

Executive Interview

with **Graham Glass**, CEO and Founder CYPHER Learning

Exploring the Future of Generative AI in Learning

About CYPHER Learning

CYPHER Learning is a pioneering force in the learning platform industry, committed to unlocking human potential through personalized, engaging and boundless learning experiences. With its cutting-edge, AI-powered platform, CYPHER Learning serves a diverse user base of over 20,000 organizations and millions of individuals in more than 50 languages. The company's mission is to revolutionize the learning landscape by providing a modern, user-friendly platform that optimizes time for L&D professionals and educators while delivering customized learning experiences that are both impactful and quantifiable.

About Graham Glass

Graham Glass the CEO and founder of CYPHER Learning, is a visionary leader in the education and technology sectors. With over two decades of experience, Glass has dedicated his career to harnessing the power of technology to enhance learning experiences. As an entrepreneur, educator, author and speaker, he has



been at the forefront of innovative solutions that have positively impacted millions of learners across the globe.



About Michael Rochelle

Michael Rochelle is Chief Strategy Officer and Principal Analyst at Brandon Hall Group[™]. Michael leads a wide range of advisory support and strategic engagements for Fortune 1000 and small- to medium-sized organizations as well as leading and emerging solution providers across the HCM industry. Michael has more than 30 years' experience in HR, IT, sales, marketing, business development, and strategic and financial planning in Fortune 500 and venture-backed start-up organizations.

MICHAEL

How do you want to help us all out in understanding what this exciting but very fast-moving landscape that is Al?

GRAHAM

My whole life I've been into Al and I used to think about it way before ChatGPT came on the scene, but there wasn't anything particularly impressive going on. And then suddenly out of the blue comes ChatGPT and that kind of changed everyone's perspective.

I remember at CYPHER Learning thinking this could be a real boon for education in general, business education, higher ed, you name it. But it wasn't obvious how good this stuff is. I remember just sitting down at a computer one evening, just noodling around and I start with, I think I asked it like, what's 2 plus 2? And it goes 4. It's like, okay, that's a good start. It didn't say 5.

And then as I started asking it deeper and deeper questions, I was just constantly amazed by how good it was. And then I said to ChatGPT, teach me linear algebra. It wasn't just a question. It wasn't, what's the capital of Sweden? I actually started using this Socratic method to teach me linear algebra. And that's when it's like, okay, this is serious stuff. As a company, we decided to focus on course creation first. Because it's like an obvious place to start and it has an obvious high value. But we learn a lot by focusing on course creation.

Once we realize that you can actually build a pretty nice course, and I'd never say 100%, let's just say 80%, in a relatively small amount of time, the biggest insight that I got is this can enable rapid iterative development of educational content. So rather than committing to a course and then spending hundreds of hours, I could say I want to build five different versions of the same course in 20 minutes.

MICHAEL

When you talk about these insights, how do you translate these insights into how it impacts me as a Learning and Development professional?

GRAHAM

Without sounding like too much of a salesperson, one of the things that CYPHER tried to do is to make GenAI easy to use for the end user.

Without going into detail, say, I want to build a course and then you have check boxes and it basically fills out a form. We make it so you can nudge it in certain directions. For example, when I was teaching, I was a big fan of project-based learning. That was kind of my style. And that's what I got a reputation for.

If I'm an L&D person, I want it to come across like it's still Graham building these courses. You could say, build me a course about X, but you could say, and also include three project-based learning things that are fun and creative or something like that.

And you fill in all the blanks. Now we're into skills-based learning. So if I say, I want to teach the following 20 skills, you can tell it that. Or you can say, I want to build a course about a certain thing and I want the AI to come up with what are the 20 skills that are going to be taught. So when it builds the course, it's not just building a bare-bones course. It's actually building the modules, synthetic imagery, digital voiceover, skills-based learning. All of that stuff gets generated for you in less than 15 minutes.

MICHAEL

So I want to make sure I heard you right. Did you say 10 to 15 minutes to build a course?

GRAHAM

Yes. And by the way, that's not easy to do. So if you just wanted to use ChatGPT outside of our platform, then you would be typing prompts for five hours, six hours straight. But one of the things that we did when we first designed what we call CYPHER Copilot, not to be confused with Microsoft Copilot, by the way — it's a separate distinct product.

We decided that it's important for it to work fast. What we do is that we try and talk with Als in parallel whenever we can. When you're building a course, at any one moment in time, it might be talking 15 to 20 different prompts in the background simultaneously.

And it's a bit like doing a jigsaw in parallel where you've got 10 people around the table, all putting pieces into the jigsaw and within 15 minutes you've assembled the whole course. But yeah, around 15 minutes is pretty accurate.

One of the things we're careful about is to not oversell GenAI. It does occasionally make mistakes, and it tends to make mistakes in areas where there is not that much content in the public sphere.

MICHAEL

How do you add in the human intelligence to make sure that you get it to where you want to get to it?

MICHAEL

How do we safeguard ourselves when it comes to privacy and not infringing on somebody's copyright or trademark?

GRAHAM

Putting on an L&D hat, what you would typically do is you would provide the broad brushstrokes when you fill in the form, like here's the kind of course that I want to build. You let it generate the vast percentage of the bread and butter, and then you go in and you make little tweaks where there's something was a little bit off and you want to improve it.

But you're typically going to insert quite a lot of your own projects, your own anecdotes. You might have some specific things for your company. While it might have generated something a bit more generic, you might want to go in and replace a generic section with a specific example from your organization.

But the nice thing is you take all the time that you would have spent building the bread and butter, and now you can spend all of that time adding all of the stuff that you value highly. GRAHAM

That goes back to the adventure side of GenAI, which is when CYPHER started working on this stuff — the first version of our Copilot was limited to the public domain. And it does an extraordinarily good job. I'd hazard a guess, although we haven't done any particular research, that a professional might also make mistakes when they're generating a course. And that's why most courses go through a review process to fix the author's mistakes.

I don't even know whether an AI makes more mistakes or not, but it makes some. We focused on the public domain. We did a lot of tuning of prompts and efficiency, etc., and we added support for things like synthetic imagery. For example, if you're concerned about copyright, you can tell Copilot to generate AI imagery and it will use a separate AI service for generating synthetic imagery which doesn't violate any copyrights for sure. The next question is, yeah, but how do I build a course now using my existing two-gigabyte video or my PDF or my PowerPoint or my Microsoft document?

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That was what we did in Copilot 2, which is in production. You can upload your own content, and we do all kinds of cool things behind the scenes to analyze that data and build a course just on your data. It's going to try hard not to pull data from the internet.

One of the things we have found out is that the Al tries hard to please. If you say, build me a 10-module course and you give it a one-page PDF, it will most likely start pulling in some public data to try and keep you happy. We document these best practices though, like making sure you're giving it enough data so it doesn't go out like a little puppy dog and retrieve stuff from the public internet.

There's one very cool feature that we're already working on called AI cross-check. And what that feature will do is it uses one Al as the primary generation of text, and it uses another AI to read the content and it's from a different company, so it's not using the same training data. And it'll use a second Al, and if they find anything contentious, then when it generates the course, it will automatically draw a box around it, tell you why it found contentious, so that a human reviewer can either say, yeah, it's okay, let it through or delete or let me go in and edit something. So the general idea is to try and use all of these new AI powers to avoid these kinds of things. And once again, lessen the burden on the human.

MICHAEL

So let's talk more about your platform because you put a lot of time and energy into it, as

has your team. And clearly, you've got a very strong background in this and been at it for a long time. What are the best use cases for CYPHER Learning at this point?

GRAHAM

Yeah, so there's the use cases as of right now. There might be different use cases by the end

of this year. But for right now, it's basically going to be somebody who wants to save a huge amount of time and energy building courses. So like we're slap bang in course development with the Copilot One and then the subsequent Copilot Two.

So that's the primary. It's not going to grade people's papers. It's not going to do any of that kind of stuff. It's going to be for someone who wants to create course materials. And so, for example, if you're in the L&D department, and as we all know, they're usually have a great budget. They're usually understaffed. We know all the problems and challenges. This could be a lifesaver where suddenly now you can accelerate the rate that you deliver courses. They can be more timely.

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You can update them more often. You can relieve some of the stress that you might be feeling in your life. And also compliance. There are a lot of industries out there where they're heavily regulated. There are not off-the-shelf courses that you can get from a course vendor. They're like nuclear regulatory agency or water regulatory agency. Something like our platform can hugely help in those cases because it can generate great engaging courses modern courses from whatever existing materials you've got because otherwise those things are going to have to be built by hand because they're so specific.

MICHAEL

When it comes to having multiple people working to build content and having a bunch of people weigh in at the same time, how does that work?

GRAHAM

A lot of it depends on how you kind of divvy up your team. So for example, let's just say that somebody has to build a learning path. We're going to be building these five courses that you run through. Maybe it's an onboarding sequence. Maybe it's an upskilling sequence. You might have one person who said, I'm going to use Copilot to rapidly generate 10 to 15 courses that are candidates. And then the ones that look best, they go through a little committee, they decide, yeah, these are the three best courses in their area. That could be then handed over to someone who was a domain expert who then took those courses and run with them. Or depending on how big your L&D team is, you might have one person working one of the courses, another person working in another course operating in parallel.

One of the features that we're working on is the ability to take an existing course that was not built by Copilot and upgrade it. Those are the kinds of investments that we're making into course generation.

Another thing that we're investigating, we haven't committed yet to, is theoretically, Copilot could automatically create you an entire learning path. You could theoretically say, I want to build an MBA program. And it could suggest here are the 15 courses that you might want to include in your MBA as mandatory, and these five are optional. And once you work with the AI to determine, yeah, that's the program I want, it actually builds the entire MBA using the same technology. So it's not just necessarily about building one or two courses. This has the potential to build entire programs.

MICHAEL

We've talked about GenAl from the standpoint of helping with the scaling, going faster, quicker to our endpoint. Have you seen it

actually improve the learning itself?

GRAHAM

Our customers predominantly tell us that not only this is saving time and money, but the end users are enjoying it as well. You and I have both seen what some courses look like. There's a lot of bad stuff out there. It's like very dull. It's not gamified. It's not particularly precise. The imagery looks bad. It's like what the cat dragged home. The nice thing with Copilot is it always generates engaging, nicelooking courses.

We can only base it on the feedback that we're getting from our customers, but our customers generally seem happy with this stuff. We're also working on Gen AI beyond building courses. We've got some much more ambitious plans in play. But in terms of what the CYPHER platform currently supports, it's certainly focused on building engaging courses very quickly. Here are some ways to listen to the interview on Brandon Hall Group's Excellence at Work Podcast:





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