mentorship competency empowers self-funded non-traditional students, full time professionals, and family income contributors to obtain more individualized and meaningful feedback without conflict and challenging time-management restraints, travel time and additional cost.

2. REVOLUTIONARY CHANGE: **HIGHER EDUCATION**

Digital Mentorship Competency Certification

In higher education this means that office hours can become a completely different use of time and space. In lieu of gaining clarity on assignments, projects and graded feedback exchanges, office hours can resemble guidance and counseling sessions, advising and leadership transfer, soundboards and listening environments. These are the connections and belonging arenas that require one-on-one engagement and assist students in the application of learning for real-life scenarios (see **graph 1.2** below):

Mehl/Fose

Digital MENTORSHIP Methodology MATRIX

using screen-capture multimedia feedback, recommended tool: Screencast-O-Matic

Graph 1.2

TRADITIONAL OFFICE HOUR APPROACH — **LESS CONVENIENT**

	TIME	SPACE	COST	CLARITY	SCOPE/SCALE	QUALITY
INSTRUCTOR	on campus limited	physical restrictive	travel office space redundant	high stressful	f2f one-by-one	accurate
LEARNER	on campus limited	physical intimidating	travel parking	high anxious	f2f one-by-one	accurate

DIGITAL COMMENTARY APPROACH — **MORE CONVENIENT**

	TIME	SPACE	COST	CLARITY	SCOPE/SCALE	QUALITY
INSTRUCTOR	any	any approachable available	none	precise	1-on-1 screen time	consistently high control
LEARNER	any refinement mentoring	any accessible consultation	none	precise guidance accountable	1-on-1 screen time	precise transparency

However, digital mentorship also means a major reduction of redundancy clarification for faculty, major flexibility in availability and access, and major impact of pedagogical concepts. In lieu of mastery learning, higher education can now embrace reflective and critical thinking analysis with guidance, since with this approach mentorship isn't competing with teaching. There is a strong need for mentors in this environment, but it requires a committed, caring and approachable scholar that understands accountability and motivation as core principles of teaching.

In higher education that means that the administration has a cost effective approach of increasing student and faculty morale while optimizing office allocation and space assignments on campuses. It also means that with video assessment, faculty have a demonstrable way of proving "regular and effective contact" with the students as individuals in their online courses – a factor that is significant to administrators in judging the effectiveness of an online instructor's pedagogy and dedication to a student's personal development.

In higher education that means that the classroom can resemble teaching modules that are composites of "best practices" and "best training" guided with clarification and potential contribution of the lecturer in the room. This requires a teaching tool

repository of "home-made" institute specific learning material that serves as knowledge capture of the "most impactful" solutions collected and generated on any specific subject matter. This is what the Mehl/Fose team view as their calling to pursue and accomplish in the next decade through consultation & training.

We are formally transitioning from base research to the applied component. We are eager and excited to enter the state, and national realm of leadership, which we are calling the Digital Academic Revolution (DAR). This approach means that students are exposed to the most impactful, vetted and refined content and faculty will be trained and certified in knowing how to accomplish this most efficiently and in a meaningful way. We can't wait to spread the word in keynotes, training manuals, webinars, podcasts, workshops and campus visits. Instead of certifying an individual's coursework and material, we are leading the charge to prepare teachers to take on the current Digital Academic Revolution through Digital Mentorship Competency.

3. REVOLUTIONARY CHANGE: **PROFESSIONAL WORKFORCE LEARNING & TRAINING**

Legacy Expert Accreditation

Ken Burns called the National Parks Service (celebrating its centennial anniversary this month) **"America's Best Idea"** (PBS, 2009). The National Park Service has two main jobs: one is to protect the national parks; the other is to help visitors enjoy them. In workforce training and professional advancement, the dual purpose after recruitment is to retain and foster employees. If properly executed, Digital Mentorship, using screencasting technology, can be America's Best Opportunity for job satisfaction and competitive advancement.

Internships, apprenticeships, residency programs and other partnership arrangements in post-secondary labor environments aim for the pairing of experience and inside perspective with new recruits. However, the performance assessment, feedback and guidance can be enhanced, refined and more concise compared to the traditional (either absent or simply end-of-service report-card style) approach when integrating a technology-centric constructive criticism loop with screen-capture/mentorship methodology.

Ranging from *agriculture, architecture, artistic, athletic, business, communication, engineering, environmental, entertainment, finance, health, manufacturing, medical, legal, public service, technology, security, scientific, non-profit and for-profit market segments* - the ultimate challenge is the opportunity of transitioning and smoothly integrating new team members into an existing organizational structure. The Digital Mentorship approach permits a formal arena of collecting and sharing quantitative and qualitative data, essentially converting the intangibles into tangible guidelines of good leadership and knowledge transfer. Potentially inheriting a workforce that has already

experienced this technique in primary, secondary (common core) and tertiary education can further enhance this opportunity for success, satisfaction and a competitive edge.

Becoming a Legacy Expert in Digital Mentorship Competency requires a concerted three- pronged approach: (1) *Developing* communication competency on information dissemination and digestion; (2) *Leadership* skill and knowledge transfer identification (establishing change agent standards and credibility gages); (3) *Documentation* for archiving purposes (creating a customized knowledge repository of screencast feedback/commentary).

Through Digital Mentorship, incoming personnel capture both the visual and verbal confirmation and clarification of expectation and standards to establish dual legacy: the opportunity to capture the best of the existing organizational change agents, while documenting the process. The documentation allows for oversight, accountability and merit-based performance recognition. The ability to pinpoint exactly who is fostering the best next generation of high performers is currently based on the outcome assessment. Suddenly the potential includes the ability to capture the "how" so that the assessment is based on the *process and the product/outcome*. For any industry this permits a review process of transparently evaluating the reasons of reaching or exceeding goals when human capital is the predominant driving force.

MENTORSHIP PROCESS

Plugging into Students Digital DNA: Knowledge Transfer and Information Digestion

The possibility to mentor more effectively should get every educator on the planet excited about the fact that they are not extinct; they are more necessary than ever.

Just think about it: the library never replaced the scholar. That explains the collaborative nature behind this methodology -- where the mentor turns into the student and the student turns into the mentor and through the transformation can perpetually take on each other's form and function. Furthermore, the Internet hasn't replaced training, teaching and education; it is a powerful supplement, not a substitute. The screen capture approach empowers the mentors to serve as change agents, pin-pointing education by grading a student's individual work and becoming more acquainted with their actual thought process. As a result, the teacher is able to refine the student's digestion of information while currently sneaking a peek at the student's method of learning from a metacognition standpoint. All of this information can enhance a teacher's assessment toolkit, and in turn, assist the individual student to reach greater heights and maturity as a learner.

> "We need to clearly establish that technology is now no longer a tool, but for the first time, a gateway to the process, an access point to reach, clarify and amend the learning process."

Each student may have a unique learning process and approach, however the instructor has a clear understanding of the intended goals and benchmarks of both the outcome and the path through the mentorship approach. This is by no means a handholding technique, rather transparency of expectations and compliance clarification. Assignments need to have clear, rubric-based deliverables, but they also need to reflect constructive feedback with a clear outline of the scope and scale. Students tend to be motivated by grades as well as inspiration, so combining them is an ideal approach.

"The physical paper is dead. Long live the screen, when it comes to mentoring."

What it boils down to in the end is that it actually isn't about the medium; rather, it is about the steps of learning it represents. In the written physical paper, the written annotations represent a finished product with finalized statements and yet they alienate the component of "constructive" criticism that can be more easily digested by students. Annotations on written papers represent judgment and labeling, resulting in discouragement for most students. Those that already have the maturity and capacity for success are barely guided by the teacher with that approach, they are simply lead. We need to reach all forms of students, and especially not merely the students who have already understood the content and can apply it toward their own development. Therefore, the method of written feedback is not optimal because it lacks the clarity of the author's intent – it is lacking in the impact of clarity, and frankly, it is outdated.

Written work is optimal for legacy, for information gathering, for information dissemination, for information permanence. However, we are now at an unprecedented time where the captured multimedia environment is readily available at low cost and permeates all facets of our personal, professional, and most significantly, academic lives. It is the difference between in-depth blogging vs. tweeting and Facebook posting vs. Snapchatting. We have not necessarily all bought into being a society of short-attention-span individuals, but we are gradually morphing into a society that uses visual stimulation as a way to enhance information digestion.

As faculty, we already seek out content that can be shared in the classroom, but sadly, we are not focused on what we want our students to learn *with* it; rather, we frame it as learning *from* it. Our approach to guiding student learning needs to be pro-active and less reactionary.

Currently, lesson plans clearly establish the framework for lectures to reflect and frame the concepts of learning units. The traditional deliverables are tangibles from theoretical concepts and practical applications; however, they are generally measured through compliance of either "correct" or at least "acceptable" responses and solutions.

The key value added through screencasting assessment is the emphasis on the learning process of feedback in conjunction with product or output grading. At the core, it is crucial to differentiate the relationship of grading and feedback. Grading entails a component of judgment to the recipient that is generally disconcerting as the perception is that one is either "up to" or "below" the standards of the grader. Such an approach without transparent feedback also compounds the difficulty of instructional objectivity.

MENTORSHIP IMPACT

At the present time, the most common approach of assessment is embedded in providing constructive criticism for draft or incomplete work. Reviewing assignments, projects and presentations should instead be carried out through a scaffolding approach. The current gauge of the successful, satisfactory and standards-compliant submission (i.e., completion) of the assignment and consequent grading with measurable tangibles and rubric no longer will suffice for the instructor who desires to serve as a mentor. Although it is significant to provide the student with clearly accomplishable guidelines, the mentorship constructive criticism feedback will thrive by taking advantage of multimedia, modeling and emulation -- feedback that goes beyond the traditional and simple standard of compliance.

The spoken word in one-sided screen capture permits clarity in nuanced justifications and serves as a mechanism for transparency. Even if it isn't interactive, it still permits an opportunity to provide perspective and much-needed encouragement – a circumstance that is indeed very scalable. Motivation, re-enforcement, guidance and modeling are as impactful as content and knowledge – possibly more so. The core component of successful teaching is the optimal knowledge transfer from mentor to mentee – this is where screencasting assessment can really make a difference!

"Learn by doing" is the school motto of Cal Poly, San Luis Obispo, where we are both presently employed. The motto is often jokingly referred to by the students as "learn by failing," but in essence, what the approach was intended to imply is a focus on practicality and application. We need to avoid using theory in our teaching method and practice what our students preach. We need to reach them where they are. Some educators resist this catering approach as simply furthering the selfishness of the "me" generation, but to be truly effective, we need to plug into their digital brains. We need to optimize learning by becoming aware of the do's and don'ts of providing effective screen-capture assessment as transparent multimedia feedback.

> "We need to establish a training methodology through pedagogy that is technology centric to permit mentorship in its most raw form."

Feedback isn't about perfectly edited sound bites, and purely aesthetically pleasing visuals; it is about approachability and guidance. Generally, the intimidation for scholars in this approach is rooted in the fear of not being technologically savvy. We need to clearly establish that technology is now no longer a tool, but for the first time, a gateway to the process, an access point to reach, clarify and amend the learning process. What a beautiful time to be a teacher in training. What a beautiful time to be a student. What a beautiful time to connect with the brain of the mentor!

We always thought we would like to take a straw to the brain of those who inspire us. Well, we can't suck out their knowledge, but we can surely pour our "best intentions" into the spoken word and by so doing, provide the voiceover for the visual connection we are creating with the person on the other side of the monitor.

THE NEXT TEN-YEAR DIGITAL ACADEMIC REVOLUTION (2016-2026)

For the first time in education the screen could become the mirror where the mentor is looking into the face of their mentees. In the 2006 edition of *Time* Magazine's *Person of the Year (Grossman, 2006)*, there was the label of "Content Generators" with a mirror on the cover. Two decades later, *Time* may feature educators that have joined the Digital Academic Revolution -- those with the vision that they are responsible for pairing the gift of digital mentorship pedagogy with the graduating class of 2026.

We are so excited, so thrilled to be your mentorship trainers -- which is why us, why now. Why don't you join us?

Article #2 PREVIEW:

DIGITAL ACADEMIC REVOLUTION MENTORSHIP COMPETENCY SERIES

#2 THE CONVERSATION: Viewing Instructional Design & Pedagogy as a Holistic Unit Transformative Teamwork in a Learn by Doing Approach – Student Turned Mentor & Mentor Turned Student

Wait a minute, we're being *too abstract* here with just exposing you to the macro-analysis. We shouldn't simply unveil the outcome; instead, you should be a part of the micro-analysis – the entire process from inception to application. So with that in mind, we would like to guide you through the journey we took with a reverse-engineering approach in the DAR Series that follows. Sounds like you are ready for the micro-analysis part. You should see what we were thinking -- understanding how we got here.

Let's back up these claims and findings AND give you the opportunity to replicate this in your environment.

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Dr. Luanne Fose is the Lead Instructional Designer for the Center for Teaching, Learning & Technology at California Polytechnic State University in San Luis Obispo. She holds a Doctor of Philosophy in music theory, musicology, and music technology from the University of North Texas. In her current position at Cal Poly, she conducts faculty workshops and consultations for the development of flipped, hybrid, and online courses. As a former music professor, she has an innate passion and artistry for audio and video production as a means of integrating Universal Design for Learning with the craft of teaching.