



AUTHORING STUDENT SUCCESS:

How K-12 Educators Navigate Copyright Law to Create Custom Curriculum

By Evo Popoff

Produced by



Commissioned by



FOREWARD

Foreword by Jane Swift

Across the country, district leaders are preparing anew for possible disruptions to the school year, courtesy of COVID-19. Will there be rapid shifts between face-to-face and virtual classrooms? Local budgets cut to the quick? Students' learning losses exacerbated by a lack of access to technology and other economic inequities? For K-12 educators, the only certainty right now is uncertainty.

COVID-19 is shaking up the way our school systems operate while exposing gaps in equity and access that have always existed. The federal government is handing out dollars and states are stepping in to provide support. But it's clear that in a nation as vast and diverse as ours, local educators and district leaders are uniquely qualified to identify the needs of their communities — and they deserve the flexibility to address them.

It's also apparent that mass-produced curricula and instructional materials, designed to be broadly applicable and meet far-away state standards, often fall short in meeting students' needs during complex times. Simply put, what works in Houston, Texas, doesn't necessarily work in Holyoke, Massachusetts.

It may seem counterintuitive to ask that educators take on yet another initiative by creating or curating content. But addressing the needs of students in this moment with off-the-shelf curriculum — typically a set of textbooks built around the educational standards of one or two large states — creates as many issues as it solves. For too many years, educators have dealt with content that doesn't reflect their community's standards or desire for inclusiveness by "hacking" traditional textbooks.

Fortunately, innovation and technology have created simpler ways for districts to embrace custom content while also saving time and making marked improvements in their classrooms. For starters, customized content provides unparalleled flexibility. That's a necessity given the extended "summer slide" some students experienced after COVID-related changes to the school day. Learning losses vary from school to school, classroom to classroom and even from student to student. Creating and curating relevant materials will be one way to tackle those losses.

Teachers know their students best and, therefore, better understand their needs. The recent pivot to remote learning also demonstrates the importance of making content engaging to keep students connected. This report provides an example of an Oklahoma school district that routinely augments a lesson on erosion with pictures of a nearby mudslide. That one small change — replacing generic photos with something local and identifiable — turned an abstract earth science lesson into something tangible and relevant.

Community standards and engaging learning are critical, but so are practical considerations. The economic fall-out from COVID19 means that school budgets will be squeezed nationwide. Most custom materials aren't free, but they do save districts money by building local content that will meet the community's needs for many years.

Finally, customization lets district administrators localize courses to increase cultural responsiveness and reflect the people and values in their communities. Culturally-responsive content gives students richer, more personalized material and a learning experience that has meaning in their lives. In some schools, that may mean using texts that reflect the stories of immigrants or migrant families. In others, it may involve civics lessons that discuss the role of activism in local government. Whatever the context, custom materials augment existing lesson plans just enough to show students that their norms for communication and behavior not only are valued, but important.

And that, in turn, increases opportunities for more equitable learning, which is the focus of a recent framework for school and district leaders created by the nonprofit I lead, LearnLaunch. The Building Blocks of Equitable Remote Learning offers 10 categories for making learning more inclusive and equitable at a time when students are attending class from their living rooms. It draws on our public-private partnership with the Massachusetts Department of Elementary and Secondary Education and from listening to the challenges facing school and district leaders during the early days of the school closures last spring.

Among the issues, we suggest districts explore: "Elevate culturally responsive teaching and learning practices." This path encourages educators to consider students' cultural and learning differences when planning instruction and developing learning materials — something that can be accomplished through custom content.

Another block offers ways to connect regularly with every student using the mode and schedule that best meets their family's needs. That's important at a time when not every student has access to a device and not every lesson is best taught with digital materials. Teachers are urged to consider their students' learning environments: "How are you varying the mode of communication to fit student and family needs?" And, "What opportunities are students given to advocate for themselves and express their learning preferences?"

During a global pandemic, it's especially challenging for district leaders to coordinate the use of quality custom content. But when they assert control, they guarantee the instructional appropriateness of the materials, including whether they meet state educational standards or comply with copyright laws. Districts are likely to continue developing content within a world traditionally inhabited by large, well-funded publishing companies. While this may be a new world for them, it's good to know organizations like XanEdu and others spotlighted in this white paper can help districts navigate potential challenges.

Like remote learning, customization offers great potential for learning that's more student-centered, more equitable and more effective. And both offer districts a powerful path forward.

Jane Swift is the former Lieutenant Governor and Governor of Massachusetts. She is President and Executive Director of LearnLaunch, a nonprofit education innovation organization.

ACKNOWLEDGMENTS

We are grateful for the expertise of friends and practitioners who have provided valuable support and insights to the authors in the development of this paper, including:

Jane Swift

President and Executive Director of LearnLaunch and former Lieutenant Governor and Governor of Massachusetts

Dan Gohl

Chief Academic Officer of Broward County Public Schools (BCPS)

Chris Cerf

Former Superintendent of Newark Public Schools and former Commissioner of Education of New Jersey

Ronn Nozoe

Associate Executive Director of ASCD

Roy Kaufman

Managing Director of Business Development and Government Relations at Copyright Clearance Center

Bart Epstein

President and CEO of Jefferson Education Exchange and Research Associate Professor at the University of Virginia Curry School of Education

Corie Colgan

Interim Chief of Teaching and Learning at District of Columbia Public Schools (DCPS)

Whitney Whealdon

Former Director of ELA Guidebooks at the Louisiana Department of Education and Director of Learning Innovation at Learning Tapestry

EXECUTIVE SUMMARY

The ability to customize curriculum is vital for K-12 school districts looking to supplement their content to meet the varying needs of all learners. Principals want quality materials that they can have confidence in and that, ideally, can be delivered both digitally and in print. Teachers want the opportunity to select the appropriate materials for their specific students and learning experiences. Selecting custom content, such as a variety of authentic text, brings the groups together, giving them a sense of ownership. It also ensures a more consistent adoption of and engagement with the content, a critical goal for district leaders.

Because publishing usually isn't a school systems' core competency, the challenges of time and logistics needed to create, curate and deliver content at the scale of traditional textbook publishers can be daunting. Additionally, one often overlooked challenge is presented by U.S. copyright law: familiarity with the copyright protections of curriculum materials or the circumstances in which their use is allowed. That can lead to inadvertent copyright violations, which not only jeopardize the curricula built upon them, but open districts to lawsuits. Seeking to avoid this challenge altogether, some districts forgo the use of copyrighted content, often using open or home-grown materials that may sacrifice quality for convenience.

This report spotlights work by districts and educators to customize and curate content to reach their specific learners. It explores why those districts are venturing into what has historically been uncharted territory and how they are addressing the challenges they find there. And it tells the story of districts that have pursued a safe middle path by partnering with custom content providers such as XanEdu and copyright experts like Copyright Clearance Center (CCC), which provide districts with an efficient way to get the content they need and a better understanding of the copyright implications of custom content publishing.

TERMS TO KNOW

Copyright: A legal status that grants certain exclusive rights to the creator of a piece of content (or her designee) in print and digital formats.

Copyright infringement: The act of reproducing, distributing, performing, publicly displaying or deriving another work from copyrighted content without the permission of the copyright owner.

Fair use: An affirmative defense that legally excuses some otherwise infringing activities for certain types of use on a case-by-case basis. Uses that may be fair use include teaching, journalism, criticism and research.

Open education resources (OER): Instructional materials that can be used without securing copyright permission because they're licensed for free use.

Public domain: A reference to content that is no longer under copyright protection or never was to begin with. The public can use public domain works without the permission of the author, publisher or other copyright owners.

Teach Act: A law enacted by Congress in 2002 that lets educators use copyrighted materials for distance education, with certain restrictions.^{1,2}

TABLE OF CONTENTS

01 Foreward

03 Acknowledgments

04 Executive Summary

05 Terms to Know

07 About the Author

08 Introduction

10 The Case for Customization

11 Challenges of Customization

13 Case Studies

15 Solutions

17 Bibilography

ABOUT THE AUTHOR

Named State Policy Maker of the Year by the State Education Technology Directors Association (SETDA), Evo Popoff ranks among the small handful of education policymakers who have worked as an education entrepreneur and executive within the private sector.

Evo previously served as Chief Innovation and Intervention Officer and Assistant Commissioner for the New Jersey Department of Education, where he oversaw the state's education technology and school and district improvement efforts. Prior to joining the Department, Evo led the development of education technology products and school improvement solutions in collaboration with district and state leaders and educators.

Before beginning his career in education, Evo practiced law at McDermott, Will & Emery where he worked on labor and employment, antitrust and general corporate issues.

He holds a B.A. in Political Science from the University of Chicago and a J.D. from the George Washington University Law School.



XanEdu's K-12 CustomBook Solutions help you make education personalized and affordable by giving you control to create unique materials based on your specific students' needs. At XanEdu, we empower curriculum creators to take back control of the content, quality and costs of instructional materials.



Whiteboard Advisors is a social impact agency for education. For more than 15 years, our team of educators, policy wonks and storytellers has brought an unmatched understanding of the policy landscape to our collaboration with the most transformative organizations and entrepreneurs in education. We're passionate about taking breakthrough ideas to scale to reimagine how we learn, work — and live.

INTRODUCTION

While teachers have curated disparate student resources for ages, district-coordinated customization is a relatively new practice. Teachers regularly gather content that has already been published — such as tests, worksheets, experiments, poems or short stories — to supplement the curricula. Others create quizzes, lab experiments and other content on their own. K-12 teachers **report** spending about seven hours a week looking for instructional materials and another five hours a week creating their own.³ Increasingly, however, district leaders are discouraging teachers from “freelancing” instructional materials. And with good reason. Those materials may or may not adhere to state standards or correlate with end-of-grade tests, leading to a disjointed curriculum.⁴ The practice also raises concerns about student data privacy (when using materials online) and copyright infringement, two areas that cry out for oversight from district leaders. It’s not uncommon to find a host of issues raised in a school system where multiple teachers maintain separate collections of custom content, all curated or created without guidance from district administrators.

Schools aren’t abandoning custom content, though. In fact, customization is fast becoming part of academic planning in districts across the country. When the use of supplemental content is intentional and carefully crafted, districts reap tremendous benefits — from more personalized learning to increased relevance through local content or cost savings and increased equity.



Teachers know their students best, and, therefore, better understand their needs.

Jane Swift
President and Executive Director, LearnLaunch

It’s undoubtedly a positive trend in education. But even when it’s part of a district’s strategic plan, customization presents challenges. Content still must align with state standards, still must meet a high threshold of quality and still must provide instructional benefit to a wide range of students.

Another hurdle, one that often gets short shrift from educators, is navigating the labyrinth of laws protecting copyrighted materials. Often, districts curate content from copyrighted sources without securing permission from the owners — because they don’t know they need it or don’t know how to get it. Still others might mistakenly believe they can photocopy portions of a novel year after year. And a few might avoid the use altogether — when, in fact, they could have easily received permission.

Copyright mistakes can expose school districts to legal ramifications. In October 2019, the Houston Independent School District paid \$7.8 million to settle a copyright infringement lawsuit from an educational materials supplier. The district used a variety of DynaStudy-produced study guides, cropping out copyright information and the company’s logo.⁵

“When you move to a world of custom materials, the copyright considerations become more important,” said Roy Kaufman, managing director of business development and government relations for the Copyright Clearance Center, which helps academic and corporate users secure copyright licenses. “That said, there is not much copyright education at the school district level, and a school district’s attorney is more likely to be an expert in procurement or HR than copyright. Copyright law is a specialized field.”

Districts that want to embrace a broader use of custom content, such as a variety of authentic text, while upholding copyright laws have three paths forward:

- 1 They can use custom materials — copyright status notwithstanding — and hope they get away with it. But as the Houston lawsuit shows, this is a potentially costly proposition. As the use of custom content continues to grow, so too will scrutiny from copyright holders.
- 2 They can avoid using any copyrighted materials altogether. That option is equally problematic, offering a cost-effective solution but leading to missed opportunities, including personalized instruction, increased equity, localization and cost-savings.
- 3 They can partner with a custom publisher, such as XanEdu, that can provide the benefits of custom content creation while absorbing the legal and financial risks on behalf of school districts.

Ultimately, this white paper aims to provide answers for districts looking to customize their instructional materials while managing copyright compliance.



Teachers spend 7 hours per week searching for instructional resources (both free and paid-for) and another 5 hours per week creating their own instructional materials.

Education World 2017 report

THE CASE FOR CUSTOMIZATION

The landscape of educational content has changed significantly in the last three decades. Dan Gohl, Chief Academic Officer for Broward County Public Schools (BCPS) in Florida, said:

“Twenty to thirty years ago, (educators) were saying, ‘I’m buying this brand because I know that this means there’s some sort of quality here.’ There weren’t a ton of options.”

Today, not only are there more options, but districts are taking more initiative to design their own curricula. BCPS, for example, is moving away from buying all of its content and moving toward curating materials or, ideally, creating its own. “What we want is a cross section of materials that support our kids coming to understand world history or geography or whatever the topic is,” Gohl said.

Customization, as opposed to buying complete curricula and/or off-the-shelf textbooks, allows districts to take back control of content, quality and costs of instructional materials. It also offers them more relevancy and flexibility in lesson planning, which makes learning more meaningful to students.

“The demand over the last decade for higher standards and culturally responsive content has exposed gaps in traditional materials and districts – and sometimes states – have eagerly stepped in to develop content to fill those gaps in their pursuit of high-quality curriculum,” said Chris Cerf, former Superintendent of Newark Public Schools and former New Jersey Commissioner of Education.

Take, for instance, the customization of an online science course in Broken Arrow Public Schools in Oklahoma. Teachers replaced generic photos of erosion with pictures of a mudslide that happened on a nearby interstate.⁶ That small, simple action localized learning for the district’s students, making the lesson real in a way homogenized pictures never could.

“Districts embark on this because they understand there are gaps between curriculum and state expectations,” said Ronn Nozoe, Associate Executive Director of ASCD, a 113,000-member organization of educators that helps them enhance their craft.



Districts embark on this because they understand there are gaps between curriculum and state expectation.

Ronn Nozoe
*Associate Executive Director
of ASCD*

CHALLENGES OF CUSTOMIZATION

Districts have a wealth of content created by traditional textbook publishers, newspapers, magazines, blogs and rank-and-file teachers available at their fingertips.

This creates two challenges for district leaders.

The first involves quality. Not all resources are created equal. Some educational materials align with state standards, but many don't. That leaves it to instructional teams to determine whether content meets state guidelines. And that may not be familiar ground for a new generation of educators who didn't take courses in instructional design.

"In order to meet educational standards and requirements, a lot of validation testing goes into materials at creation," said Kaufman of CCC. "The large volume of content on the web can be problematic at the teacher level if it leads to inconsistency across the district. Often, districts need to customize content to render it relevant for their students and to ensure alignment with standards."

The second challenge, copyright infringement, is directly related to the first. Districts frequently, and unknowingly, run afoul of copyright laws, motivated by a desire to supplement the core curriculum with content

that's not only high quality but chosen for their students. That's especially true in language arts, where students need complex texts related to the work they're doing in class — for example, historical context or music from that period — to align with state-mandated concepts and competencies.

Unless those works were published under an open license or are part of the public domain, then the district must secure permission.⁷ "This work isn't easy and can be fraught with challenges if the goal is not only a quality curriculum, but one that can be readily adopted. Districts and states pursuing this work would be wise to follow the example of peers — such as the work done by the Louisiana Department of Education — that have successfully navigated those challenges," said Cerf.

**Not All
Resources Are
Created Equal**

THE OER CONUNDRUM

In 2015, the U.S. Department of Education encouraged districts to begin using open education resources, including textbooks, videos, tests, modules, complete courses, software or any tool or resource a teacher might incorporate into the classroom.⁸ A survey two years later revealed that 79% of U.S. school system technology leaders said OER were part of their districts' digital content strategy.⁹ Since then, thousands of more schools have begun using some type of high-quality, openly licensed material.

But it's not always clear what material is open and what is protected by copyright laws. According to a guide for K-12 educators on OER created by a coalition of licensing and educational organizations, "The key distinguishing characteristic of OER is its intellectual property license and the freedoms the license grants to others to share and adapt it. If a lesson plan or activity is not clearly tagged or marked as being in the public domain or having an open license, it is not OER. It's that simple."¹⁰

Additionally, some OER providers haven't secured the proper permissions themselves for use of third party content in their lessons, leaving districts open to liability for being a "contributory infringer." And rather than clearing up the copyright issues themselves, those providers leave it to districts to take the risk.¹¹

Because of the complexities of copyright law, experts urge district leaders to create and follow policies regarding the use of copyrighted materials.

"As more districts replace their old textbooks with a range of instructional materials — including homegrown content created by administrators, teachers and contractors — they find themselves stepping in the shoes of traditional publishers who must carefully manage issues of intellectual property," said Bart Epstein, President and CEO of the nonprofit Jefferson Education Exchange, and a Research Associate Professor at the University of Virginia Curry School of Education. "With traditional publishers, everything is clear: The publishing company owns everything created by its employees and contractors. In the educational context, ambiguity about who owns what can lead to hurt feelings, financial disputes and — in the worst case scenario — a district losing the ability to use content created by its own teachers. Districts that are intentional in these efforts and create clear policies and procedures for the educators creating and curating their curriculum can reap the benefits of custom curriculum while minimizing potential risks, such as lawsuits that could arise if educators use content without permission."

There's another good policy for districts looking to introduce customized content into their curriculum: When in doubt, seek permission.

CASE STUDIES

DISTRICT OF COLUMBIA PUBLIC SCHOOLS

District of Columbia Public Schools (DCPS), the district's central curriculum team, collaborated with teachers to develop a custom curriculum to address a challenge that plagues many districts across the country: ensuring every student has access to high-quality content. To solve the access challenge, DCPS searched for print ELA materials that covered the full range of standards and topics that were important and relevant for their students. Still, the team was unable to find any commercial curricula that met their criteria. Not giving up on their goal, the district secured grant funding for the local development of their own printable ELA curriculum called "Passport to Learning" (grades K-5) and "District Visions" (grades 6-12).

"Our curriculum was developed collaboratively by DCPS' curriculum team and teachers. It was built with equity, access and social justice at its core," said Corie Colgan, DCPS's Interim Chief of Teaching and Learning.

Delivering printed materials was fundamental to the solution in DCPS. A printed custom book may seem like an 'old' technology, but it has fewer dependencies. Digital delivery requires a device, internet access and digital fluency and understanding on the part of both students and teachers. For school districts with wide disparities in income and education,

digital solutions can exacerbate inequality. Students and teachers are familiar with print and face few barriers to interacting with the format.

While numerous commercially available print materials exist — including traditional textbooks — these materials are developed for general appeal by meeting a broad set of common standards and themes. This approach, which results in minimal need for differentiation in the instructional materials from state to state, helps the textbook publishers achieve scale cost-effectively but at the cost of providing districts and their students with relevant content that addresses local needs.

For DCPS, a custom curriculum provided the only path for meeting the needs of all their students. But, while the district's central curriculum team and educators had the expertise and vision to develop the content for their custom ELA curriculum, they knew they needed help to pull together and publish their curriculum to achieve their vision.

"This year, access to print materials won't be a barrier between students and engaging, rigorous texts," said Colgan. "That's because we've partnered with XanEdu to collate, secure any required copyright permissions, reproduce materials and deliver high-quality readers — and they did it all on a tight deadline."

CASE STUDIES

LOUISIANA GUIDEBOOKS

One notable successful implementation of custom and OER curriculum is in the state of Louisiana.

Frustrated with the historically struggling performance of its public schools, the Louisiana Department of Education (LDOE) began a search for a well-rounded, standards-based ELA curriculum by turning to traditional textbook solutions. When it could not find a program that fit the specific needs of the state's students, the LDOE decided to develop its own high-quality curricula that would provide teachers with the flexibility to tailor their lessons to the needs of their students, while ensuring alignment with Louisiana state standards.

To provide the necessary high-quality, complex texts that would support the new lesson plans, the LDOE selected copyrighted materials (e.g., text excerpts, short stories, poetry, articles, etc.).

In doing so, this created two important questions for the LDOE:

- 1 Would an end-user understand the copyright licensing requirements associated with the texts and seek permission?
- 2 If a district did understand the licensing requirements, would it have the lead time, resources or capacity to seek out permission from over 200+ rights holders?

Proceeding with this copyrighted content without a licensing and distribution solution would result in significant implementation barriers ranging from districts infringing copyright law to excluding critical elements of the curriculum.

To create scalable solutions for their districts, the LDOE partnered with XanEdu, a custom publisher centered on supporting K-12 customization and OER implementations, and together they created "Readers" from the copyrighted texts. XanEdu and its partner, Copyright Clearance Center (CCC), managed the permissions licensing as well as the editorial, design and production and distribution process for the Readers.

CASE STUDIES

LOUISIANA GUIDEBOOKS (CONTI.)

By packaging the copyrighted materials together, the LDOE created a straightforward, legally compliant mechanism for districts that were accessible and easy for teachers to use, thereby removing previous implementation barriers.

‘Often, teachers feel like they should stick with the exact language in the textbook, but our open custom solution provides an opportunity to adapt (the material) and make it appropriate for the students in their classroom,’ said Whitney Whealdon, former director of academic content for LDOE.

In addition to having a high-quality curriculum, this more affordable solution allowed the LDOE to access additional funding for aggressive professional development and implementation support. In 2015, Louisiana’s 4th graders showed the highest gains in reading scores of any state in the U.S., gains that have held steady since then.

SOLUTIONS

Customization can be a wonderful tool for school districts for addressing the challenges of adoption, equity and relevance. But when done poorly, the process can create even more challenges — including potential legal issues. Districts that have successfully implemented custom content, such as a variety of authentic text, have done so intentionally.

“One major challenge is scale when it comes to copyright questions,” said Kaufman of CCC. “Determining when permissions is required, identifying the owners of the works and then seeking permission can be hard if it is not within your expertise.”

ADDENDUM – COVID AND CUSTOM CONTENT

Whether students return to brick-and-mortar classrooms or virtual ones, the 2020-21 school year will present myriad challenges for educators because of the coronavirus.

The sudden shift to distance learning in March 2020 created unprecedented disruption — makeshift digital lesson plans, widespread disparities in access to technology, harried parents unprepared for their role in homeschooling — resulting in unequal learning outcomes across student populations.

“The risk is that in some schools next year, you are going to have a kid with parents who were able to provide high-quality supplemental instruction at home, sitting next to a kid who hasn’t received meaningful instruction since February,” former U.S. Education Secretary John King, president and chief executive officer of the Education Trust, told the Washington Post.¹²

At the same time, districts are expecting budget cuts as they face a unique recession where they must provide additional services, particularly for subsets of students significantly impacted by school closures, with potentially fewer resources.

Districts likely will spend much of the 2020-21 school year fitting 1½ years worth of instruction into one calendar year. Content customization will allow districts to build that into the curriculum, which will increase the opportunity for more equitable learning.

BIBLIOGRAPHY

¹ www.copyright.gov. Accessed June 10, 2020.

² www.ala.org. American Libraries Association. Accessed June 10, 2020.

³ Gorman, Nicole. "Survey Finds Teachers Spend 7 Hours Per Week Searching for Instructional Materials." *Education World*. July 2, 2017. Accessed April 22, 2020.

⁴ "Open Educational Resources (OER) in the K-12 Curriculum." The William and Ida Friday Institute For Educational Innovation and Public Schools of North Carolina. Accessed May 3, 2020.

⁵ Carpenter, Jacob. "HISD settles study guide copyright case for \$7.8M." *Houston Chronicle*. Oct. 28, 2019. Accessed June 13, 2020.

⁶ Brown, Emily Ann. "How open educational resources are coming of age." District Administration. Dec. 16, 2019. Accessed May 2, 2020.

⁷ Kaufman, Roy, and Andrew Campana. "OER: Lessons from the Field." *Insights*. 2019. Accessed May 2, 2020.

⁸ "U.S. Department of Education Recognizes 14 States and 40 Districts Committing to #GoOpen with Educational Resources." U.S. Department of Education. Feb. 26, 2016. Accessed April 22, 2020.

⁹ "2017 K-12 IT Leadership Survey Report." Consortium for School Networking. Accessed May 6, 2020.

¹⁰ "Frequently Asked Questions: OER for K-12 Educators." Consortium for School Networking (CoSN), Creative Commons (CC), Creative Commons – United States (CC-USA), the Institute for the Study of Knowledge Management in Education (ISKME), the State Educational Technology Directors Association (SETDA), and the Scholarly Publishing and Academic Resources Coalition (SPARC). Accessed May 6, 2020.

¹¹ Kaufman, Roy, and Andrew Campana. "OER: Lessons from the Field." *Insights*. 2019. Accessed May 2, 2020.

¹² Huffman, Kevin. "Homeschooling during the coronavirus will set back a generation of children." *Washington Post*. March 27, 2020. Accessed May 2, 2020.