



Create personalized and adaptive digital STEM materials with Bolster Academy

Factsheet

Educational publishers





Bolster Academy is a software provider helping you create, manage and publish your own **digital interactive STEM textbooks and workbooks**. Learning materials created with Bolster Academy are proven to help improve learning outcomes, student motivation and teacher effectiveness.

By creating math and science products with Bolster Academy technology, you are able to give every student personal help they need using **mistake-specific analysis** of exercises, and even provide **optimized individual learning paths**.

Our fully customizable learning platform helps you deliver highly personalized practice, assessment & exam preparation products based on:

- Immediate **targeted feedback** on any answer attempts by students.
- Adaptive sequencing of exercises to promote the **most efficient route** to mastery.
- Learning analytics with an array of dashboards to help teachers better understand their students.



Your partner for digital innovation



Reliability

When introducing digital learning solutions, you need them to be failure-free. Naturally you expect the same stability from your partnerships.



Innovation

Utilizing innovative approaches in education will enhance retention, engagement, communication and efficiency. Bolster Academy allows you to be the catalyst in your country!



Customisation

Nobody knows teachers and students better than you do. We therefore allow you to create the exact learning solution you designed, while supporting the workflow you're familiar with.



Transparency

We are a transparent partner without hidden costs. We adhere to a code of conduct to support professionalism and ensure the continued collegiality of all of our partnerships.



Reliability

- ✔ **Proven learning experiences**
Used by tens of thousands of students worldwide. Upon request, publisher references are available.
- ✔ **Reliable technology**
We offer a solid hardware & hosting configuration. Scalable servers guarantee effortless handling of peak loads with fast response times for both teachers and students.
- ✔ **Strong relationships**
 - **Development:** We strive to be more than just a software provider. It is our goal to always develop in close collaboration to ensure the success of your educational products.
 - **Support:** We offer swift responses and resolve times for you and your authors.
 - **Consultancy:** Our proven international track record in secondary and higher education allows us to advise on the best use of educational technology.
 - **Commitment** We believe exclusive partnerships can strengthen the relationship and mutual market position.
- ✔ **GDPR compliant**
High standards in privacy and security are incorporated in policy and development.



Transparency

- ✔ **Transparent onboarding**
We offer a simple, fast and efficient onboarding process. You can get started within just a few days.
- ✔ **Transparent pricing**
Our standard business model is a SaaS licence fee which is calculated on the sales of mutually developed products in your market.
- ✔ **Transparent ownership**
Ownership of all created products lies with the publisher.



Customisation

- ✓ **Lay-out**
Publishers are able to give the platform their own in-house design. You can differentiate the design on product level.
- ✓ **Integration**
The software integrates with existing platforms and other tools, through standards (e.g. SAML2, LTI, TinCan xAPI) or our own API.
- ✓ **Workflow**
Our content management system enables immediate editing of content at any moment, and allows for tags and metadata at every level. Content can be exported to PDF, docx, and LaTeX.
- ✓ **Roadmap influence**
We regularly develop new features and always welcome request from our clients. We deliver developments on time and within budget.



Innovation

- ✓ **Modernize education**
We enable you to develop fully interactive and personalized learning materials that fit today's generation of students. Set yourself apart from competitors with new opportunities for existing and new products!
- ✓ **Authoring community**
Our active online community of authors at various international companies and institutions allows for efficient Q&A, and is a perfect place to network.
- ✓ **Motivated students**
Mistake-specific analysis of exercises and adaptive sequencing creates engaged students and proven high levels of activity.



A fully customizable solution allows for creative design of educational products



PUBLISHER

Automatically checking and grading saves teachers' time, allowing for more planning and supporting



TEACHERS



STUDENTS

Personalized learning solutions engage and activate students

Value for Teachers, Students and Publisher



Advanced algorithm

An advanced algorithm at the core of our learning environment guides students along as they solve problems. It not only sees that a mistake is made, but also what that mistake is. This allows our software to provide targeted hints at any step in the solving process to improve subject understanding.



Randomisation

Our platform randomizes variables in the exercises, allowing for endless practicing.



Mathematical input editor

Students can tackle open exercises with calculations or mathematical formulas using their physical keyboard or an intuitive on-screen mathematical input editor supporting everything from simple algebra to complex mathematics.



25 types of exercises

Apart from the open mathematical questions, the software contains 25 other exercise types, including geometrical exercises, graphical input (e.g. lines, vectors, formulas), and of course multiple choice, drag-and-drop, and essays.



Testing

Our embedded testing module creates different randomized tests for students (diagnostic, formative, summative), and even checks and grades them. Teachers can act as secondary reviewers and focus their energy on classroom settings, instead of spending too much time on repetitive grading tasks.



Interactive elements

Our theory pages can include many interactive elements, such as randomized examples, graphs, animations and videos. They can even be presented as a slideshow!



Forum

A forum encourages student-teacher and peer-to-peer interactions. When struggling with a maths or science problem, students can ask exercise or theory specific questions on the forum. On exercises, the software shows the exact steps taken by the student when presenting their question on the forum, which helps the teacher offer targeted help to the student.



Learning analytics

Detailed learning analytics help teachers drill down and identify specific weaknesses and red flags. These progress reports are available at any desired level of detail.



Adaptivity

Teachers can use either a linear or adaptive presentation of content. Our adaptive learning functionality continuously analyses how students approach and answer each exercise, and follows up with either an easier or harder exercise. Sections are then unlocked when previous chapters are mastered, and optionally after a chapter-based diagnostic test.



Gamification

Light gamification elements can be enabled by the teacher. Students can earn achievement badges when they complete learning-based challenges. Gamification is a great way to increase student engagement, and in result improve learning outcomes.

"Nearly 10% of the grade could be explained by the progress in Bolster Academy. I also noticed that students in Bolster Academy spend more time on the assignments than previously."



Dr. van Versendaal
University of Amsterdam

"As a teacher, using Bolster Academy, you can use the automated feedback to anticipate mistakes students make; correct answers are never mistakenly interpreted as incorrect."



Dr. Hoevenaars
Utrecht University of Applied Sciences

"We have received positive feedback on how it has helped to direct students' study, motivate students to practice, and provide feedback to help students identify weaknesses and misunderstandings."



Dr. Richardson
Edith Cowan University, Australia

"In the 5 years that Bolster Academy has been part of the strategy of the Foundation Program, we have seen results steadily improve from an initial pass rate of 58% prior to its adoption, to a pass rate of 87% in 2018."



Dr. Naidoo
Tshwane University of Technology
South Africa

"Thanks to all the help Bolster Academy offers students, they are less likely to get stuck. Consequently, as a teacher I have much more freedom to spend my time on those students who need me the most."



Drs. Kamps
Rotterdam University of Applied
Sciences

"With the help of the Bolster Academy platform we aim to improve the quality of the contact hours by letting students independently practice basic skills exercises and by providing more in-depth lectures."



Faculty of Science and Engineering
The University of Groningen



bolster.academy



+3120 752 0000



info@bolster.academy



**Bolster Academy
Science Park 400
1098 XH Amsterdam
The Netherlands**

