



eDynamic Learning

CAREER & ELECTIVE COURSES



Course Instructional Framework

Award-Winning Curriculum

//CODiE//
2021 SIIA CODIE WINNER

THE EDTECH AWARDS



COOL TOOL WINNER 2021

Best Elective Curriculum Solution

Best Career Planning Solution

Course Instructional Framework

eDynamic Learning is a teacher-founded company, established with a mission to help students find their passion through exciting and unique career-focused curriculum. With over 200 course options for schools, we are the largest publisher of CTE and elective curriculum for grades 6-12.

Our digital curriculum is developed in-house by teachers and industry subject matter experts. The courses are designed to meet state and industry standards and are flexible and customizable so teachers can personalize learning to ensure they meet the needs of their students.

Implementation Models

eDynamic Learning's comprehensive digital curriculum is designed to work continuously, regardless of the setting or instructional model. Schools often use it as a textbook replacement, supplemental instruction, or virtual course curriculum. The dependable, user-friendly design and flexible framework allows schools to deliver courses that meet the needs of their district, school building, and individual classrooms.

Schools use our course curriculum in the following ways:

- Enriching Elective Courseware
- Career Technical Education Courseware (CTE)
- Preparation for 80+ Industry Certifications
- Middle and High School Career Exploration
- STEAM Programs
- Textbook Replacement
- Coding Camps
- Summer School
- Afterschool Programs
- Supplemental Curriculum

Instructional Strategies & Learning Theories

Each course leverages instructional design strategies rooted in research. Course content employs essential concepts native to the Gen Z generation and incorporates Behaviorist, Constructivism, and Cognitivism learning theories.

Each course is designed and written with engaging curriculum narratives that employ backwards design methodology to support best practices for students. Bloom's Taxonomy is used to drive higher-order thinking skills in lessons, activities, and assessments. Frontloaded course vocabulary gives a purposeful introduction to key vocabulary to make the course content more comprehensible and more engaging for students.

LMS Compatibility



Consistent Course Design. Consistent Success.

eDynamic Learning's digital curriculum provides a strong foundation of content for teaching and learning. Just like with a textbook, teachers have the ability to customize the course curriculum and add a variety of materials to enhance their instruction and engage their students in learning. Built-in assessments include unit quizzes, a midterm exam, and a final exam. Assessments are randomized from a large pool of questions to mitigate the possibility of cheating. Course units include:

- A Unit Introduction
- 3-8 Lessons
- A Unit Podcast
- Critical Thinking Questions
- Unit Discussion Questions
- 1- 4 Activities
- Flashcards
- Quiz

Accessible & Responsively Designed

Courses are also responsively designed to run on all technology platforms and devices and meet Web Content Accessibility Guidelines (WCAG) 2.0 AA, making them accessible for students who are deaf, hard of hearing, blind, or visually impaired.



Comprehensive, Interactive & Flexible Course Features

Featuring the Anatomy & Physiology 1a: Introduction Course

Getting Started: For Students

In the Getting Started folder, students are given access to the course syllabus, vocabulary, bibliography, required materials and tips for being successful in an eDynamic Learning course.

Engaging Curriculum Narratives

Each course is designed and written with engaging curriculum narratives to keep students interested in the subject matter. Video, interactive elements, and assessments decrease passive learning and increase comprehension.

Manageable Sections of Information

Each lesson is “chunked” into bite-sized pieces of information followed by a visual or an interactive element making information more likely to be engaging, retained, and recalled.

Multimodal Interactive Elements


To increase engagement and decrease passive learning, interactive resources offer opportunities for students to engage with the content. This promotes student agency and images facilitate information processing.

Embedded Multimedia Elements Include:

- Images
- Diagrams
- Infographics
- Videos
- Slideshows

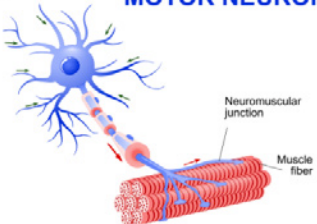
Keeping Your Blood Pumping

Later, you will learn about the various types of muscle tissue, and that includes cardiac muscle tissue. The muscle that makes up this incredible organ pumps with enough force, between 60 and 100 times a minute in a healthy adult, to deliver blood and all of its nutrients and oxygen all over the body. It's fascinating to consider that, with each pump of this strong muscle, it can distribute blood to the proximal ends of your fingers and toes as well as to all of the vital organs.



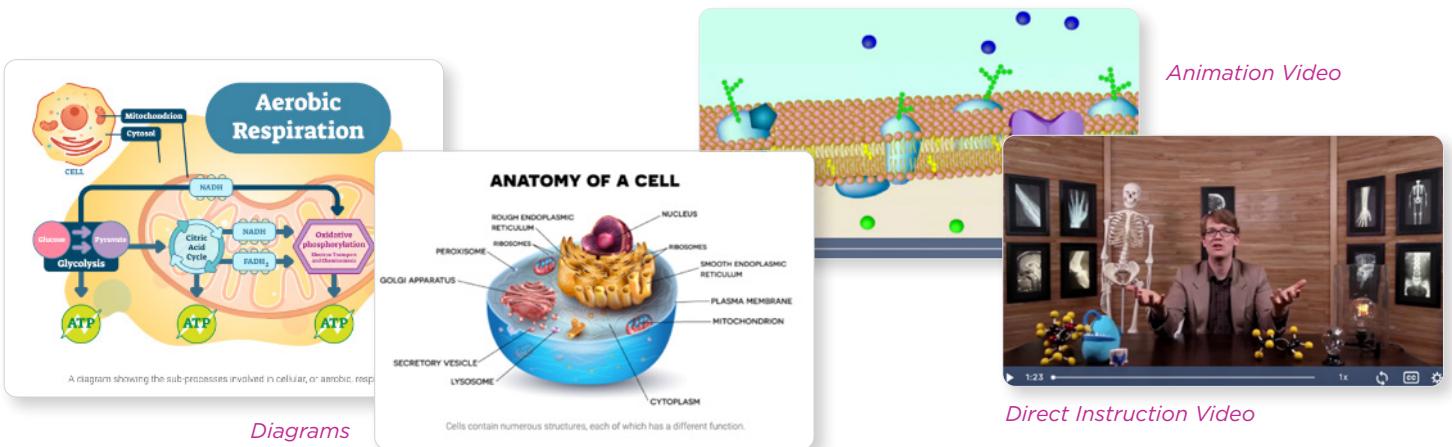
The heart, a very hard-working organ, is made out of cardiac muscle.

MOTOR NEURON



The motor neuron sends a signal to the muscle to contract or relax.

The other thing sitting in the synaptic gap is an enzyme called acetylcholinesterase. It works to make sure that the impulse sent to the myofiber will result in only one contraction. This can be compared to the address bar in your messaging app. The acetylcholinesterase ensures that the message only goes through once and to the correct person, or in this case myofiber. But, that's not the end of it. The muscle fibers still have to go through another series of steps before the muscle can contract.



Aerobic Respiration

ANATOMY OF A CELL

Animation Video

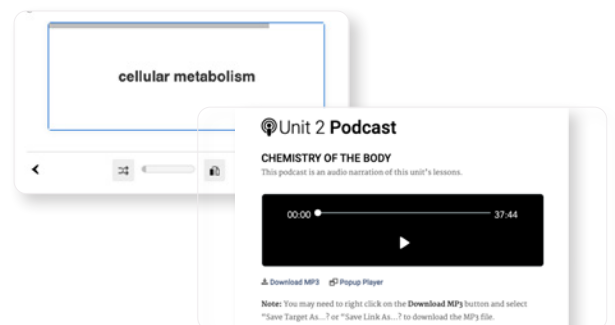
Direct Instruction Video

Flashcards

Each unit contains a deck of flashcards that allow learners to review the key terms and ideas found within the unit.

Podcasts

Unit Podcasts assist auditory learners with opportunities for reading comprehension and literacy improvements. Students can read along with each lesson and listen to the narrator's pacing and pronunciation.



cellular metabolism

Unit 2 Podcast

CHEMISTRY OF THE BODY

This podcast is an audio narration of this unit's lessons.

00:00 37:44

Download MP3 PopUp Player

Note: You may need to right click on the Download MP3 button and select "Save Target As...? or "Save Link As...?" to download the MP3 file.

Critical Thinking Questions

Students are routinely asked to think critically through higher-order thinking questions, application activities, and discussion questions that link content to lived experiences.

UNIT 2
Critical Thinking Questions

Please complete the following questions. Use a word processor to complete your work. Remember to use complete sentences and include both the questions and answers when you submit your work.

Submit your work as a file attachment using the dropbox.

The answers to the Critical Thinking Questions are worth 10 points.

UNIT 2 CRITICAL THINKING QUESTIONS

Critical Thinking Questions

1. What would happen if, for some reason, your body wasn't able to maintain homeostasis in response to a stressor, either because of a failure in the control response system or because the stressor was too extreme for your body to counteract? Why would this happen? Provide an example of a failure to maintain homeostasis in your answer.
2. Explain the difference between diffusion and osmosis, providing examples of each.
3. Imagine going outside on a cold day without a jacket. Explain your body's homeostatic control system response to this in terms of the four components: the sensor/mechanism, the control center, the effector/mechanism, and the feedback control loop.
4. Anabolic steroids are used to build muscle mass quickly. Why are they called "anabolic"?
5. We often hear people talk about how the body "burns" glucose and other sugars to provide energy, but it's not as simple as your stomach just creating raw energy from food. Explain how, on a cellular level, your body actually breaks down glucose and how the "energy" ends up in the inner membrane of your mitochondria.

Self Assessment: "Test Your Knowledge"

'Test Your Knowledge' quizzes are presented to students throughout the course and are not counted as part of their grade. This provides an opportunity to practice and ensure they are prepared prior to taking high-stakes, graded unit quizzes.

Prep for your Quiz
Here are some example quiz questions. We're sure to read WHY your answer was correct/incorrect in determining where you may be moving forward to the formal quiz for the

Test your knowledge

Which of the following is a good example of homeostasis being maintained?

- Sweating when you are running a race
- Sugar dissolving in a coffee
- Natural progressive hair loss
- Leaves changing colors on the trees in the fall

Yup, you got it!

Sweating, also known as diaphoresis, is the body's way of maintaining the internal temperature. Can you remember what signals this change? What is involved in the control system that facilitates this?

Reflective Discussion Board Questions

High-interest discussion questions leverage Bloom's Taxonomy objectives such as "analyze, compare and contrast, examine, and defend," and encourage students to reflect, collaborate, and share learning experiences.

DISCUSSION BOARD

POST

Please post detailed answers to the following questions. **Please use complete sentences.**

Did you know that the study of anatomy and physiology as we know it today began in ancient Greece? Hippocrates is considered the Father of human anatomy and the pioneer of dissecting, even though there was ultimately a huge gap in time between his work and those of his successors and modern dissection. Meanwhile, Hippocrates recognized how symptoms in one part of human anatomy, like chills in fingers, could be related to disorders in other parts of the body. If you'd ever heard of the Hippocratic oath, that's a reference to Hippocrates as the Father of medicine. Of course, moderns, herbalists, and so on have been working with medicine and anatomy since the dawn of civilization; it's just that those two figures approached the field from a more scientific perspective.

What would you say it means to take a scientific approach to medicine? What makes the work of these two scholars, and later scientists, especially important in the study of anatomy and physiology?

ADD ATTACHMENT

DISCUSS **POST**

Real-World Activities

Activities are practical engagement and explorational opportunities that bring in a real-world context. Students apply what they've learned to create, develop, or produce a body of work and demonstration knowledge. Some examples include writing an essay or creating a multimedia presentation, a portfolio piece, or an app.

UNIT 2
Activity

Complete all components in the activity below according to the given instructions. Refer to the provided rubric for information on how you will be graded. Submit your work as a file attachment using the dropbox.

The activity is worth 15 points.

UNIT 2 ACTIVITY

Design Your Own Factory

We talked about how the structure of the cell can be compared to a factory and various roles that people or departments may have in the factory. Using what you learned about the cell and the organelles within the cytoplasm, you are going to design your own factory! You can sketch out a blueprint or map of your factory by hand or use any photo design program or slideshow program you might have (like PowerPoint or Photoshop). Your blueprint must include the following:

- Identify what product your factory is going to be responsible for producing.
- Identify AT LEAST FIVE organelles (departments) and assign each a role in your factory. These departments can be different sections or rooms in your factory. Make sure to label the rooms with their organelle and with their function in the factory.
- Show how one organelle relies on another by adding arrows to your blueprint. This will show how a product moves through the factory from raw materials to finished product.
- After you have finished your blueprint, write a paragraph describing the process from start to finish, identifying the organelle/department and what step occurs there. Include this narrative description below the blueprint, or on another slide, so that it doesn't clutter your blueprint.

• Here's an example from Lesson 2 as a guide: If you think about an assembly line that makes a shirt, the ribosomes are where the fabric for the shirt is woven, the RER is where a shirt is sewn together, but the SER is where that shirt is pressed and packaged to look nice.

Submit a clear photo of your blueprint, if you sketched it by hand, or your blueprint file if you used a computer application.

Summative & Formative Assessments

Courses include both formative and summative assessments for students. Unit quizzes, midterm exams, and final exams are auto-graded for the teacher.

Unit 2 Quiz
Anatomy and Physiology 1a: Introduction / Unit 2: Chemistry of th...

4. Examine the image below:

14. Positive feedback mechanisms tend to produce effects that maintain homeostasis.

True

False

Which item represents...

2. A cell has few proteins in it; the fluid it is in has a high density of proteins. What is necessary for the cell to move proteins outside of itself?

- osmosis
- diffusion
- passive transport
- active transport

PREVIOUS 2 of 15 **NEXT**

Literacy Toolbar Supports Diverse Classrooms

eDynamic Learning courses offer a built-in literacy toolbar to support English Language Learners, students with learning disabilities, IEP/504 accommodations, and to help all students improve their study skills and content knowledge. Through the expandable accessibility icon, students have access to an array of helpful tools. The toolbar is sticky and stays on screen as students scroll through the course, making it accessible when they need it.



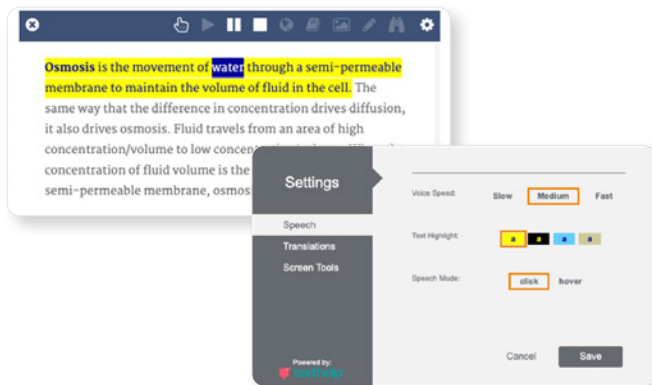
Student Agency

The Literacy Toolbar includes text-to-speech, language translations, dictionary (text and image), highlighters, and a screen masking feature.



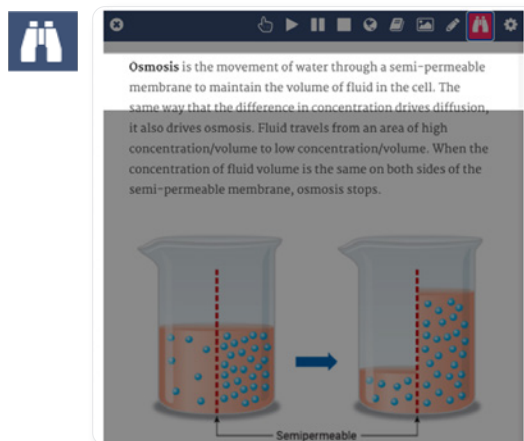
Read Aloud With Text Tracking

Text can be read aloud in 3 speeds and highlighted in 4 different colors. Words are highlighted when spoken, which engages and motivates auditory learners, improves vocabulary, comprehension, information processing skills, and increases their attention span.



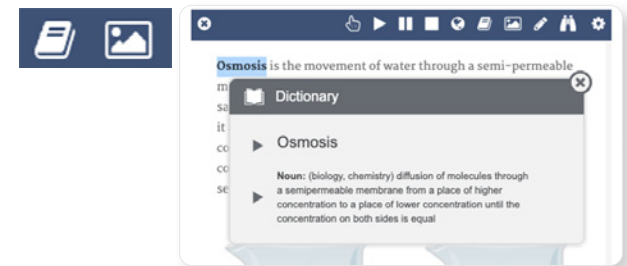
Screen Masking

Screen masking overlays reduce visual stress on students with reading disabilities - including students with dyslexia. Students have 3 options to choose from including the Letterbox, the Ruler Guide or the Line Reader Guide.



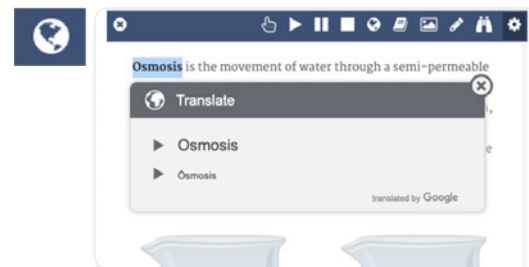
Dictionary & Pictionary

Words can be highlighted and defined using the dictionary and pictionary options. Students can also click the word to hear the definition read aloud.



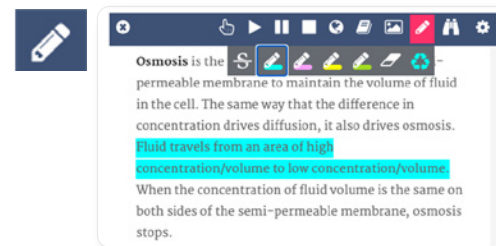
Text Translation

Selected words or phrases can be translated and/or read aloud in 90+ languages, providing continuous learning supports for English Language Learners.



Highlighters

Strikeout pens and multi-colored highlighters promote study tips. Highlighted text can be collected and transferred to a Word or Google doc for studying purposes.



Empowering Educators

Resources to Support Data-Driven Instruction

Teacher Resources

Our extensive teacher resources enable educators to utilize a variety of teaching and learning strategies including Blended Learning and Inquiry-Based Learning (project-based learning, problem-based learning, challenged-based learning). Teachers also receive a pacing guide, online and continuous learning guide, suggested answer keys, and grading rubrics for open-ended questions and activities.



Suggested Answer Keys

Within the Teacher Resources folder, suggested answer keys are provided for critical thinking questions, discussions, and activities.

UNIT 2 CRITICAL THINKING QUESTIONS

Critical Thinking Questions

1. What would happen if, for some reason, your body wasn't able to maintain homeostasis response to a stimulus, either because of a failure in the control response system or because the stimulus was too extreme for your body to counteract? Why would this happen? Provide an example of a failure to maintain homeostasis in your answer.
2. Explain the difference between diffusion and osmosis, providing examples of each.
3. Imagine going outside on a cold day without a jacket. Explain your body's homeostatic control system response to this in terms of the four components: the sensor/receptor, the control center, the effector/mechanism, and the feedback control loop.
4. Anabolic steroids are used to build muscle mass quickly. Why are they called "anabolic"? Explain how, on a cellular level, your body actually breaks down glucose and how the "energy" ends up in the inner membrane of your mitochondria.

TABLE Grading Rubric

	Description of Departments	Blueprint/Map
Full Credit	Five organelles are identified, and their use demonstrates an obvious understanding of the structure and function of the organelle. The purpose of the factory and the links between the departments are included and are clearly articulated.	Five organelles are identified, and their placement in the diagram demonstrates an obvious understanding of the structure and function of the organelle. The purpose of the factory and the links between the departments are easily understood from the image.
Partial Credit	Only two or three organelles are identified, and/or their use does not demonstrate a complete understanding of the structure and function of the organelle. The purpose of the factory and/or the links between the departments are included but may be poorly articulated.	Only two or three organelles are identified, and/or their use does not demonstrate a complete understanding of the structure and function of the organelle. The purpose of the factory and/or the links between the departments are poorly understood from the diagram.
Little Credit	Fewer than two organelles are identified, and/or their use demonstrates little to no understanding of the structure and function of the organelle. The purpose of the factory and/or the links between the departments are not included.	Fewer than two organelles and/or their use are identified. The purpose of the factory and/or the links between the departments are not clear from the diagram.

Gradebook With Insightful Data

A comprehensive gradebook gives teachers access to grades and valuable data insights to help target and personalize instruction. Simplistic dashboard views enable teachers to see how individual students are doing in the course with performance data, cumulative score, time spent in the course, performance, pace, and progress.

Grading Rubrics

Rubrics are provided for teachers and students for open-ended questions and activities.

Score

4.99 / 15

FULL CREDIT NO CREDIT CLEAR

REVERT TO CALCULATED

modified ✓ completed

SAVE DRAFT SUBMIT SCORE

EXCUSE ALLOW RETRY OVERRIDE COMPLETE

Feedback

Visible to student

B i U

■

Add your feedback here

Insert template No templates to display

EDIT TEMPLATES

Returned attachments

Private note Hidden from student

Anatomy and Physiology 1a: Introduction - Grades

GRADES	UNIT SUMMARY	FOR ME
<input type="checkbox"/>	Name	Score Letter Minutes
<input type="checkbox"/>	Grey, Meredith	92.87% A 0
<input type="checkbox"/>	House, Gregory	35.15% F 0
<input type="checkbox"/>	Howser, Doogie	94.93% A 0
<input type="checkbox"/>	Lockhart, Abby	79.24% C 0
<input type="checkbox"/>	Pierce, Benjamin	81.69% B 0

Anatomy and Physiology 1a: Introduction - Grades

Score: 35.15%

Schedule: Apr 6, 2020 - Apr 6, 2021 1:59 AM (1 year remaining)

51.92% of gradeable activities completed (27 of 52)
17.41% of all activities completed (27 of 155)

Unit 1 28.33%

Activity	Location	Score	Status	Submitted date	Target due date
Unit 1 Text Questions Dropbox	Unit 1: Human Body Organization	30%	✓		May 1, 2020
Unit 1 Lab Dropbox	Unit 1: Human Body Organization	10%	✓		May 7, 2020
Unit 1 Activity Dropbox	Unit 1: Human Body Organization	40%	✓		May 13, 2020
Unit 1 Quiz	Unit 1: Human Body Organization	93.33%	✓		May 19, 2020
Unit 1 Discussion 1	Unit 1: Human Body Organization	20%	✓		May 21, 2020
Unit 1 Discussion 2	Unit 1: Human Body Organization	20%	✓		May 25, 2020

Unit 2 31.64%

Activity	Location	Score	Status	Submitted date	Target due date
Unit 2 Text Questions Dropbox	Unit 2: Chemistry of the Body	20%	✓		Jun 11, 2020
Unit 2 Lab Dropbox	Unit 2: Chemistry of the Body	30%	✓		Jun 17, 2020
Unit 2 Activity Dropbox	Unit 2: Chemistry of the Body	40%	✓		Jun 23, 2020
Unit 2 Quiz	Unit 2: Chemistry of the Body	53.33%	✓		Jun 29, 2020
Unit 2 Discussion 1	Unit 2: Chemistry of the Body	0%	✓		Jul 1, 2020
Unit 2 Discussion 2	Unit 2: Chemistry of the Body	0%	✓		Jul 3, 2020

Grading Assignments & Personalized Feedback

Teachers have the flexibility to support their students in a variety of ways to personalize instruction.

Personalized Feedback

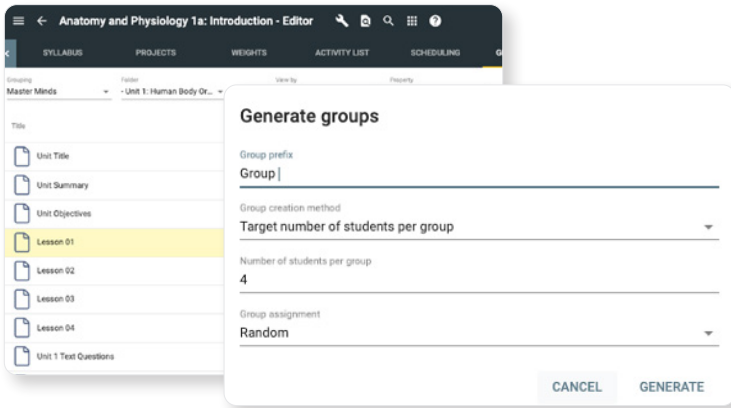
Teachers can give individualized feedback on assignments in the form of written notes, audio, or video recording attachments.

Private Notes

Teachers can record private notes on assignments making IEP and 504 plan documentation easy and efficient.

Reports for Mastery & Performance

A variety of reports can be accessed to assist teachers and curriculum leaders on data-driven decisions. Educators can access and print reports for their whole class and individual student performance, mastery, item analysis, and much more.



Differentiate with Small Groups & Personalization

Teachers can create and manage small groups to change visibility of course material, quizzes, and custom content for different groups. They can easily assign and communicate with the whole class, small groups, and individual students.

Monitor & Track IEP & 504 Accommodations

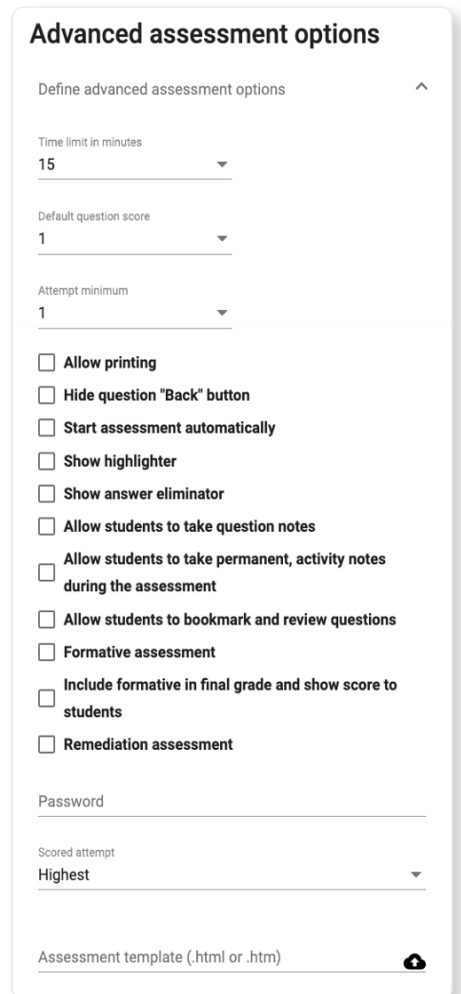
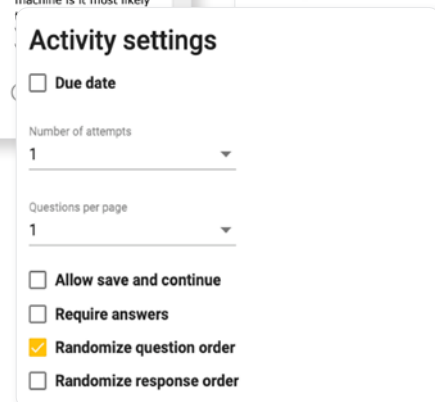
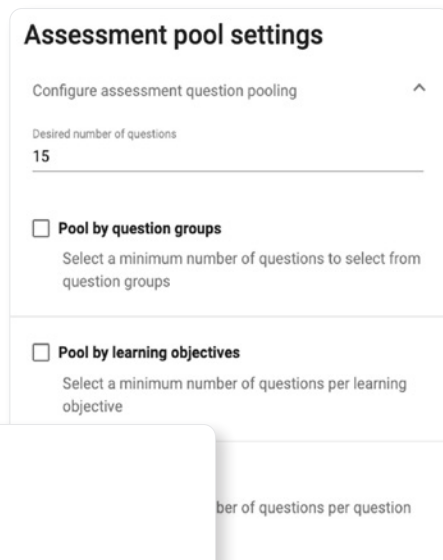
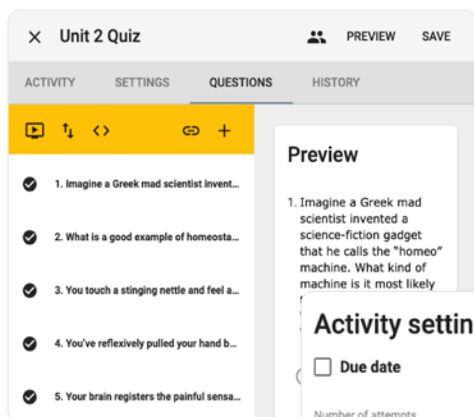
Teachers can quickly identify students who have an IEP or 504 accommodation through the flag feature so they can adjust the curriculum to support their unique requirements and ensure success.

Name ↑	Score	Time	Und	Int	Eff	Progress	Pace	Perf
Lockhart, Abby	79.09%	00:24:26	●	●	●	<div style="width: 21%;"></div> 21%	●	●

Adjust Assessments to Support Accommodations

Teacher can modify assessments in a variety of ways to meet the needs of their learners and create their own assessments. They can allow or adjust:

- Retries or attempts
- Time allowed for quiz
- Number of questions on quiz
- Calculator tool availability
- Printing of the assessment
- Electronic highlighted notes
- Adding questions to assessment
- Randomizing question order



Relevant, Sensitive & Personalized Learning

Meeting the Needs of Diverse Learners

Regularly Reviewed and Updated

Digital curriculum provides numerous benefits including the ability for eDynamic Learning to regularly update the courses to incorporate relevant and newsworthy events and details, which transfer seamlessly for LTI-enabled school partners. Courses are continually reviewed to ensure the language and topics are sensitive and appropriate for all learners. An external diversity/sensitivity editorial organization is also employed to review lessons, images, and assessments to identify potential bias, stereotypes, and inauthenticity. The editorial group assigns readers to review material from the perspective of their own lived experiences. Readers look for content related to:

- Adoptions
- Addictions
- Ageism
- Animal violence, death
- Body image, eating disorders
- Bullying, cyberbullying
- Culture
- Death
- Domestic violence
- Ethnicity and race
- Gender Issues
- Generational issues
- Immigrant culture
- Indigenous cultures
- LGBTQ+
- Mental illnesses, disorders
- Physical illnesses, disabilities
- Regionalism
- Religion
- Socioeconomic status
- Tokenism

Social Emotional Learning

Many of the eDynamic Learning courses weave CASEL's 5 competency framework throughout to foster knowledge of self-awareness, self-management, social awareness, relationship skills, and responsible decision making. Various lessons and assessments incorporate the CASEL competencies to advance growth and development.

Customize the Curriculum

eDynamic Learning provides a strong foundation of content for teaching and learning, but gives you the ability to incorporate your own lessons and activities or district-authored materials.

Rearrange units and lessons to meet district scope and sequence

Add:
New lessons, links, videos, docs, assessments, etc.

Hide:
Units, lessons, activities

Move:
Units, lessons, activities in a different sequence

Modify:
Due Date, Grading Options, Access, and more!

Support Methods to Ensure Success

As a teacher-founded company, our goal is to support your school's success! We offer an array of options to enable teachers to customize and personalize their instruction, engage students, and support them in making the most of the curriculum.



Access the latest tutorial videos and updates through our YouTube channel



Contact our Tech Support Team at no cost when encountering a challenge or a question



We offer a variety of professional development workshops to support all instructional models



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