

Dr. Christian Gilde Researches AI & Creativity, Lindsey Branch Selected as SID of the Year & Leadership Scholars Announced

Operations Update <operationsupdate@umwestern.edu>

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Academic Spotlight: Researchers Announce OpenAI's GPT-4 Matches or Outperforms Humans in Creative Thinking Tests

A team of interdisciplinary researchers, including Dr. Christian Gilde, Professor of Business at the University of Montana Western, Dr. Erik Guzik, Assistant Professor of Management at the University of Montana, and Dr. Christian Byrge, Professor of Business Creativity at Vilnius University, shared their findings during the University of Southern Oregon's Conference on Creativity from a [recent study focused on the creative capabilities of AI](#).

For the first time, OpenAI's GPT-4 scored in the top 1% on the Torrance Tests of Creative Thinking (TTCT), matching or outperforming humans in the creative abilities of fluency, flexibility, and originality.

The research team first met during an innovation and creativity workshop held in 2013 at Boise State University where Dr. Gilde and Dr. Guzik attended a workshop facilitated by Dr. Byrge. The researchers discovered their mutual interest in understanding, promoting, and evaluating creativity.

“As business faculty and researchers, all of us shared an interest in applying technology to business education and development. As we began to explore AI, especially ChatGPT, it became clear the benefits for business applications would be significant. The introduction of ChatGPT creates new opportunities in just about every field and industry, but especially those that depend on creativity, or the ability to generate new and novel ideas that have value,” said Dr. Gilde. “This development also forces society to revisit some of the most fundamental questions about creativity, including what the nature of human creativity is and whether creativity is an ability that uniquely separates human beings from machines. Overall, this could prompt a reevaluation of how we define, assess, and develop creativity in education, organizations, and society.”

For their latest research project with GPT-4, the researchers were interested in evaluating its creative abilities compared to human creativity.

“GPT-4 was tested eight times through ChatGPT using two variants of the TTCT, the gold standard for researchers assessing creativity. Using the TTCT, we asked GPT-4 to demonstrate its creative abilities by asking questions, guessing causes, contemplating potential consequences, generating ideas for product improvement, envisioning new alternative uses for existing products, and imagining future scenarios,” said Dr. Guzik.

The AI’s responses were compared to those of humans by Scholastic Testing Services, a third-party evaluator of the TTCT. All eight tests saw GPT-4 score in the top 1% of all human responses for fluency — the ability to produce a large number of responses to each activity.

For flexibility, the ability to produce a variety of ideas and to shift from one approach to another, three tests scored in the top 1%, two in the top 2%, and the remaining three in the top 7%.

The research team predicts that every component of the entrepreneurial process, and business in general, will be affected by AI in the next five years — including identifying unique opportunities and significant problem areas, generating novel solution ideas, improving products, producing new marketing strategies, and imagining future scenarios and outcomes.

The team's findings, including further research into training GPT-4 to improve its creative abilities in specific domains such as business innovation and entrepreneurship, is planned for publication later this summer.



Lindsey Branch Named Frontier Conference Sports Information Director of the Year

In her inaugural year, Montana Western Sports Information Director, Lindsey Branch, was selected as the [2022-2023 Frontier Conference Sports Information Director of the Year](#) in a vote by the league's sports information directors. She is the conference's nominee for the National Association of Intercollegiate Athletics honors.

"I am very appreciative of the honor and am grateful to be recognized by my colleagues throughout the Frontier Conference," Branch said. "With this being my first year in sports information and college athletics, I am incredibly thankful for my fellow Frontier Conference colleagues who have supported and worked beside me throughout the year."

The award honors an individual who demonstrates excellence in all aspects of athletic communication, including social media, press releases, photography, statistical compilation, website updates, coordinating media personnel, graphic design, and promotion of the Frontier Conference and the NAIA.

Save the Dates

Visit our [online events calendar](#) for more information and to [submit your scheduled events](#).

You can also explore upcoming [community events](#) and [volunteer opportunities](#) in the Dillon area.

June 11-17

- [College National Finals Rodeo, Ford Wyoming Center](#), Casper, WY

June 17

- [30th Annual Scholarship Scramble](#), check-in at 7:00 a.m., Beaverhead Golf Course

August 12

- Montana Shakespeare in the Parks Presents "Three Musketeers," 6:00 p.m., Legacy Plaza & Pioneer Federal Amphitheater, UMW Campus

August 28

- Block 1 begins



Montana Western Announces 2023-24 Chancellor's Leadership Scholars

The [Chancellor's Leadership Scholars Award](#) is a four-year, full-tuition scholarship awarded to exceptional students residing in the state of Montana who will be attending the University of Montana Western in the fall.

Montana Western is proud to announce the five following high school seniors as the 2023-24 award recipients: Megan Ehinger, Elizabeth Fulbright, Nicolas Macdonald, Isabella Montalvo, and Allison Sprague.

"Congratulations to the recipients of this scholarship that recognizes leadership, community service, and academic excellence. We are excited to welcome you to campus this fall," said Montana Western Chancellor, Michael Reid.

UMW Ranked Nationally in Top 20 Best Online Bachelor's Degree Programs for Early Childhood Education

The University of Montana Western was ranked among the top 20 best online bachelor's degree programs in Early Childhood Education (ECE) by bestaccreditedcolleges.org.

Hundreds of institutions across the country were considered for this ranking and the top programs were selected based on their financial aid awards, quality of education, faculty, and available resources for students. Montana Western was the only Montana institution to be featured.

Montana Western's multiple online ECE programs feature labs and opportunities for students to interact with peers and professionals within the field of ECE. Students come out of the program with an understanding of young children's characteristics, development, and how to create supportive, healthy, respectful, and challenging learning environments. With over 100 students enrolled in online UMW ECE programs, this format provides students across the state access to high quality courses while living and working in their own communities.



Montana Western Announces R.E. Miller as General Contractor for Sports & Activities Complex

After publicly launching a \$13 million fundraising effort earlier this year to fund scholarships, academic programs, and student wellness and athletics facilities, the University of Montana Western has [announced the selection of Jeffrey Contracting/R.E. Miller as the general contractor of the new Sports & Activities Complex](#), anticipated to break ground this August with the goal of having a game-ready field for fall semester 2024.

The civil site plan for the Sports & Activities Complex project is complete and has been reviewed and approved by the City of Dillon and Montana Department of Transportation. The next stage will be working with the project's engineers, architects, and general contractor for design development and cost estimates.

The Sports & Activities Complex will be constructed on a section of 14 acres of land adjacent to campus that John and Phyllis Erb pledged to the university in 2019. With expanded seating and new amenities, the Complex will significantly enhance the game-day and campus life experience and will aid in recruiting future students. The new Complex will also be available to host local games and events for other community organizations to support the youth of Beaverhead County.

Over \$11.8 million has already been committed to the \$13 million comprehensive campaign, of that, about \$4.5 million will be directed to the Complex project. Currently, total funds raised for the Complex project are at \$3.6 million.

Approximately \$8.5 million is planned to be divided among the other three funding priorities of the Experience One Campaign including substantially increasing support for student scholarships, adding a Wellness Center to the campus to support the mental and physical health of UMW's students, and investing in the Fund for Experience One to increase experiential learning opportunities for students and faculty. Montana Western hopes to secure the remaining funds needed for the campaign over the next twelve months.

For more information, please contact the University of Montana Western Foundation at 406-683-7305, email roxanne.engellant@umwestern.edu, or visit tinyurl.com/X1-campaign.

Montana Western Names Students to 2023 Spring Semester Dean's List



The University of Montana Western named 513 students to the 2023 spring semester Dean's List.

To achieve this honor, students must be enrolled full-time or for 12 semester credits and carry a minimum 3.33 grade point average. An asterisk after a name indicates a student received Dean's List high honors.

The listing at the link below is divided into In-state and Out-of-State/International students, alphabetically by city and state.

[Dean's List Spring Semester 2023](#)



Facility Services Project Updates

Wellness Center Project

- The detail design and cost estimate of \$3.5M was presented to the BOR during the May meeting. The BOR approved both plans and have authorized the construction and full implementation of the new center.

Campus Lighting Project

- The installation of new LED lighting systems have been completed in the Montana Conference room and in the Engineers' House.
- These "demonstration" rooms allow for assessment of the overall quality and functionality of the new lighting fixtures and control systems before full-scale implementation.
- Light and wattage consumption measurements will be taken to confirm the design meets the criteria as stipulated by the DEQ energy savings lighting program, followed by implementation throughout campus starting later this summer.

Campus Security Camera Project

- This summer, UMW will be starting a safety-enhancement project to install security cameras, both interior and exterior, in high traffic areas on campus.
- The cameras will be cloud-based and fully integrated into a common software platform. The full-scale project will be executed in phases over the next few years.
- The phase I portion of the project will consist of approximately 40 cameras. About 30 of these cameras will be exterior with a priority on a line of sight to card swipe access doors, public gathering places such as the Legacy Plaza and the Tundra, and parking lots. Cameras will also be located in interior spaces such as the Keltz Arena, Straugh Gymnasium, weight room, and student lounges.
- It is expected that approximately 80 cameras will be installed once the project is complete.
- The phase I cameras are expected to be operational by the end of Block 1.

If you have any questions or concerns, please contact UMW Director of [Facility Services](#), Michael Brown: michael.brown@umwestern.edu or 406-683-7142.

Submit Content to Upcoming Operations Updates

Please share your current projects, initiatives, examples of Experience One, and other updates with us so we can share them with the University Community and [let us know](#) what information you would like to see included in future updates. We'd like to hear from you!

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