

TEACHING SIMULATION-DRIVEN EXPERIENCES WITH SIMULIA

Empowering your students with the new standard for designers



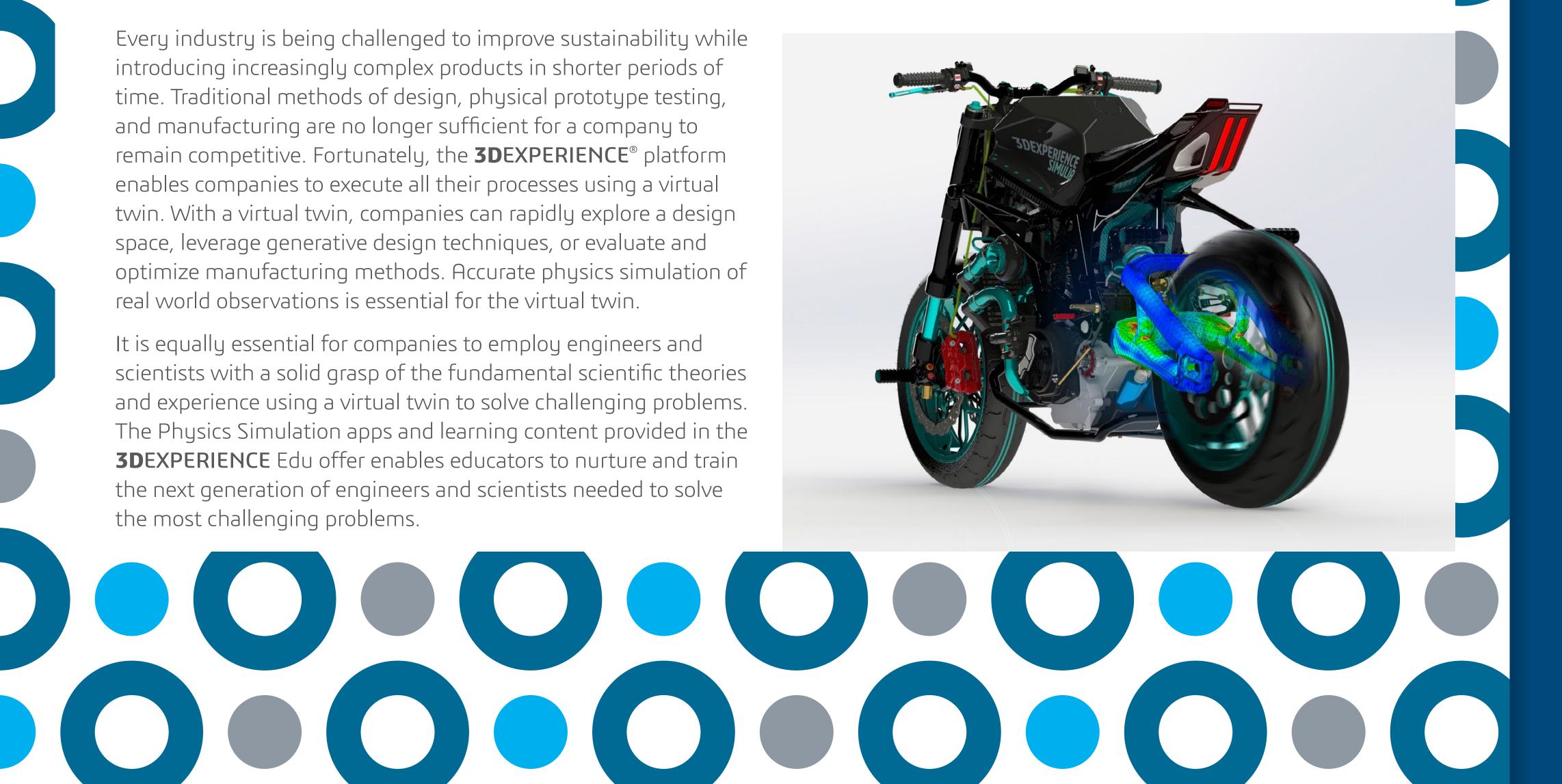


SIMULATION: A KEY DISCIPLINE TODAY FOR TOMORROW'S FUTURE

Every industry is being challenged to improve sustainability while introducing increasingly complex products in shorter periods of time. Traditional methods of design, physical prototype testing, and manufacturing are no longer sufficient for a company to remain competitive. Fortunately, the **3DEXPERIENCE**[®] platform enables companies to execute all their processes using a virtual twin. With a virtual twin, companies can rapidly explore a design space, leverage generative design techniques, or evaluate and optimize manufacturing methods. Accurate physics simulation of real world observations is essential for the virtual twin.

It is equally essential for companies to employ engineers and scientists with a solid grasp of the fundamental scientific theories and experience using a virtual twin to solve challenging problems. The Physics Simulation apps and learning content provided in the **3DEXPERIENCE** Edu offer enables educators to nurture and train the next generation of engineers and scientists needed to solve the most challenging problems.

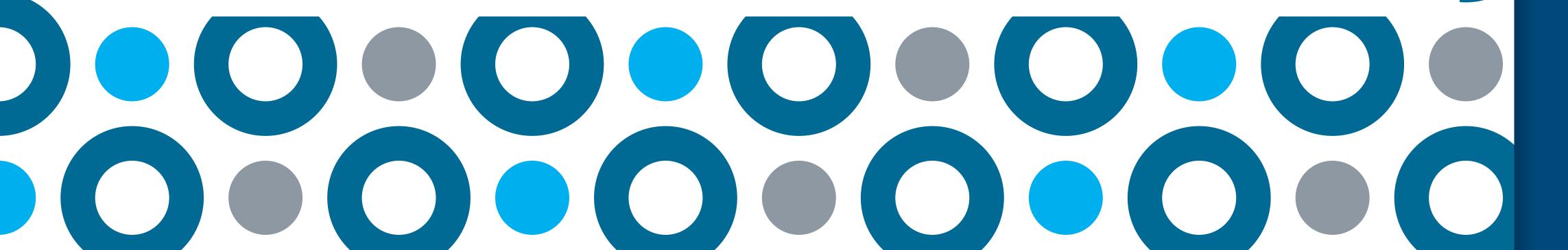




EDU OFFER: APPS + LEARNING CONTENT + COMMUNITY

We know you're probably already an expert on leading Dassault Systèmes products like Abaqus, and that you've invested a lot of time developing your knowledge and skills and creating motivating lectures and handson simulation exercises. You likely mentor your students as they hone their skills executing inspiring capstone projects for the world of industry or perhaps you're a newcomer! If you are, then welcome!

If you're reading this, you're almost certainly interested in jumping to the new, cutting-edge Dassault Systèmes solution, **3DEXPERIENCE**.



APPLICATION FOR

INDUSTRIES

LEARNING CONTENT

CONTENT FOR EDUCATORS AND STUDENTS

> **COMMUNITY** DEDICATED GROUP FOR EDUCATORS

> > 3

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IT'S TIME FOR AN UPGRADE!

We've brought together everything you need to smoothly transition to **3DEXPERIENCE**. Let's push the boundaries of simulation! The **3DEXPERIENCE** platform for Education helps you prepare your students for their future employability by giving them access to industry simulation solutions.

By combining our powerful physics solvers with guided assistants that leverage the integration of CAD and simulation, we've enhanced the entire simulation learning experience. Instead of analyzing a single component, students use technologies like general contact and pre-tuned solution procedures to evaluate complex assemblies. Those with an understanding of fluid mechanics easily perform flow simulations. While new users rely on **3DEXPERIENCE** to learn simulation for the first time, experts are able to include complex physical responses, from explicit dynamics and material failure to complex turbulence modeling.



10-5 Assembly Design Part Design

S

Milling Machining

Structural Model

and Apps:

} Structural Scenario

Material

Deposition Fab

P Structural Validation

Deep dive further into the Roles

edu.3ds.com/en/software/3dx-aca/simulia-3dx

E

Functional Gen.

Design

Fluid Scenario

~1/-plm

CAE/MACHINE DESIGN COMPOSITES DESIGN ADDITIVE MANUFACTURING AND MORE

what you need (to meet your short and long-term needs).

APPS



Yes, there are more apps than ever! You're 100% sure to find







+400 APPS

EVERYTHING YOU NEED TO TRANSFER YOUR PEDAGOGY AND A LOT MORE BESIDES



ANYTIME ANYWHERE

YOU AND YOUR STUDENTS CAN NOW WORK FROM LABS AND FROM HOME!



COLLABORATIVE

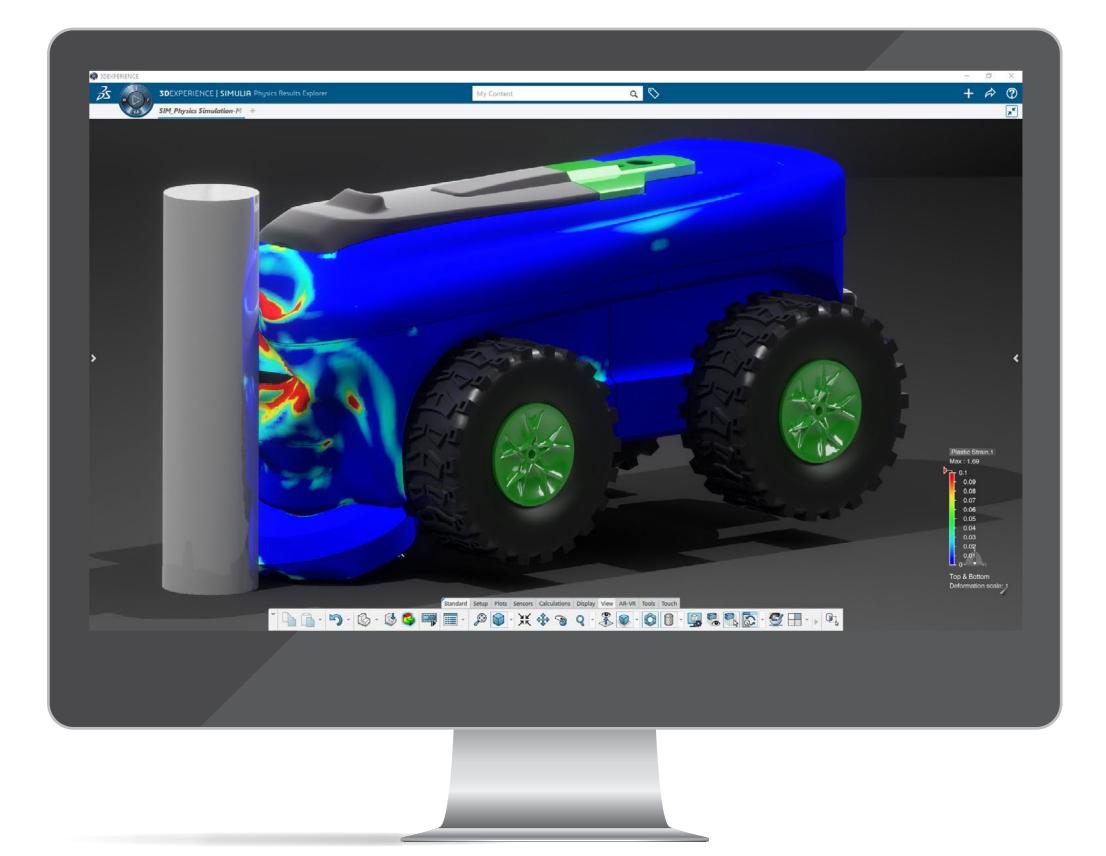
NO LIMITS! FROM TEAM PROJECTS WITH YOUR STUDENTS TO THE ENTIRE WORLD!

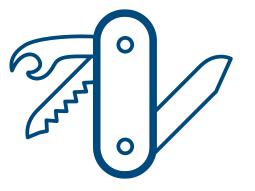


CLOUD BASED SECURE AND ALWAYS UPDATED

APPS

When you deploy the **3DEXPERIENCE** platform for Education, it's only a third of everything you get! So, let's take a look at the amazing content and communities waiting for you.





SHARPEN **YOUR SKILLS**

LEARNING MATERIALS DESIGNED AND BUILT BY REAL EDUCATORS JUST FOR YOU



CHALLENGE YOURSELF

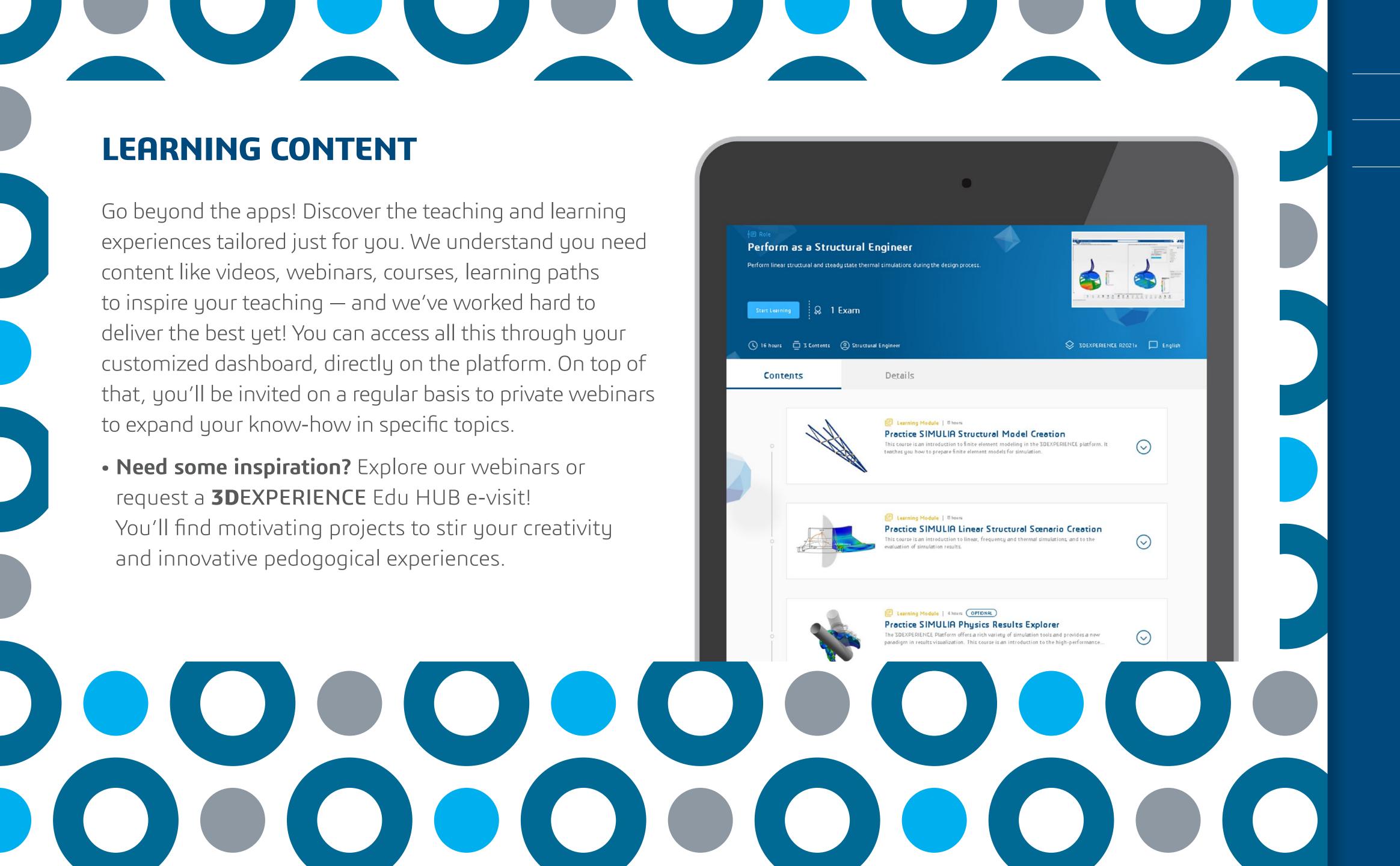
FLEXIBLE LEARNING MATERIALS THAT CAN BE RE-USED HOW AND WHENEVER YOU LIKE



LEARN BEST PRACTICES

YOU'RE NO LONGER ALONE! WELCOME TO A COMMUNITY OF THOUSANDS OF EDUCATORS AND DASSAULT SYSTÈMES EXPERTS

request a **3DEXPERIENCE** Edu HUB e-visit! and innovative pedogogical experiences.



LEARNING CONTENT

- Need to adapt a current teaching activity? (i.e. Simulations on ABAQUS and CAE with CATIA V5)? We've got a range of options for you:
 - Re-use fully developed courses by teachers and professors from our committees (hundreds of hours of learning)
 - Re-use content from learning paths developed by Dassault Systèmes experts for our industry customers (plus they help students prepare for professional certifications!)
- Need to implement a new pedagogical approach like a flipclassroom, blended teaching, PBL, etc.?
 - Check out our unique repository of Edu Space learning modules and paths
 - Assemble them as you want and publish your own learning path



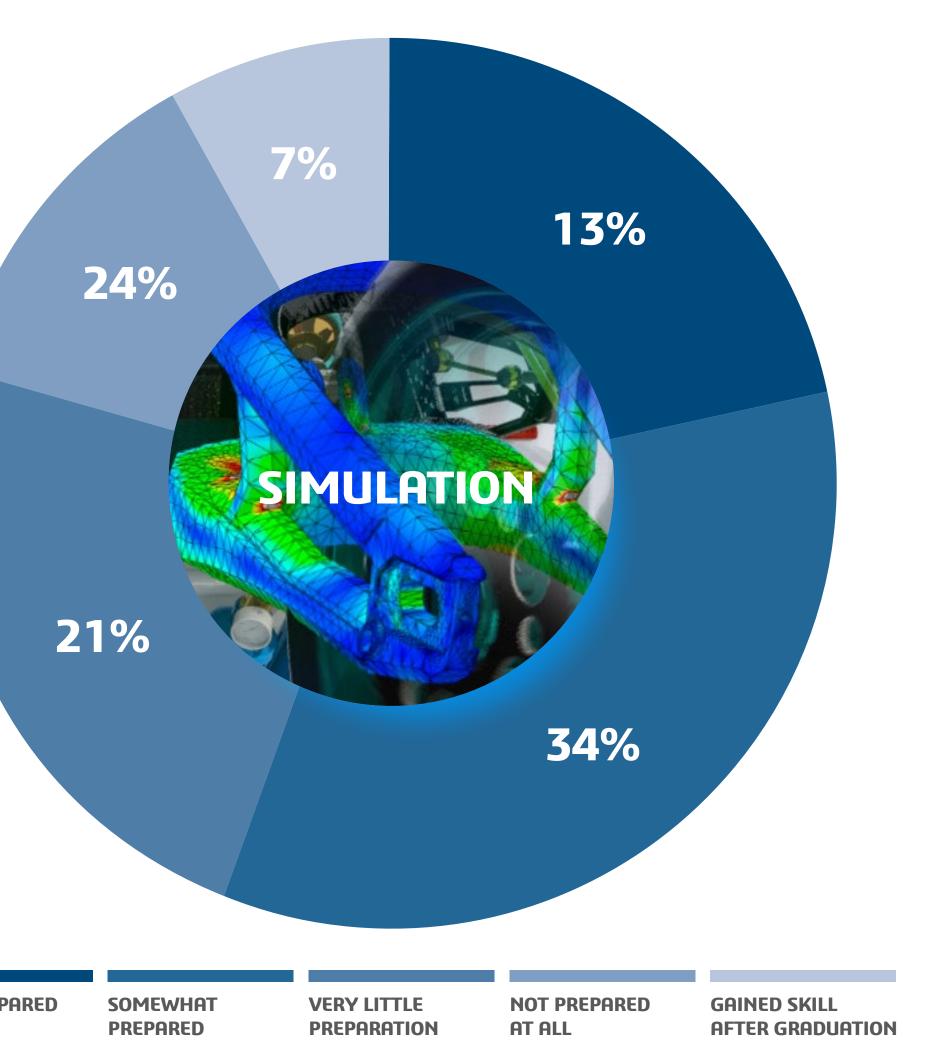
HEAR IT FROM THE EXPERTS!

According to Dr. Byron PIPES, the Executive Director Indiana Manufacturing Institute at Purdue University "MODSIM represents the future of engineering because it will become pervasive across industry. This is transformational."

However, The American Society for Engineering Education states that 45% of students felt they are unprepared or have very limited knowledge about simulation. With one student even stating "We need to learn how to solve realworld engineering problems. My program put immense emphasis on memorization and math instead of use of modern tools such as simulation to solve problems".

Give your students a competitive edge for the future engineering workforce with SIMULIA on the **3DEXPERIENCE** platform!

VERY PREPARED



Source: Report by ASEE, The American Society For Engineering Education

A GLOBAL COMMUNITY

Want to accelerate collaboration and international exposure for your students?

- You understand that you've got all the right content, now you just need connections with teachers that are also **3DEXPERIENCE** users.
- Promote turnkey capstone projects with existing student competitions and put together teams with students from around the world to allow your students to take part in a real Problem Based Learning (PBL) experience.



Need some coaching to develop your latest hands-on exercise? Need platform best-practices?

Need anything else?

 Then the **3DEXPERIENCE** Edu | Academics Community is for you! Teachers from around the world and our Edu technical experts are there for your empowerment. Whether the solution comes from a peer, Dassault Systèmes or an Edu Champion, you're not alone anymore!

• The **3DEXPERIENCE** Edu | Academics Community is there for that. Explain your need and we'll work on it with our community members. And if you like, they can start working directly with you.

edu.3ds.com/en/software/3dx-aca/simulia-3dx



Our **3D**EXPERIENCE[®] platform powers our brand applications, serving 11 industries, and provides a rich portfolio of industry solution experiences.

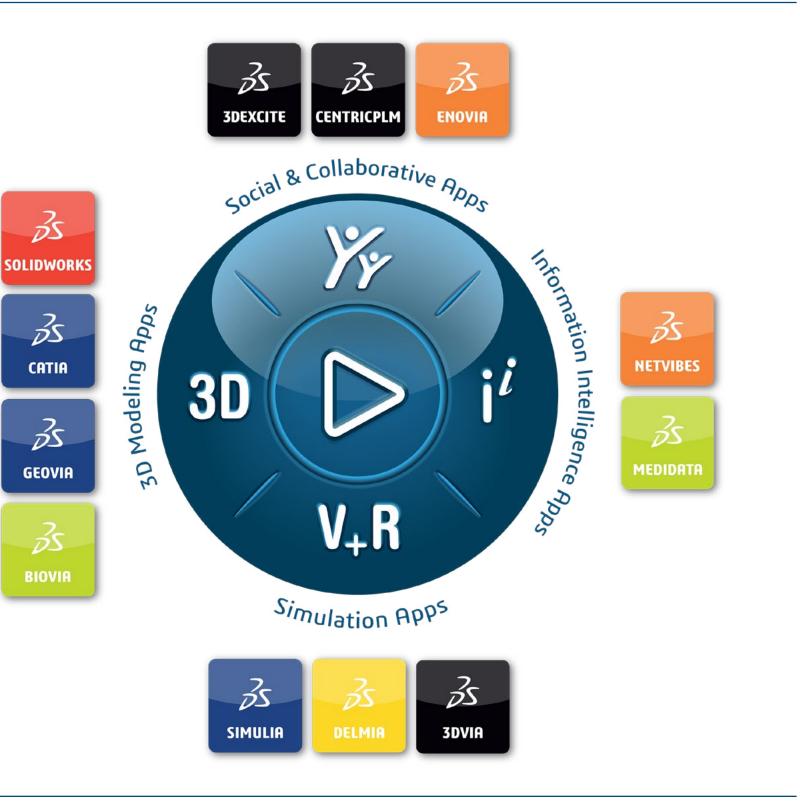
Dassault Systèmes, the **3DEXPERIENCE** Company, is a catalyst for human progress. We provide business and people with collaborative virtual environments to imagine sustainable innovations. By creating 'virtual experience twins' of the real world with our **3DEXPERIENCE** platform and applications, our customers push the boundaries of innovation, learning and production.

Dassault Systèmes' 20,000 employees are bringing value to more than 270,000 customers of all sizes, in all industries, in more than 140 countries. For more information, visit **www.3ds.com**.





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