BUILDING HIGH-QUALITY SUSTAINABLE VIRTUAL PROGRAMS

SCALING EFFECTIVE VIRTUAL TEACHING PRACTICES

Equipping and Supporting Teachers for Success
Dear Colleagues

Virtual learning has steadily increased throughout the 21st century. Yet nothing could have prepared school communities for the urgent need for emergency remote learning as a result of the pandemic.

For many of us who have been building sustainable virtual programs prior to the pandemic, we know that all learning — especially virtual learning — must be designed intentionally to address the unique needs of each student. Unfortunately, for a variety of reasons, the pandemic’s early weeks saw implementations that rarely reflected the best practices for online learning, which have been developed and refined by decades of research and innovation. We cannot go back, but we must ensure that students and families will have access to sustainable, high-quality virtual programs now and in the future.

As we have demonstrated throughout this series of case studies, Building High-Quality Sustainable Virtual Programs, a variety of student populations in different virtual settings can achieve high quality academic outcomes and thrive as learners (Edmentum, 2021).

In this case study, we turn our focus to the teacher’s role in virtual learning, an area that too often has been overlooked. In particular we examine this through the lens of Mentoring, Edmentum’s virtual teaching training program. As we have learned, teachers are a unit of change in virtual learning environments. There is nothing more sacred than teacher relationships with students, but it is incumbent upon districts to provide support and flexibility for them to teach effectively.

Throughout this case study we amplify the voices of several teachers who are helping to lead change by teaching in the first virtual academy in their respective school or district. In particular the focus is on the role of mentorship and coaching in the professional development and growth of these teachers. We learn that the teachers consider 1-on-1 mentorship and participation in ongoing professional learning communities effective strategies in building sustainable virtual programs.

— Dave Adams, Chief Academic Officer

Acknowledgements

We are grateful for the time provided by Edmentum’s educators and program leaders who shared their insights. Thank you in particular to teachers in partner schools and districts, including: Sandy Hagy and Joy Westendorf, of Chicago Public Schools; Bill Shire of Bristol Township School District; Meghan Anderton of the American International School of Nouakchott; and Lynette Brown of Oakdale Public School. We also appreciate the expertise shared by Edmentum’s Kelli Norwood and Diane McRandal, both of whom have led the Mentoring program since its founding. In addition, Edmentum’s Data Science and Research teams have played critical roles in helping to extract and analyze thousands of academic performance and student demographic data points as part of this process. To build on these data-driven insights, Jean Sharp, in association with Sharp Solutions and Services Group, Inc., conducted interviews with program leaders and teachers in the mentoring program. Geoff Decker Communications provided writing and editorial support.
With millions of students learning through remote and blended environments, there is concern that current strategies are insufficient to ensure all students have access to a high-quality education (Dusseault & McCann, 2020). Nationally, the impact of the pandemic on student learning has been significant. Measures of unfinished learning, which capture accumulated disruptions to a student’s grade-level learning opportunities, show students fell behind by an average of five months in mathematics and four months in English. Students of color and low-income students were disproportionately affected, analysts have found (Dorn, et al., 2021).
In response, there has been a growing focus on the importance of building sustainable, high-quality virtual programs. The role of teachers, and their effectiveness as virtual instructors, is more important than ever. A report from the RAND Corporation (2021) showed that having a sufficient number of qualified instructional staff for virtual learning ranked second among district leaders’ challenges in the 2020-21 school year. While it is a high priority, virtual teachers have not had access to meaningful professional learning opportunities to develop and refine their craft. While districts and their vendors often provide short-term onboarding support and training, research found that teachers wanted consistent ongoing professional development with best practice recommendations, access to professional learning communities, and collaboration and peer mentoring (Hanover, 2019).

This case study examines outcomes of Mentoring, Edmentum’s virtual teaching training program. Launched to help districts build instructional capacity for their virtual academies, the program is designed around 5 key components of effective virtual teaching practice:

- 1:1 mentorship and instructional coaching from nationally-recognized virtual instructors.
- Membership in a national professional learning community, organized around facilitated monthly workshops.
- Small-group cohorts based on shared instructional skill sets and overlapping interests.
- Technical training, digital learning resources, and personalized support for implementing new learning technologies.
- Certification to recognize and distinguish effective virtual teaching practices.

This paper is an opportunity to present findings and insights about virtual learning during an unprecedented school year. While unfinished learning mounted for many students across the country, students enrolled with teachers supported by Edmentum mentors achieved high levels of academic success. Further research is needed to better understand the correlations and causality between program components and student outcomes.

To better understand how the mentoring program affected participating teachers, this case study also features insights from teacher survey assessments and extensive interviews with program leaders and several district teachers. What emerges from these analyses is that confidence in virtual instruction improves over the course of their participation.

“My success came from the fact that I felt like there was someone standing behind me, holding me up, making sure I didn’t fall,” one teacher told us. “My Mentor gave me confidence to try something new and there is no way I would have tried that without her supporting me and saying ‘You’ve got this.’”
Introduction

The Evolving Role of Teachers in a Virtual Environment

More than ever, districts need to ensure that their teachers are equipped and supported to be effective teachers in a virtual learning environment. Students are learning online in greater numbers than ever before, and teachers need more than the technical basics. They must be fully prepared to use evidence-based teaching approaches that optimize a virtual environment.

Yet few teachers felt equipped or supported for the job they were being tasked to do, despite decades of teaching experience.

“I had never used Zoom in my entire life and suddenly it was my life. It was just a whole new world for all of us.”
Lynette Brown, Oakdale, Ok.

“When COVID hit, I was like, oh my God, I have to do what? I couldn’t do any Google Meets with my students for the first couple of weeks because I didn’t know how.”
Bill Shire, Bristol Township School District.

Many schools and districts sprang to action, moving quickly to set up virtual academies for the 2020-21 school year.

“We were looking to create an opportunity to drive the effectiveness and quality of the virtual instruction,” said Kelli Norwood, director of academy professional learning at Edmentum, who helped develop the mentoring program.
“We knew we needed to support the growth of our teachers for students to be successful.”
Meghan Anderton, an AISN teacher, said that her school was already making plans to adopt a digital curriculum to drive consistency across grades and prepare their students with 21st century skills. The pandemic pushed them to finally make the transition, but it wasn’t embraced initially. The appeal of a mentoring program helped the school community embrace and manage change, Anderton said.

“Virtual learning was all new to us. It was a big change, so some staff and students were resistant to it,” said Anderton. “Having the training and having someone we could lean on highly benefited our school.”

For Chicago Public Schools Virtual Academy, a fully virtual learning option for students in Chicago Public Schools (CPS), the pandemic was an opportunity to better serve some of their most vulnerable students.

“March 17, 2020 was the day we were all sent home due to the pandemic, and we were all asked to reinvent the wheel.”

Sandy Hagy, a high school English teacher in the CPS Virtual Academy.

Previously, CPS homebound students—those with medical conditions that prevent them from attending brick-and-mortar schools—had limited access at the end of the school day. When the pandemic hit, Hagy and a core team of teachers and administrators transformed the academy, moving to a full-time program. For the first time, students who were homebound due to medical conditions would have unprecedented access to high-quality virtual learning programs.

“The pandemic really opened the district’s eyes and showed the need that exists for students with different medical conditions,” said Hagy.

Districts are also leveraging the mentoring program as a way to build instructional capacity. An important consideration for decisions to start a virtual program is the desire to keep students in the district rather than losing them to virtual, charter, or private schools.

That is the case in the Bristol Township School District, which has seen its virtual academy enrollment surge from 20 students to 170 students. Bill Shire, a 32-year veteran teacher in the district, has been leading that effort, and he credits the support he has received through the Virtual Teacher Mentoring program for helping to scale its efforts. Initially focused on technical and instructional training, Shire said that the program has evolved to meet the district’s needs. Shire is charged with scaling Bristol’s virtual academy amidst increasing parent demand. The mentoring program has equipped him with the support and skills to be able to become more efficient with some of the administrative tasks to focus on instruction and student learning.

“It was easy when there were 20 students, but now there are 170… I was able to learn faster and therefore do more because of the support I received through the mentoring program,” said Shire.
# Edmentum’s Virtual Teacher Mentoring Program Elements

<table>
<thead>
<tr>
<th>Element</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1:1 Mentoring and instructional coaching</strong></td>
<td>Mentors are master online teachers with the experience, knowledge and passion to share and collaborate with other educators. They connect with their mentees and work toward building confidence and foundational knowledge, and they provide one-on-one instructional coaching, expert advice, and opportunities for feedback and reflection.</td>
</tr>
<tr>
<td><strong>Small Group Cohorts</strong></td>
<td>In smaller group settings, teacher mentees connect with colleagues with similar teaching specialties and interests. These cohorts of educators progress through the program based on content area, grade level, and/or state certification. With their cohort, teachers will participate in collaborative teacher meetings that are facilitated around data-driven instruction, student learning goals, and the refinement of teacher practices.</td>
</tr>
<tr>
<td><strong>Professional Learning Community (PLC)</strong></td>
<td>A networking community for virtual instructors working in local school districts and EdOptions Academy teachers who are seeking continuous and meaningful professional growth. Through monthly large-group sessions, PLC members dive deep on topics that range from instructional best practices to optimizing the student experience and driving academic achievement.</td>
</tr>
<tr>
<td><strong>System and Content</strong></td>
<td>Teachers in the Mentoring program will learn to navigate the Edmentum technology platform and tools. They will also learn how to unpack and customize Edmentum courses and curriculum, and how to effectively apply their work in the virtual classroom.</td>
</tr>
<tr>
<td><strong>Certification</strong></td>
<td>Through participation in the Virtual Teacher Mentoring program, educators will have the opportunity to earn an Edmentum issued Online Teaching Certification. This is an optional pathway that develops teacher capacity through a rigorous and intentional program that builds teacher competencies and effectiveness in virtual instruction.</td>
</tr>
</tbody>
</table>
Virtual teaching builds on the same evidence-based pedagogy that is foundational in any learning environment. But online learning is not the same as in-person learning, and virtual teachers need to develop a unique set of skills and knowledge to provide impactful learning experiences for students. Just like in-person teaching, virtual instruction is a professional craft to be continuously developed, practiced, and refined.

Decades of research have identified online and in-person practices that help students engage, increase motivation, and learn more. Edmentum’s framework for effective virtual teaching defines the core competencies that all virtual teachers should possess to ensure their students are successful. (See Appendix C for fuller descriptions and additional research citations)

**Establishing Student-Teacher Relationships:** When students feel welcomed and comfortable, they develop a sense of community, and they are more receptive to learning (Brown, 2010).

**Virtual Instructional Tools and Techniques:** Virtual teachers must be able to utilize instructional tools, navigate course learning platforms, facilitate synchronous online sessions, and create personalized video content (Underdown & Martin, 2016).

**Teacher Qualification, Experience, Training, and Learning Opportunities:** Virtual instructors should be highly qualified, state-certified teachers with experience in online learning environments.

“Virtual learning was all new to us. It was a big change, so some staff and students were resistant to it. Having the training and having someone we could lean on highly benefited our school.”

MEGHAN ANDERTON
Academic Manager and Teacher at The American International School of Nouakchott

**Teacher Efficacy and Continuous Improvement:** Teachers must feel supported with high-quality coaching and provided with sufficient information and resources by their school’s administration.
Cultivating Confidence in Virtual Instruction

When teachers feel supported and confident with their ability to provide learning in a virtual environment, that confidence translates to our students. Programs to support and equip virtual instructors with effective teaching practices are increasingly a priority for districts. Mentorship programs and professional learning communities can address this challenge in several ways.

MENTOR COHORTS AND PLC

The Virtual Teacher Mentoring program structure is set up to cultivate a community of professional practitioners. There are monthly meetings to collaborate with the entire cohort. Each meeting is structured to address a topic or competency area, but it is also a space where teachers can connect and discuss strategies that are working in their classes as well as the challenges. In addition, all participants in Edmentum’s Virtual Teacher Mentoring program have access to national monthly professional development opportunities.

Every two weeks, teachers meet with their mentors one-on-one, an opportunity that teachers say is perhaps the most effective element of the program. Edmentum mentors are instructional coaches, thought partners, and problem-solvers. They play a lot of different roles.

“I always feel like I have support. I never feel alone when using the curriculum,” says Sandy Hagy, CPS Virtual Academy. The individual meetings are wonderful because I can actually sit down with my mentor and dive into what I need to do, what I’m working on individually. The group meetings are great because then we come together as a group and I can really hear what other people are doing. Not having this support would have set me back considerably. I just learned so much more from these experiences.

In the fall of 2021, Edmentum administered a survey to its mentee cohort asking for their feedback and reflections on how their participation in the mentoring program affected their virtual teaching.

When asked which learning opportunities teachers found to be the most empowering in the Virtual Teacher Mentoring program, 96% identified 1:1 Personalized Coaching sessions. The presence of a professional learning community (PLC) was the second most empowering element of the mentoring program, according to the survey results, followed by small group cohorts and virtual office hours.

In a survey of teachers participating in the 2020–21 Mentoring Program, the percent of teachers saying they were comfortable teaching virtually more than doubled from 24.4% before participating in the program to 57.8% with the Mentoring Program. Additionally, 100% of teachers felt comfortable or very comfortable teaching virtually after participating in Mentoring.

Confidence in Virtual Teaching

Before Mentoring | After Mentoring
--- | ---
0 | 60
10 | 50
20 | 40
30 | 30
40 | 20
50 | 10
60 | 0
The Impact of Mentorship

Hagy says being part of the mentoring program “impacts everything I do, every single day.” From the technical to the instructional, she says that having a professional learning community facilitated by an expert mentor has had a profound effect.

Perhaps the biggest area of growth, Hagy says, has been her proficiency at customizing and tailoring her instruction to each of her students, depending on their needs. “I have the autonomy, the flexibility to custom tailor the curriculum for my students,” says Hagy.

There are many different tips and strategies for personalization, and Hagy says she has learned how to incorporate those into her own instructional approaches. “This curriculum — and its mentoring — provides that,” Hagy says of her school’s partnership with Edmentum. “What I’ve learned through my mentor is that it’s a matter of putting my own spin on it,” Hagy says. “I have 18 years of experience, so I can bring my own pieces into it.”

The teachers credit CPS Virtual Academy’s leadership for ensuring that the expansion came with an investment in professional learning.

Joy Westendorf, a National Board-Certified Teacher and colleague of Hagy at CPS, says that she is always looking for opportunities to learn and grow as a professional. “Having this mentorship has been just awesome for me.”

Bill Shire of Bristol Township said, “from the very beginning, we learned how the program works — the ins-and-outs of the technology and the curriculum. That was one of the best things.” Shire was one of the first mentees to be fully certified in virtual learning through Edmentum’s Virtual Teacher Mentoring program. “The knowledge I have received — just being able to jump onto a Google Meet with a student and quickly tailor your instruction to their needs — I wouldn’t have gotten that with other programs.”

Lynette Brown, a teacher in Oakdale, OK, said that she also felt bolstered by the idea of having an expert who was responsive to help her. “My success came from the fact that I felt like there was someone standing behind me, holding me up, making sure I didn’t fall,” Brown said. “She gave me confidence to try something new and there is no way I would have tried that without her supporting me and saying ’You’ve got this.’”

Meet a Mentor
Diane McRandal

- 2019 EdOptions Academy Teacher of the Year
- 2020 Finalist for Edmentum Educator First
- 25+ years teaching in traditional and virtual classrooms; 10+ years in online teaching
- Curriculum developer, department chair, and Google Certified Teacher

“I’m going to make you be the best you can be. I want you to believe you can do this. Every child in the virtual world has the opportunity to sit in the front row, middle seat. Let’s get them there!”
Partner Highlight: Chicago Public Schools

When Chicago Public Schools set up the CPS Virtual Academy, it was to bring high-quality virtual instruction to hundreds of learners with medical conditions that prevent them from attending brick-and-mortar schools.

“March 17, 2020 was the day we were all sent home due to the pandemic, and we were all asked to reinvent the wheel,” says Sandy Hagy, a high school English teacher in the CPS Virtual Academy.

The traditional “home-bound programming” had been set up as a program with limited hours of instruction. When the pandemic hit, Hagy and a core team of teachers and administrators transformed the academy into a full-time program. For the first time, students who were homebound due to medical conditions would have unprecedented access to high-quality virtual learning programs.

“You feel like every day you’re making a difference, just being able to interact and engage with these students,” says Joy Westendorf, a teacher at the CPS Virtual Academy.

A particular point of pride among the CPS Virtual Academy team is the feedback they’ve received from parents. “The parents have been so pleased because they’ve said this is really the first time that their kids have actually been able to be in a classroom environment with their other classmates,” says Westendorf.

**She said that 96% of families want their students to continue attending the school.**

“That’s due to the dedication of the teachers working at the virtual academy,” says Hagy. “But also the rigorous instruction and the coaching.”

‘Opened a lot of eyes’

Hagy believes that the pandemic forced educators to truly consider what learning looks like and who really has access to it. “The pandemic opened a lot of eyes and showed the need that exists for students with conditions that prohibit them from accessing a brick-and-mortar building,” says Hagy. “There is a need to have virtual instruction...It’s a very exciting opportunity to bring high quality instruction to students that wouldn’t otherwise have access,” says Hagy. “They need an alternative for learning.”
Discussion

With millions of students learning through remote and blended environments, there is concern that current strategies are insufficient to ensure all students have access to a high-quality education (Dusseault & McCann, 2020).

In response, there has been a growing focus on the importance of building sustainable, high-quality virtual programs. The role of teachers, and their effectiveness as virtual instructors, is more important than ever. Consider the results of a recent survey of district leaders published by the RAND Corporation (2021):

• Leaders reported high levels of professional development needs for virtual instruction on a range of topics (Using technology tools, developing remote lesson plans, using assessment data effectively, with a clear majority (68 percent or more) reporting moderate or great needs.

• The top-ranked professional development need among the six topics about which we asked was addressing students' social and emotional well-being.

• Almost half of district leaders said that they have created virtual learning communities for staff during this school year.

This case study was an opportunity to present findings and insights about EdOptions Academy virtual program during an unprecedented school year. We gained valuable insight from interviews with several district mentee teachers who were part of the program in 2020–2021.

Four themes emerged from these conversations:

• **Managing change**: In most cases, the teachers we spoke with were leading change in the first-ever virtual program their school or district had offered. In many cases, the decision was quickly made, and they had a small window of time to figure things out and begin to support students.

• **Equipping teachers**: Teachers in a virtual program have had to learn an enormous amount of new information. The Mentoring program helped teachers acquire the critical skills and expertise needed to support a virtual program including the technology platform or LMS, the online curriculum, and other tools to engage and support student learning.

• **The support of leadership**: Support from school and district leadership was critical. Teachers felt very strongly about the support they have received from the mentoring program indicating that they would simply not be where they are without it.

• **Transformational vs. transactional**: The Virtual Teacher Mentoring program is a very relational based model of professional development and support. It requires high-touch and high-responsiveness. Teachers feel they have that personal relationship with their mentor and speak highly of their responsiveness, expertise, and advice.
Appendix A

DATA AND MEASURES
To better understand the student outcomes associated with Edmentum’s Virtual Teacher Mentoring program, academic outcome data were analyzed across four categories at the individual course level in nine subject areas. They include formative and summative assessment scores, course grades, project grades, and assignment completion. The analysis sample includes 700 course enrollments across three school districts: Oakdale Public School, OK; American International School of Nouakchott, Mauritania Africa; and Bristol Township School District, PA.

Students who completed courses in the three selected districts and whose teachers participated in the 2020-21 school year mentoring program were included in the analysis of course and assignment outcomes. Course completion was measured by analyzing whether students completed either at least 70% of course activities or the end-of-course assessment.

<table>
<thead>
<tr>
<th>Student Course Outcome</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Grade</td>
<td>Once the semester is complete, students receive a final grade of 0-100 in each course they enrolled in.</td>
</tr>
<tr>
<td>End of Course Exam</td>
<td>Each semester course includes an end of course exam that measures the learning objectives within that course.</td>
</tr>
<tr>
<td>Post-Unit Test</td>
<td>Each semester course is divided into instructional units, and each unit includes a unit post-test that measures the objectives within that unit.</td>
</tr>
<tr>
<td>Mastery Test</td>
<td>Each instructional unit within a course is divided into lessons, and each lesson includes a mastery test that measures the specific objective of that lesson.</td>
</tr>
<tr>
<td>Unit/Course Activity</td>
<td>Depending on the course subject, courses contain unit and/or course-level activities that measure students’ ability to solve problems or complete tasks that require higher-order thinking.</td>
</tr>
<tr>
<td>Threaded Discussion</td>
<td>Each instructional unit includes a graded discussion topic that allows students to demonstrate critical thinking.</td>
</tr>
</tbody>
</table>
Student outcomes shown in Table A1 and Figure A1 were analyzed based on 700 course enrollments for students from three Edmentum Virtual Teacher Mentoring districts for the 2020–21 school year. Individual students could be enrolled in multiple courses. Outcomes analyzed were course grades, end of course exam, post-unit test, mastery test, unit/course activity, threaded discussion, as well as enrollment counts. Figure A1 shows a visualization of the distribution of final course grades for each subject. The black lines in the figure represent the median grade, and the purple rectangle ranges from the 25th-75th percentile of the student grade distribution.

Table A1 and Figure A1 show that median course grades range from 68% in English language arts to 83% in electives courses, with overall median value equal to 75%.

### Table A1: Student Outcomes by Subject (median value)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Final course grade</th>
<th>End of course exam</th>
<th>Post-unit test</th>
<th>Mastery test</th>
<th>Unit/Course activity</th>
<th>Threaded discussion</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math</td>
<td>74</td>
<td>64</td>
<td>65</td>
<td>80</td>
<td>90</td>
<td>100</td>
<td>146</td>
</tr>
<tr>
<td>English Language Arts</td>
<td>68</td>
<td>68</td>
<td>75</td>
<td>80</td>
<td>88</td>
<td>85</td>
<td>151</td>
</tr>
<tr>
<td>Science</td>
<td>77.5</td>
<td>68.5</td>
<td>70</td>
<td>80</td>
<td>95</td>
<td>100</td>
<td>114</td>
</tr>
<tr>
<td>Social Studies</td>
<td>80</td>
<td>77</td>
<td>78</td>
<td>100</td>
<td>90</td>
<td>90</td>
<td>104</td>
</tr>
<tr>
<td>World Languages</td>
<td>70</td>
<td>60</td>
<td>87</td>
<td>100</td>
<td>90</td>
<td>95</td>
<td>21</td>
</tr>
<tr>
<td>Career &amp; Technical Education</td>
<td>74.5</td>
<td>66.5</td>
<td>70</td>
<td>100</td>
<td>94</td>
<td>100</td>
<td>52</td>
</tr>
<tr>
<td>Health &amp; Physical Education</td>
<td>79</td>
<td>80</td>
<td>80</td>
<td>100</td>
<td>98.5</td>
<td>100</td>
<td>71</td>
</tr>
<tr>
<td>Electives</td>
<td>83</td>
<td>76.5</td>
<td>77</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>25</td>
</tr>
<tr>
<td>College Prep</td>
<td>79.5</td>
<td>80.5</td>
<td>73.5</td>
<td>100</td>
<td>—</td>
<td>—</td>
<td>16</td>
</tr>
<tr>
<td>Overall</td>
<td>75</td>
<td>70</td>
<td>74.5</td>
<td>100</td>
<td>90</td>
<td>100</td>
<td>700</td>
</tr>
</tbody>
</table>
Figure A1: Median values

Math \( (n = 146) \)

English Language Arts \( (n = 151) \)

Science \( (n = 114) \)

Social Studies \( (n = 104) \)

World Languages \( (n = 21) \)

Career & Technical Education \( (n = 52) \)

Health & Physical Education \( (n = 71) \)

Electives \( (n = 25) \)

College Prep \( (n = 16) \)
### 5 Key Components of a Sustainable Virtual Program

Part of Edmentum's ongoing work is to define what high-quality sustainable virtual instruction looks like. After decades of work as an innovator in online teaching and learning, Edmentum has identified several key components for building a sustainable, high-quality virtual program.

| High-Quality Instructional Practice | • Effective instructional practices, tailored for an online environment  
| | • Experienced virtual instructors, highly-qualified and state certified  
| | • Active learning strategies |
| Online Curriculum and Assessment | • Instructional materials that meet students where they are  
| | • Aligned with state’s college and career ready standards  
| | • Multimodal and student-centered |
| Virtual Platform | • Organized from a student’s point of view  
| | • Simple, efficient, and ubiquitous  
| | • Data-driven intervention |
| Whole-Learner Services | • Multi-role support teams: coaches, advisors, counselors, and mentors  
| | • Specialized services for students with disabilities, ELLs |
| Continuous Improvement | • A deliberate focus on learning growth and continuity  
| | • An emphasis on growth-oriented goals and accountability metrics  
| | • Promoting students’ beliefs that they have the ability to meet goals by changing how they approach new learning experiences. |
The Science Behind Virtual Teaching Effectiveness
Edmentum’s virtual instructional training and development for teachers is built on a foundation of research-based pedagogical principles.

ESTABLISHING STUDENT-TEACHER RELATIONSHIPS
When students feel welcomed and comfortable, they develop a sense of community, and they are more receptive to learning (Brown, 2010). When students join an Edmentum online learning community, they immediately receive tailored video introductions from their teacher or coaches. They’ll also use the time to get acquainted with the school norms and culture. Research has shown that, in a virtual learning setting, instructors can enhance collaboration and establish a community of inquiry through the instructional methods that are used (Mandernach, 2009). Research demonstrates that students who received personalized feedback from their instructors felt more satisfied in the learning experience and achieved larger academic gains than students who did not (Gallien & Oomen-Early, 2008).

VIRTUAL INSTRUCTIONAL TOOLS AND TECHNIQUES
Edmentum instructors are trained to effectively leverage and utilize a variety of virtual instructional tools and techniques, including Edmentum’s course learning platform, online video technology to record instructional sessions or micro-lectures. Instructor-created video content, for example, is a simple strategy for increasing students’ sense of connection with their teachers. The utilization of personalized video content has been shown to increase the level of engagement and satisfaction experienced by students (Underdown & Martin, 2016).

TEACHER QUALIFICATION, EXPERIENCE, TRAINING, AND LEARNING OPPORTUNITIES
EdOptions Academy employs highly qualified, state-certified teachers who are experienced in teaching online courses in a virtual environment. All EdOptions Academy teachers have a bachelor’s degree from an accredited institution, a valid state teaching certificate for the states and subjects they teach, and experience teaching in both traditional and virtual classroom settings. Many teachers hold multiple certifications, advanced degrees, and endorsements. Specifically, EdOptions Academy teachers have an average of 14.8 years of teaching experience; 73.6% of teachers have a master’s degree or higher, and 93% have certifications in multiple states. In addition, all newly hired teachers will receive a rigorous introductory training program as well as access to continuous learning opportunities.

TEACHER EFFICACY AND CONTINUOUS IMPROVEMENT
EdOptions Academy’s academic department chairs ensure that all EdOptions Academy teachers are equipped with sufficient information and resources needed for instruction. The department head reviews teacher performance three times per year (during the academic year of August through June) to ensure that instruction consistently meets high standards. Reviews consist of one or more walkthroughs, feedback, evaluation checklists, and a final summative evaluation. Walkthroughs consist of checks on the teachers’ certification for good standing and the use of technology for synchronous and asynchronous communication purposes (Zoom classrooms, email, IM, Web conferences, live sessions, threaded discussions, and file-sharing activities). Instructional reviews examine teachers’ use of innovative strategies, the quality of their feedback and monitoring of students, and the degree of their responsiveness to students with special needs.
### Edmentum’s Research-Based Online Course Design Principles

<table>
<thead>
<tr>
<th>Principles</th>
<th></th>
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</table>
| **Mastery Learning:**  
Focus on efficient learning. Students show mastery of key content, invest time in not-yet-mastered content, and proceed through learning new content at their own pace. | When it comes to introducing students to new concepts, content, or knowledge, there is a delicate sweet spot in their brains. When it’s activated, the learner sees a path to mastery of new concepts. This critical spark enables students to work efficiently at their own pace with a focus on what they need to learn. (Le et al., 2014). It also subtly promotes a growth-mindset orientation in students, which research shows is a strong predictor of academic success.  
Edmentum courses apply principles of mastery learning by establishing powerful learning objectives that effectively define what students will know and be able to do at the end of a course. Each learning objective includes a mix of assessment and learning experiences. Through formative, low-stakes assessments, as well as unit pretests, Edmentum courses provide information that allows teachers and learners to make self-directed decisions about their own learning. This ensures that the pace of instruction matches what each student is ready to learn (Haynes et al., 2016; Le et al., 2014). |
| **Active Learning:**  
Involve learners in responding to and manipulating information while they learn — ensuring their involvement in building understanding and minimizing passive reception of information. | Decades of research support active learning's basic tenet, which is that students learn more when they are actively engaged in the content that they are expected to master (Prince, 2003). This student-centered instructional method puts the learner in charge, contrasting a traditional lecture format, in which a teacher delivers information to a classroom of students who passively receive it (Bonwell & Eison, 1991). Hattie’s research (2009) shows that as students become active in the process of their own education, learning outcomes improve. Edmentum’s courses include a range of effective teaching practices and active learning strategies. |
| **Deliberate Practice:**  
Offer intentional, structured, and sustained practice that builds thoughtfully in complexity to support increasing levels of understanding. | Research shows that deliberate practice is a powerful influence on student achievement because initial learning can be consolidated from surface knowledge and committed to long-term memory (Hattie, 2009; Hattie & Yates, 2013). It refers to intentional, highly structured, and sustained student effort that impacts knowledge and skill acquisition and retention. The learning curve relies on the links among practice, reinforcement, immediate feedback, and performance (Campitelli & Gobet, 2011; Hattie & Yates, 2013).  
Edmentum’s learning design embeds deliberate practice and feedback within lesson tutorials. Integrated interactions allow learners to immediately apply new knowledge to gain higher levels of understanding. Students receive immediate feedback on correct or incorrect answers, including an explanation that encourages them to learn from their mistakes and successes. Extended practice provides additional applications of recent learning through interactions that are constructed to support and build mastery and ordered to build from basic foundational skills to the application of higher-level learning. |
<table>
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<tr>
<th>Principles</th>
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<td><strong>Explicit Instruction:</strong>&lt;br&gt;Support successful learning by providing clear skill statements, modeling of learning outcomes, and reducing cognitive load.</td>
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<td><strong>Scaffolding:</strong>&lt;br&gt;Buoy learning by providing specific supports when learners need them and systematically removing them—leading to independence as learners approach mastery.</td>
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<td><strong>Metacognition:</strong>&lt;br&gt;Engage students in reflecting on how they best learn and evaluating their thought processes to help themselves along their learning path.</td>
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Edmentum Courses
Independent Review and Approval

Edmentum’s standards-aligned digital courses are submitted for external review and approval by independent organizations and experts to ensure that they are based on effective pedagogical principles and comprehensively cover state and national standards of learning. In 2020, Edmentum submitted digital curricula across 2,479 courses for review by curriculum experts and educators in 49 states.

99% first-round approval rate
References


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