

Scientifically Based Learning Helps ASGE Provide Hybrid Education to GI Medical Professionals Across the Globe

Meet The Team

Ed Dellert



Ed is Chief Publications, Learning & Operations Officer at the American Society for Gastrointestinal Endoscopy (ASGE). His career began clinically as a critical care and transplant nurse but eventually led to an opportunity to broaden his experiences by transitioning into the medical association field with a specific

focus on medical education, evidence-based guideline development and publication. He spent just over fifteen years at the American College of Chest Physicians, two years at the American Society for Anesthesiologists and the last seven years at ASGE. Each association has provided foundational experiences that have continued to build upon itself.

Ed's inspiration and love for his work at ASGE centers upon his staff and dedicated committee volunteers. "My team is awesome, and that is what makes my job so much fun, in addition to our society's committee and leadership. Staff and committee members constantly challenge me to look at things differently and come up with new ways to expand our way of delivering education. The breadth and diversity of projects that the ASGE team works on is exciting and I believe, cutting edge. It keeps things exciting."

Jean Verdeyen



Jean is the Manager of Learning Technology at ASGE. She is the project manager for the implementation of new, adaptive learning platforms to support the association's members and is also responsible for LMS administration and eLearning design and development. Jean has held several instructional design

roles throughout her career, most recently as the Instructional Design Manager at McDonald's.



About The American Society for Gastrointestinal Endoscopy (ASGE)

For more than 80 years, ASGE has served as the global leader of advancement in the field of GI endoscopy, upholding the highest standards for gastrointestinal endoscopic practice and fostering research to encourage continuous innovation. It empowers approximately 16,000 national and international members with the latest information, state-of-the art education, and unparalleled resources to advance professional and patient care goals, while providing a diverse, inclusive and engaged community to foster sharing, learning, advocacy and growth in GI endoscopy.

The organization publishes three journals that share the latest guidelines, original research and case studies in endoscopy and provides a variety of hybrid education to members ranging from GI fellows to seasoned practitioners. ASGE does all of this with a small but mighty team of 45 employees.

Why Jean loves her work at ASGE: "The work we do at ASGE has a more direct connection to a greater good than other roles I've had in my career. And the Staff and Physicians I get to work with are the absolute best!"

Joanne Rach



<u>Joanne</u> is the Instructional Technologist at ASGE where she is responsible for building and maintaining courses in the LMS and developing online training for association members. A former elementary school teacher, she eventually moved into adult education and, like Jean, previously worked for McDonald's in

various training roles.

Why Joanne loves her work at ASGE: "It's exciting to be part of a team that gets to introduce ideas and then design and implement them in ways that are both engaging and educational for learners."

An Impressive Hybrid Learning Ecosystem

ASGE offers its members a healthy mix of in-person, virtual and digital learning opportunities at their physical location, The Institute for Training and Technology (IT&T). The IT&T learning center opened in 2013, providing members and others throughout the Gastroenterology community simulation-based, hands-on training. "The entire first floor of our building is dedicated to many forms of education, with a simulation training center," explains Ed. "We have 16 skills-based training stations within our learning lab, which offers a variety of endoscopic and surgical training, as well as a 100-seat auditorium with additional break-out rooms with virtual streaming capabilities. ASGE staff and its members are very proud and excited about the educational resources the IT&T center can provide."

While members are welcomed and encouraged to complete training on-site in Chicago, IL, ASGE makes the recordings available virtually and on-demand. "These recordings go through a quality edit by an audiovisual team," says Ed. "Some of the footage gets broken into bite-sized pieces making it easier for the learner to digest information while engaged in busy clinical practice, versus listening to eight hours of continuous lectures or case studies."

The content is hosted in the ASGE Learning Management System (LMS) that has been branded as "GI Leap." "GI Leap becomes a really great tool for us to disseminate on-demand education to our membership and to the global community at large," Dellert explains.

While GI Leap can function as an archive for ASGE education, other tools and systems in their learning ecosystem include Training Arcade for educational game creation, Articulate for online learning module design and Qstream for microlearning, knowledge reinforcement and program performance measurement.



Qstream's Quick, Fun, Scientifically Proven Methodology Enhances an Already Robust Training Curriculum

Ed brought Qstream into the ASGE learning environment after learning more about its microlearning capabilities and its use in certain medical association projects. He appreciates what he calls Qstream's "sound adult educational model," its ability to be used to support larger training programs and the robust analytics the platform generates.

"We advocate to ASGE's educational committee members and to our leadership that microlearning modules allow us an enhanced opportunity to actively engage our members throughout the gastroenterology and endoscopic community," says Ed.

Qstream considers the way the human brain remembers information. Rather than teaching information in bulk, 3-5-minute microlearning challenges are pushed out to the learner on their preferred device using a scientifically proven spaced repetition model to build long-term knowledge retention. These challenges are deployed as ways to augment learning in an educationally fun, efficient manner.

"The shorter the better," Ed says. "Clinical practices are demanding of our members' valuable time, so having a microlearning platform like Qstream is a great way to keep clinicians up to date and engaged in small doses of education. Plus, depending on the educational activity, it can provide a source of educational entertainment at the same time."

Qstream uses game mechanics to help learners assess their progress and keep them engaged. Team and individual leaderboards promote friendly competition.

<u>Dr. Keith Obstein</u>, a Gastroenterologist and Director of the GI Fellowship Training Program at Vanderbilt University Medical Center (Nashville, TN), as well as Chair of the ASGE e-Learning Committee, says that when he and the committee were evaluating learning technologies a few years back, they asked themselves, "Is there a platform that could educate our members in an active manner that upholds principles of adult learning theory—including knowledge reinforcement?"

"Qstream fits that perfectly," he says. "It's a vehicle for what we envisioned at multiple levels of the organization. Qstream is a powerful platform for delivering knowledge and demonstrating sustainment of knowledge regardless of the audience."

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ED DELLERT
CHIEF PUBLICATIONS,
LEARNING & OPERATIONS
OFFICER AT ASGE



Ed says that Qstream has become a staple in their learning ecosystem. "We connect it with other initiatives, so there's a bit of an instructional design component associated with it. We're always investigating new ways to leverage technology to the advantage of our membership."

On the backend of the platform, Qstream collects real-time proficiency analytics to provide a snapshot of how learners respond to question prompts, providing knowledge areas of strength, while also identifying other areas for future focused study and reinforcement. This feature enables tailored future training programs and measures the effectiveness of learning content.

"The data and analytics that come out of Qstream are extremely helpful for people like me, who are looking at how adult learners are progressing," Ed says. "You can see their engagement level, performance improvement by their response to the various case-study questions and videos presented, while encouraging learners to advance to additional learning opportunities, if desired."

Jean, an engineer by trade, also finds the analytics to be powerful, while Joanne cites the quick bursts of learning as a key selling point for Qstream. "I think one of the things I really like about it is that it provides quick learning to keep up to date with your skills. Qstream makes that easy."

ASGE staff continue to receive feedback from ASGE members that confirms this convenient and beneficial style of learning. "They say they're completing challenges on their phone when they are walking between endoscopic or clinic rooms, or they just left a procedure and are headed to another area of the facility," Jean explains.



Qstream Results At A Glance

- 48% proficiency increase
- 1813 participants
- 3066 enrollments in microlearning challenges
- 4 completed Qstreams
- Participant feedback:
 - "Valuable teaching points for everyday practice. Thank you very much, for your effort in putting all this together."
 - "Quick and convenient. Nice option for a quick learning session in the day's spare moments. I hope you continue the program."
 - "Entertaining, challenging, well referenced. Nice tool for the busy clinician."

ASGE recently wrapped their first few sets of Qstream microlearning challenges and saw some promising results. The team creatively played with words, calling one three-part challenge "Digestibles," a nod to the quick-hit nature of microlearning. They averaged a 35% proficiency increase across all three Qstreams. Another challenge, "So You Think You Know Colonoscopy," garnered a ton of excitement and produced a 48% increase in proficiency for participants. For this Qstream, the team embedded 20 quick-hit video questions that featured the renowned Gastroenterologist <u>Dr. Douglas Rex</u>, Distinguished Professor of Medicine at Indiana University and a gastroenterology thought leader.

"We would launch a Qstream module and have over 25 people answer a question within minutes. That was pretty telling." Jean says, "The initial Qstream got a lot of attention because of Dr. Rex's global reputation, but I think this new way of learning created a lot of traction for future Qstreams."

The challenge received five-star participant reviews across the board. Ed adds, "We even heard from some of our international colleagues that participated in the Digestibles challenge that they have shared it with some of their colleagues and with their international constituencies to use this as a professional development piece themselves."

Measuring The ROI Of ASGE Member Programs

Measuring training effectiveness is no easy feat for L&D professionals. Metrics are never one to one and require quite a bit of correlation to derive realistic conclusions; however, the ASGE team has their own unique model for assessing the hard work that goes into member programming.

"We have a structure of eight different outcome levels," Ed explains. "It starts at the very basic level of participation, then moves on to satisfaction and then we get into skill-based versus knowledge-based training. So, each level progressively builds upon itself with increased sophistication at the more advanced levels."

These metrics are assessed at the activity level and at a curricular level to determine the success of each program. "We take a look at outcomes over time to find measurable trends in those areas."

One area that is easily measurable for ASGE is skills training. "We have various competencies that are identified for select educational activities. Then we measure success on whether learners can competently meet 80% or more of the training skills in an activity," says Ed.

But ASGE is attempting to take this one step further by consistently asking the question, "How do we make educational outcomes even better by blending some of these technologies?" That's where applications such as Qstream can be utilized. "We want to integrate Qstream prior to an in-person educational activity so we can better measure learner knowledge gained and proficiency improvement leading up to an in-person skills-based, hands-on training component of the course itself," says Ed. "This could have a significant impact on the learner's experience and how ASGE thinks about the design aspect of our programs."

Jean says the analytics in Qstream are extremely valuable. "The data you can derive from Qstream has been super powerful, especially to be able to look at the learning proficiency gain." She continues, "And the learner heat maps function as flags for areas that need additional training.

"As an education provider, we're trying to figure out how best to meet the members' needs in this hybrid environment," Jean says. "Better data drives us even further forward into what we can proactively offer our members."

The team is looking forward to integrating Qstream with their LMS, GI Leap, to create a cohesive learning experience for members and already have some scenarios in mind. "The LMS would be our home base, so it would take them in and out of Qstream, as needed," says Jean. "For example, Qstream might function as pre-work for another course or if they opt in after the course, we might reinforce that material with a Qstream."

Dr. Obstein says the ability to help learners self-assess in a low-stakes, non-punitive environment is another selling point of Qstream's data engine. "The platform has the power to help people become better learners," he says. "It allows learners to identify knowledge gaps, close the gap through active learning exercises, reinforce the material, revisit the material and confirm to the learner that they have in fact learned and retained the knowledge at or by a specified time interval. The learning cycle then continues."

Microlearning Drives Ongoing, Simulated Education Experience

"I've had a passion for the use of simulation-based education technologies for a very long time," Ed says. "The data you can derive from Qstream has been super powerful, especially to be able to look at the learning proficiency gain. And the learner heat maps function as flags for areas that need additional training."

JEAN VERDEYEN
MANAGER OF LEARNING
TECHNOLOGY AT ASGE



Ed says Qstream fits very nicely into this model. While knowledge retention is the primary use case for microlearning, Ed and his team employ a type of first delivery to get members ready for larger training experiences. Qstream's signature spacing effect asks each question two times if each is answered correctly and three times if missed on the first or second try. These algorithms ensure personalized learning experiences based on everyone's unique skills as well as prevent redundancy by teaching material that someone already knows.

"We ran Qstream for six to eight weeks and picked winners from each challenge based on the leaderboards," Ed explains. Those winners were invited to Digestive Disease Week 2023 in Chicago, IL, where their final competition was an escape room that we designed on site to make clinical education more fun and keep people engaged."

If you've ever been to an escape room, you understand the thought and detail that goes into executing the operation. So, when Jean and Joanne were asked to create a Prohibition era-themed escape room experience for their Chicago-based educational event, it's no wonder they had some hesitations.

Jean admits she had never been to an escape room, so this was a ground-up learning experience for her. She quickly signed up to complete one to better understand the task at hand.

"We knew we wanted it to be an educational, engaging and fun experience, with a little bit more emphasis on the fun with a different and innovative way of learning."

They invited top-scoring learners in Qstream to participate first, says Joanne. "It was the crowning activity after the three different Qstreams. We said, 'Hey, you proved that you have a lot of endoscopic and GI knowledge, and now we want to challenge you with something fun and educational."



Both Jean and Joanne say this project is one of their biggest professional accomplishments.

"The participants loved it. 98% said they would recommend it to their colleagues and almost all the comments were urging us to do it again. I think it exceeded expectations in its production value," Jean says. Participants even offered their suggestions for next time.

"It was an overwhelmingly huge project, but it was extremely successful," says Jean. "And Joanne and I did have some fun along the way."

Additional ASGE Training Priorities

ASGE members self-select the education pieces based on their skills, interests and experience. This year ASGE is growing their library of materials to incorporate information on timely topics such as using artificial intelligence in colonoscopy and DEI best practices in the endoscopic unit and across patient populations. Clinical topics include esophagitis, Barrett's esophagus, Eosinophilic Esophagitis and other upper GI disorders for general practitioners. They also offer endoscopy unit recognition programs for quality improvement processes.

"We recently hosted a leadership training program for women in GI, offering resources to grow their practice, expand their skills and be active leaders within their practice," says Ed. "So, it's a very broad spectrum, which is great but also challenging at the same time when you only have 12 months a year to meet such a diverse group of topics."

Other priorities this year include a self-assessment product that helps their members keep up to date with the latest endoscopic technologies and therapeutics while also allowing those who need it to prepare for certification. "Continuous learning is a very high priority for ASGE," Ed says.

Providing value is front and center to everything the ASGE team does. "Ed, specifically, is always looking to do something different," says Joanne. "He's always trying to be innovative with learning and figure out ways to engage our members."

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INSTRUCTIONAL TECHNOLOGIST
AT ASGE





Qstream is the leading enterprise microlearning and knowledge reinforcement solution proven by science and in practice to boost learner performance. Hundreds of organizations rely on Qstream to build high-performance teams by delivering a personalized and agile learning experience that delivers the highest levels of retention, engagement and efficiency along with analytics that provide precision insights and expose a real-time view of performance readiness.