

EDULLOGER

THE EDULLOGER
QUARTER THREE
2024



PEOPLE DRIVING SOFTWARE



A MESSAGE FROM THE CEO WRITTEN BY SAM BULL

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Dear Clients,

I hope this message finds you well and that you have had a successful start to the new school year. I want to congratulate you on your hard work and dedication to provide safe and efficient transportation for your students and staff. You are the backbone of the education system, and we are proud to partner with you.

As you know, Edulog is committed to delivering innovative and reliable solutions for your routing and planning needs. We are constantly improving our products and services to meet your changing demands and expectations. We value your feedback and suggestions, and we encourage you to reach out to us anytime you have a question or a concern.

As the school year progresses, I urge you to keep the momentum and energy of a fresh start going throughout the year. Remember that you are not alone in this journey. You have a network of peers and professionals who are ready to support you and share best practices. You also have us, your trusted partner, who is always here to help you achieve your goals and overcome any challenges. Together, we can make this school year the best one yet.

Thank you for choosing us and for your continued trust and loyalty. We look forward to serving you and your district for many years to come.

Sincerely,
Sam Bull, CEO



AT EDULOG, PEOPLE COME FIRST.

WRITTEN BY SARAH HUTCHERSON

As a company, we've always believed that our most important asset isn't just our technology—it's the people who use it and those who stand behind it. Whether it's the dedicated staff at each school district, the students they serve, or our own team members here at Edulog, we are committed to putting people at the heart of everything we do.

We understand that every school district has its own unique challenges and goals. The success of your district relies on the hard work and dedication of your staff, from the transportation directors, drivers, IT staff, all the way to each administrator who schedules the field trips, all coming together to ensure that every student gets to school safely and on time. At Edulog, we practice what we preach. Our team is an eclectic collection of individuals who bring their unique skills and perspectives to the table every day to match the efforts and passion of the districts that we serve. By fostering a culture of collaboration, we can better serve every district to meet each unique need and positively impact what extends beyond our immediate reach.

At the end of the day, it's all about the students and their families. We know that safe and reliable transportation is a critical part of their educational experience. That's why we continually strive to improve our solutions to meet your needs, ensuring that parents have peace of mind and students arrive ready to learn. Thank you for trusting us to be part of your community. We are honored to support you and look forward to continuing our shared mission of delivering exceptional transportation solutions.



EDULOG
PARENT PORTAL

Communicate with parents proactively, not reactively.

[LEARN MORE](#)

The advertisement features the Edulog logo at the top left. Below it, the text 'PARENT PORTAL' is displayed in a bold, sans-serif font. Underneath, a tagline reads 'Communicate with parents proactively, not reactively.' At the bottom left, there is a purple button with the text 'LEARN MORE'. On the right side, a white smartphone is shown displaying the Edulog Parent Portal app interface, which includes a map and various data points related to student transportation.



SCHOOL STARTUP AND THE WAR ROOM

WRITTEN BY SPENCER JENKO

As school starts for districts across North America, transportation departments once again are undergoing a flurry of activity as they work to complete the mountain of tasks that lie before them. And for many, the size of that mountain can be a substantial climb. From processing ride registrations, to assigning students to runs, to assembling routes and assigning drivers/vendors, etc...., the challenges involved before information can even be sent out to the schools and parents can feel like running a race with endless hurdles to jump over.

And with any race involving hurdles, there is always the possibility of stumbles occurring along the way - whether they happen near the start or on the final stretches.

Mistakes occur, delays happen, and sometimes the specter of bad luck shows its head at the worst possible time. And while the evolution of technology has helped transportation departments become more efficient, resilient, and able to recover, the benefits of software and hardware are not without their own set of risks.

Even the most skilled personnel in this industry know that preparing for school start can become an overwhelming task. And when student transportation has become intertwined with technology, it can be difficult to keep track of all the necessary details when one is only halfway through the race. Edulog has witnessed this time and time again and realizes that sometimes a district needs to feel like technology still has their back along the way.

Enter the War Room. In recent years, Edulog has offered enhanced support to districts as they go through their school startup to assist, whether they are undergoing significant changes in their routing department, implementing a new technology solution, or simply feeling the strain of limited resources. The 'War Room' in effect acts as a dedicated support service for transportation departments, with dedicated techs and reps from Edulog that are entirely focused on answering any and all calls from a district as they arise.

BREAKING NEWS

SCHOOL DISTRICTS
REPORTED SCHOOL
STARTUP PHONE CALL
REDUCTIONS UP TO
75%

FIND OUT HOW



SCHOOL STARTUP AND THE WAR ROOM CONTINUED

The War Room is an online ‘meeting room’ that is always active and staffed during the district’s working hours. It can be used to assist routers when they have questions, provide training for new personnel as needed, provide updates to leadership, and help diagnose issues when they surface. Edulog can even arrange for additional personnel to be on-site when specific ‘hands-on’ help is required.

Simply put, it is a space where both Edulog and the school district can tackle the various transportation challenges as they work through school start (or any other large project). The war room approach promotes communication and collaboration as people work together to ensure a smooth school start.

Both values are critical for success in a system with many moving parts that must work together.

It’s no secret that while technology has provided great benefits to student transportation, it has also introduced changes in how information flows and who receives that information, complicating the mission of a transportation department. Edulog recognizes that districts sometimes need that extra “helping hand” to reassure them along the way. Because while getting all your school buses running on day one is a far cry from the trials of war, preparing for the first day of school can make one feel like they are in a room strategizing for one...



ROUTING

Optimization and Efficiency



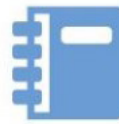
BELL TIMES

Studies and Optimization



CONTRACTS

Auditing and Analysis



PLANNING

Demographics and Redistricting



OPERATIONS

Policies and Metrics

TRADESHOWS WRITTEN BY PAUL STOKEY

This year has been very productive for the tradeshow that Edulog has attended. To date, the Sales team has attended 37 shows. 18 shows happened in June alone and we have 13 more shows scheduled before the end of the year. We have had a great year so far in tradeshow and hope to continue our success into the end of the year and beyond. If you are going to attend any of the remaining tradeshow this summer, stop by to see us!

Check out our *Summer Fun at Edulog* article to see some tradeshow pictures, thanks to Pete Salinas!

THE IMPACT OF ATHENA ON OUR DISPATCH OPERATIONS: A CLIENT'S PERSPECTIVE

WRITTEN BY SHAWNA KNUDSON

In today's fast-paced world, efficient operations are crucial for the success of any service-oriented business. The introduction of advanced technologies has revolutionized the way we manage these operations, and one such innovation is Athena. This article explores the positive impact Athena has had on district operations, as reflected in the heartfelt feedback from our clients.

“Just wanted to say thank you. Athena has been working nicely for us here in dispatch and knowing you all ‘have our backs’ has been a relief. I know everyone there has been working long and hard and we appreciate you all.”

“I told the world how wonderful your partnership has been. They know your team has been available at all hours of the day and night to assist us through this transition. I appreciate all that you and the team have done! Thank you!”

These testimonials encapsulate the essence of what Athena and Edulog's staff bring to the table. They highlight several key aspects that have contributed to the overall satisfaction and efficiency of transportation operations.

Support and Assurance

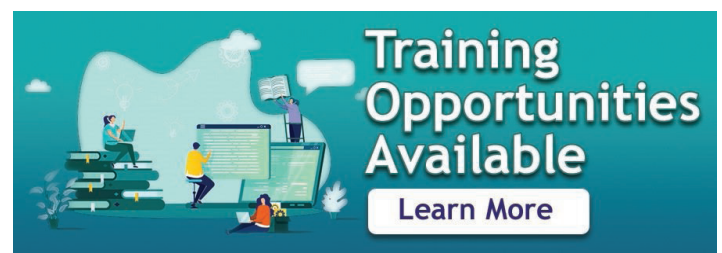
The client's mention of “knowing you all ‘have our backs’” speaks volumes about the support and assurance provided by our team.

Implementing a new system can be daunting, but our commitment to offering continuous support has made the transition smoother for our clients. This sense of security is invaluable, as it allows our clients to trust in the system and focus on their core responsibilities without constant worry.

Round-the-Clock Availability

“I told the world how wonderful your partnership has been. They know your team has been available at all hours of the day and night to assist us through this transition.” This comment highlights the dedication and availability of our team. Transitioning to a new system often comes with challenges, and having a support team that is available “24/7” has been crucial in ensuring a smooth process. Our clients appreciate knowing that they can rely on us at any time, which reinforces their trust in our partnership.

The Impact of Athena... Continued on page 6.



Training Opportunities Available

[Learn More](#)

THE IMPACT OF ATHENA...

CONTINUED

Appreciation for Hard Work

“I know everyone there has been working long and hard and we appreciate you all.” This acknowledgment of our team’s efforts is deeply gratifying. It underscores the importance of dedication and hard work in achieving success. Our team’s relentless pursuit of excellence has not gone unnoticed, and it is heartening to see that our clients recognize and appreciate these efforts.

The Broader Impact of Athena

Beyond the immediate benefits of efficiency and support, Athena has had a broader impact on transportation operations. It has fostered a culture of continuous improvement and innovation. By leveraging the latest technologies, we are constantly seeking ways to enhance our services and provide even greater value to our clients.

Client-Centric Approach

At the heart of Athena’s success is our client-centric approach. We understand that each client has unique needs and challenges, and we strive to tailor our solutions accordingly. The positive feedback we receive is a testament to the effectiveness of this approach. By listening to our clients and adapting to their requirements, we ensure that Athena remains a valuable asset in their operations.

In conclusion, the feedback from our clients highlights the significant positive impact Athena has had on transportation operations. Enhanced efficiency, reliability, support, and a client-centric approach are just a few of the factors that contribute to this success. As we continue to innovate and improve, we remain committed to providing the best possible solutions for our clients. The appreciation and trust they place in us are the driving forces behind our relentless pursuit of excellence.



BETTER.

FASTER.

ATHENA

A cloud-based
school bus routing
solution created by
industry leaders.



Get the most from
your onboard
technology with
Driver Portal
Tablets.

Improve your
operation with the
Parent Portal app.

LEARN MORE:

www.edulog.com





STAFF UPDATES

WRITTEN BY JASMINE BROWN



JOSIAH BROWN

We're thrilled to welcome two new team members to Edulog. First, join us in welcoming Josiah Brown, who has joined us as a Senior DevOps Engineer and will be leading the US team. Josiah is not just a tech expert but also an enthusiast with diverse interests. In his own words, he shares, "I am a fan of, and previously was in a sumo wrestling club! My favorite activities include hiking, mountain biking, and learning new languages in my free time. I have a longtime goal to go on a marathon this year, so wish me luck! Lastly, I am a huge baking fan and enjoy trying to make different types of breads and desserts."

Check out our recipe page for one of Josiah's delicious treats!



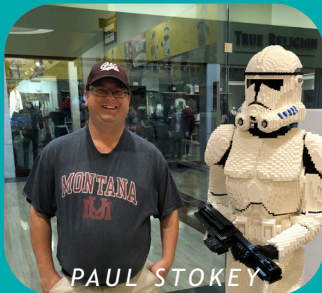
BRIAN OGOLIN

We are also excited to introduce Brian Ogolin, who is joining the Athena Service Provider department. Brian comes to us with a background as a Penetration Tester and Vulnerability Management Analyst. His outgoing personality and dedication to customer service will be valuable assets as we navigate the busy Athena conversion period. We're glad to have Brian on board and look forward to the positive impact he will bring to our team.



ASHELEY NORDBY

Asheley Nordby has recently joined the Account Management team while transitioning from the Accounts Payable department. She has an Associates of Arts from the College of Redwoods. Born and raised in Missoula, MT she is an avid lover of the outdoors, has recently gotten into mountain biking, enjoys road trips in Montana and flying across the world; it's lucky she loves maps to guide her around. Asheley also likes sewing, woodworking and solving puzzles, as well as learning upholstery from her uncle which is a family trade. Speaking of family she is a very proud aunt.



PAUL STOKEY

Paul Stokey has also joined Account Management taking on the role of Account Manager/Trade Show Assistant while maintaining his duties with Logisys Support. He was born and raised in Missoula and has lived here his entire life. Paul graduated from Big Sky-High school in 2004 and completed his Bachelor of Science in Business Administration in 2015. His wife Samantha also works at Edulog and they have 2 children. The Account Management team is excited to have him with us at Edulog!



AI: BOGEYMAN, HERO, OR SIDEKICK?

WRITTEN BY LAM NGUYEN-BULL

The theme of this quarter's Edulogger is People Driving Software. Elsewhere in this issue, you can read about how Edulog's mission is to empower real people to transport other real people to school safely, efficiently, and ready to learn. Our business, and our relationship with you, has always been about taking care of people, and it will always be about that.

We have seen heightened anxiety about the growing prevalence of Artificial Intelligence (AI) in the tools we use every day and its apparent growing ability to mimic the human voice - "will AI replace me in my job?" And there is competitive pressure on Edulog to use AI in our software, and/or to claim that we do. Yet, both this anxiety and this pressure are premature and will remain so for the foreseeable future.

That said, we have had to grapple with the evolving role of AI in our world, present and future.

First, let's agree that the term "AI" as used by most non-computer scientists today refers to a particular kind of AI - that is, the kind of AI that is built on neural networks, or large language models. This is the AI that most of us have exposure to: funny pictures created by DALL-E or sometimes chillingly realistic text exchanges with ChatGPT. But "artificial intelligence" has existed for as long as computing machines have.

And until the more recent development of neural network-type AI, computing was about crunching numbers and applying mathematical rules.

Edulog's own routing software is built on a pure mathematical model - a complex one, but a mathematical one. The solutions it delivers are true solutions, not just collections of information that look like they might be solutions. The New York Times recently explained why today's AI (the kind built on neural networks) often cannot be relied on to solve math problems:

Chatbots like Open AI's ChatGPT can write poetry, summarize books and answer questions, often with human-level fluency. These systems can do math, based on what they have learned, but the results can vary and be wrong. They are fine-tuned for determining probabilities, not doing rules-based calculations. Likelihood is not accuracy, and language is more flexible, and forgiving, than math.

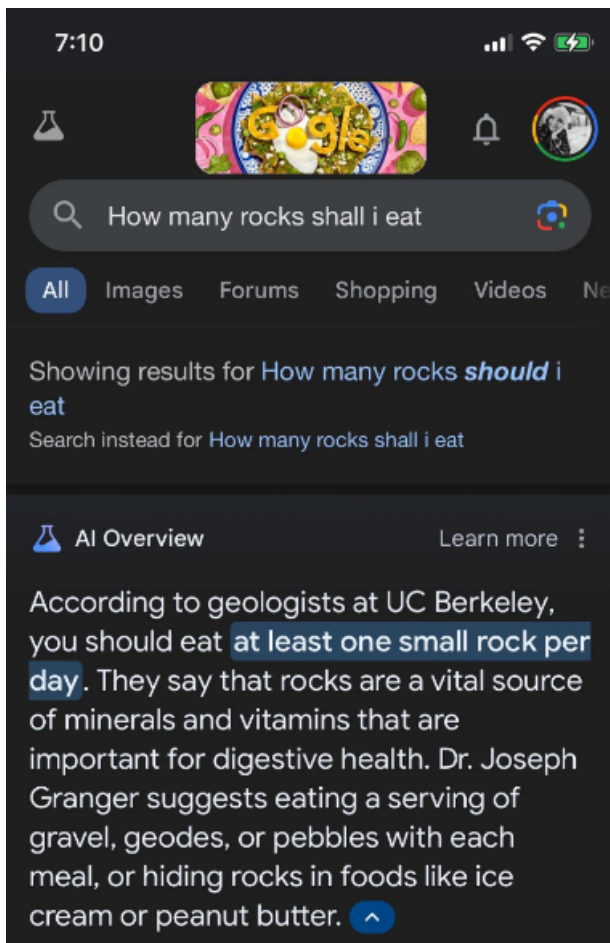
"The A.I. chatbots have difficulty with math because they were never designed to do it," said Kristian Hammond, a computer science professor and artificial intelligence researcher at Northwestern University.

AI:Bogeyman... continued on page 9.

AI: BOGEYMAN, HERO, OR SIDEKICK? CONTINUED

The world's smartest computer scientists, it seems, have created artificial intelligence that is more liberal arts major than numbers whiz.¹

Today's AI tools are not designed to handle mathematical problems, because they are based on language models, not logic models. Language models are good at processing natural language, such as words, sentences, and paragraphs, but they are not good at processing mathematical language, such as symbols, equations, and proofs. Language models are also prone to errors, such as ambiguity, inconsistency, and incompleteness, which can lead to incorrect or misleading results.



This is the reason why, for a period of time, Google's AI-assisted search results were providing answers to questions that were grammatically correct, but wrong in their substantive content.

The language models inform the structure of the information but can miss out on the actual information provided. For this reason, you should be skeptical of any routing or transportation software that claims to use AI to provide solutions. Ask questions. Many questions.

It is entirely possible that it will not take long for combination solutions to emerge which take advantage of the communications skills of AI and the computational skills of more traditional computing software. Indeed, the same New York Times article cited above reported that the popular tutoring website Khan Academy had begun to offer just such a combination solution as its AI chatbot. Numerical problems are now sent to a computational program instead of asking the AI to solve the math.

However, even these combination solutions still have a key defect - AI lacks intuition or the ability to replicate intuition. Today's AI can generate lots of simulations of solutions to math problems (such as how to route a population of students efficiently and safely). Tomorrow's combination solution might actually harness a real mathematical model, such as the one in Edulog's proprietary software, to generate true solutions and use AI to frame and present the possible solutions. But AI cannot yet exercise judgment or intuition. AI is not good at finding the optimal solution among many possible alternatives, or finding the best compromise among conflicting objectives, or finding the most robust solution under uncertain conditions.

AI:Bogeyman... continued on page 10.

¹ Metz, Cade, and Steve Lohr. "AI Chatbots Stumble in Math as Concerns Grow over Their Use." The New York Times, July 23, 2024. <https://www.nytimes.com/2024/07/23/technology/ai-chatbots-chatgpt-math.html>.

AI: BOGEYMAN, HERO, OR SIDEKICK? CONTINUED

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Finally, mistakes are inevitable for any technology, but they are especially dangerous for AI, because AI is not accountable, transparent, or explainable. AI is not accountable, because it is not responsible for its actions, and it cannot be punished or corrected. AI is not transparent, because it is not clear how it works, and it cannot be audited or verified. AI is not explainable, because it is not able to justify its decisions, and it cannot be questioned or challenged. All of this makes the use of AI to perform complex tasks involving the safety of real people a question with serious public policy implications that need real consideration.

This doesn't mean that there isn't room for AI or AI-assisted tools in the work that we do. But its inability to deliver true solutions and its lack of intuition mean that AI has a long way to go before it can replace real people using Edulog software.

**THE PLACES
ATHENA
CAN TAKE YOU**

Learn more:
www.edulog.com

Cloud-based Routing + Telematics
Best-in-class integration. Modular and scalable, suitable for any size district. Perform. Plan. Communicate.

Navigate + Track
Get the most from your onboard technology with Driver Portal Tablets. Accurate navigation + actual ridership.

Communicate + Inform
Leverage your ability to communicate with parents. Build confidence and improve your operation with Parent Portal app.

BETTER. FASTER. ATHENA

EMPLOYEE SPOTLIGHT

WRITTEN BY CORI BURNS

THE EDULOGGER
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Quincy is an exemplary employee who consistently goes above and beyond to assist others. His extensive knowledge and friendly demeanor make him a go-to person for any queries or issues. Quincy is incredibly helpful, always ready to lend a hand, and his ability to resolve problems efficiently has earned him high praise from both colleagues and clients. His dedication to providing exceptional service ensures that everyone he interacts with feels valued and supported.

Favorite Food: Seafood

Favorite Color: Purple

Dream Vacation: Any Caribbean Vacation

Favorite Quote:

“The heights by great men reached and kept were not attained by sudden flight, but they while their companions slept, were toiling upward in the night.”

From “The Ladder of St. Augustine,” by Henry Wadsworth Longfellow.

What is something unique about you (a fun fact) that few people are aware of: Played professional minor league soccer till I broke my elbow.

What do you enjoy doing in your spare time: Jogging, gardening, water activities.

Favorite place to eat in Missoula: Kobe's Seafood and Steak house.

Favorite Season and why: Summer and sunshine.



QUINCY FORDAH

If you could compete in the Olympics, which sport would you choose: 800m sprint and soccer.

Can you play any instruments? If so, which one(s)? Drums.

What are two things on your bucket list: Visit Australasia - Australia, New Zealand and SE Asia.

Do you have any pets, if so what type/name: I have pet fish.

If you could pick up a new skill in an instant, what would it be: Mixed Martial Arts, Boxing or Sky diving.

If you had to delete all but 2 apps from your phone, which 2 would you keep: Messages, WhatsApp.

How would you describe your job at Edulog and its responsibilities to someone unfamiliar with Edulog/our products: Support team lead. Make sure calls and emails into the Support ticketing system are answered promptly.

Favorite Edulog Product or favorite part of working here: Putting a smile on a client's face.

Edulog advice (to clients or co-workers): S*** happens! What matters is how you make the best of it.



SUMMER FUN AT EDULOG
WRITTEN BY EDULOG STAFF



Derek Graham:

" After leaving the Tennessee Association for Pupil Transportation trade show in Pigeon Forge, TN, I rounded a bend in the road and found myself at the museum and corporate offices of Bush's Baked Beans. Who knew?!"

Lam Nguyen-Bull: In addition to the wonderful fun that Lam and Sam got up to this summer, we want to congratulate her on another success this quarter.

Lam competed in the World Masters Weightlifting Championships in Rovaniemi, Finland! She not only put her hardwork to the test, but she came out with the silver medal!

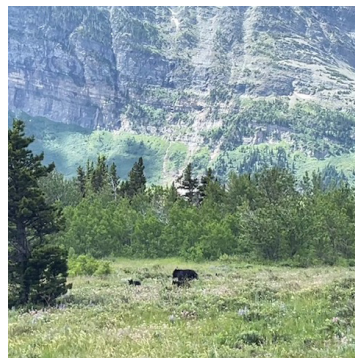
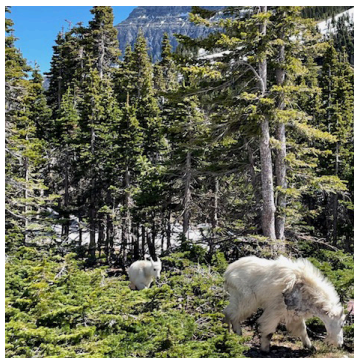
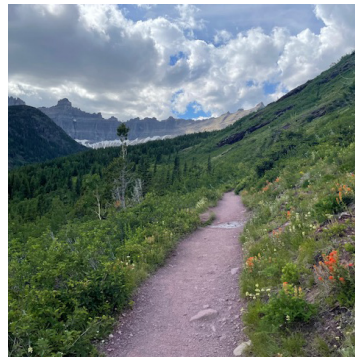
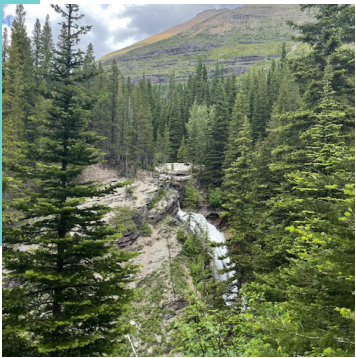
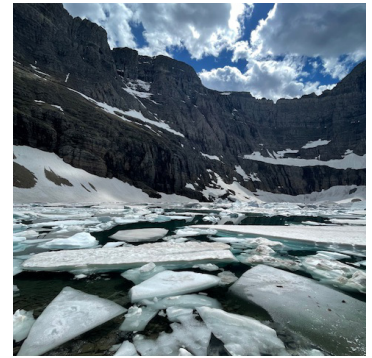
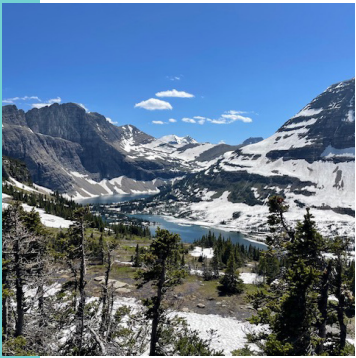
Congratulations to you!



SUMMER FUN CONTINUED



Asheley Nordby had this to say about her summer adventures: " Glacier is truly one of my favorite places on earth. I try to get up there a few times each summer, and I've spent 3 summers working on the east side of the park. Arguably the best side."



"The mama bear and two cubs pic was taken from my car - my favorite place to see a bear - on our way to the trailhead."



The rest of the images are a combination of shots from Asheley's hike to Iceberg Lake, and a stop in at Hidden Lake.

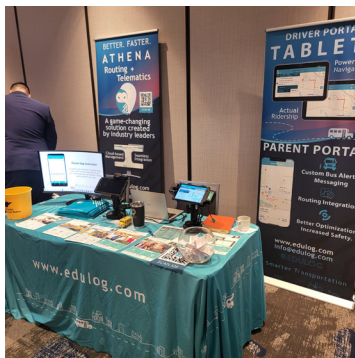
The hike to Iceberg Lake is 9.6 miles roundtrip, and a 1200 ft. elevation gain. "It's one of the most popular trails in Many Glacier and one of my favorites for obvious reasons. If you decide to do it in 2025 - know that you will have to hike from Many Glacier hotel as work at Swift current Inn will be taking place and there will not be parking at the trailhead."

The hike to Hidden Lake is 2.8 miles roundtrip, and a 460 ft. elevation gain. "Most of the trail is made up of boardwalks and thus is not my usual go-to. But on this day, it was so covered in snow you couldn't even see most of the boardwalk! Some very prepared folks were skiing down, while we saw at least one very unprepared person in flip flops, trying her best not to fall."

SUMMER FUN CONTINUED



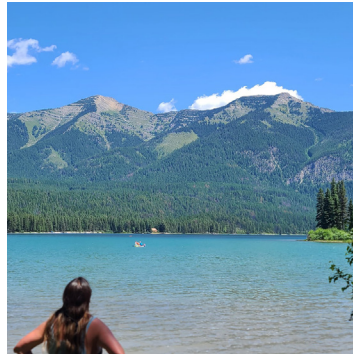
Pete Salinas spent his summer representing Edulog at the various tradeshow that occurred this summer! As we close out another successful tradeshow season, we are grateful to everyone that stopped in to say hello. See you next summer!



SUMMER FUN CONTINUED



Arika Steele and her partner, Jason, are always up for some adventures. They went camping at Chief Looking Glass in Montana, paddled around Holland Lake, and frequently spend time on the Bitterroot and Clark Fork. But the best of all was seeing the majestic bald eagle and her 3 babies (not so baby like) and a heron.



Samantha and Paul Stokey: Got up to some summer fun with an anniversary trip to Vegas, and a quick stint at the Old Deerlodge State Prison and Museum.





RECIPE: SHOOFLY CUPCAKES (FROM TASTE OF HOME)

SUBMITTED BY JOSIAH BROWN

I am a huge baking fan. I enjoy trying to make different types of breads and desserts. I really enjoy this recipe because I find most cupcakes to be way too sweet, but this one strikes a great balance between sweet, a little salty, and a little savory from the molasses. - Josiah Brown

Ingredients:

4 C all-purpose flour
2 C packed brown sugar
¼ tsp salt
1 C cold butter, cubed
2 tsp baking soda
2 C boiling water
1 C molasses

Directions:

1. Preheat oven to 350°.
 2. In a large bowl, combine flour, brown sugar and salt.
 3. Cut in butter until the mix is crumbly. Set aside 1 cup for topping.
 4. Add baking soda to remaining crumb mixture.
 5. Stir in water and molasses.
 6. Fill 24 paper-lined muffin cups two-thirds full.
 7. Sprinkle with reserved crumb mixture.
 8. Bake until a toothpick inserted in the center comes out clean, 20-25 minutes.
 9. Cool 10 minutes before removing from pans to wire racks to cool.
- Option: Half the recipe, bake in a loaf pan, and increase the time until butterknife inserted in the center comes out clean.





Sudoku

1	7			8	2			
		2		6				8
9		8						6
		9			3			7
	2			9				
		3	4			9	5	2
		1		4	9			
7	3				6		2	
		5	2		1	4		

Answers to this quarter's sudoku puzzle are on the last page.

Ready to harness that New Year energy and make a change?
Interested in data to see how far you've come?

[Click here to reach out to our Advisory Services Team](#)

EDULLOGER

THE EDULLOGER
QUARTER THREE
2024



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To find out more about our host of products and services, find us online at www.edulog.com

or email us at info@edulog.com.

You can even check us out on Facebook -



Smarter Transportation.



Sudoku

1	7	6	9	8	2	5	3	4
3	5	2	1	6	4	7	9	8
9	4	8	7	3	5	2	1	6
5	1	9	6	2	3	8	4	7
4	2	7	5	9	8	3	6	1
8	6	3	4	1	7	9	5	2
2	8	1	3	4	9	6	7	5
7	3	4	8	5	6	1	2	9
6	9	5	2	7	1	4	8	3

Ready to harness that New Year energy and make a change?
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