HIS 495- Rhode Island: Applied History & Policy

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New Technology, Old Problem: Developing OER Policies to Provide Low-Cost Materials for Rhode Island's Public Universities

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Executive Summary

- College textbook costs are rising rapidly. They are a significant barrier to access for many students, and especially under-represented populations.
- Open Educational Resources can reduce or eliminate the high cost of textbooks, but they require funding to successfully implement. Students, librarians, and international organizations advocate for their expanded use.
- Historically, educational reformers fought to reduce education costs and promote the role of the government to improve and ensure accessibility.
- Free public schools helped create the notion that education is a democratic ideal.
- Higher education reformers look to reduce the cost of and accessibility to colleges. The development of land-grant colleges and financial aid, like the Pell Grants serve to expand access.
- OER are an important step towards the democratic ideal of accessible education.
- Rhode Island must consider the best way to support OER development and whether to encourage their use among the most possible students or students with the greatest financial need.
- It is recommended that Rhode Island invest in OER development to create policies promoting their adoption at public state institutions.

Introduction

Balancing the necessary expenses of education with educational access has always challenged educational policymakers. Since the country's origin, political and educational leaders embraced the idea that widespread access to higher education is a democratic ideal. To this end, they have pioneered policies designed to improve its accessibility, so that a person's social or economic background is not a barrier to learning. Collectively, these programs represent a trend in American society towards making education more accessible over time in the ongoing pursuit of that democratic idea. That movement is not yet complete. The cost of college tuition including textbooks is increasing rapidly at a time when more students of low-income backgrounds seek a college education and student debt is a politicized issue. Historically, policymakers regard the costs associated with education as the most significant barrier to access, and they consider lowering or eliminating cost their primary goal.

Open Education Resources (OER) have emerged as a solution to address the high cost of college textbooks. Textbook cost is a hidden expense of higher education not reflected in the price of tuition. Free to low-cost OER eliminate that cost entirely, and their use promotes educational access. Effective OER use must benefit students with the greatest financial need. In the history of Rhode Island, Senator Claiborne Pell's development of the Pell Grant program models how needs-based government aid programs are constructed. The founding of the University of Rhode Island via the Morrill Land-

Grant Acts demonstrates the connection between accessibility, democracy and the public good. College reform ideas are rooted in the development of free public education, which transformed education from a private luxury to public, state-sponsored right. These historical analogues provide accessibility proponents with both the language of accessible advocacy and lessons of how to construct need- and subject-based educational aid programs. All are necessary to successfully address the ongoing textbook cost crisis and promote the use of OER.

Policy Context

Over the past decades, the ludicrously high cost of college attendance has become something of a punchline. "Hardly any adult," in the words of Brookings scholar James Koch "is unaware that the price of attending a college or university has been increasingly rapidly." [1] Between the 1997-98 and 2017-18 academic years, the overall costs of attending a four-year public university rose by approximately 6% every year: nearly three times as much as the average annual price increase for all other goods. [2] Between 2000 and 2014, this price increase led the national growth of median household income by as much as nearly 13%.[3] Put simply, the price of higher education is not only rising, but it is increasingly unaffordable for the average-income family. Rhode Island is not exempt from these trends. Between 2008 and 2018, the cost of four-year public university in the state rose by 43.2%, in line with the national average.[4] As a result, tuition accounts for about 18% of the median household income of families within the state.[5]

The scholarly publishing industry is not exempt from these tendencies in higher education. In fact, this industry offers an even more astonishing example of price inflation compared with the sticker-price of college. According to data collected by the Bureau of Labor Statistics, the price of college textbooks rose by some 88% between the years 2006 and 2016, compared to a 62% rise in tuition prices.[6] Individually, students spend approximately $1,000 annually on required textbooks. These costs exist, but as an invisible fee, and separate from the overall sticker price.[7] While the used book market exists as a method to reduce textbook expenses, predatory practices in the publishing industry and the requirements of college professors created a crisis for college students.

According to a 2014 Nebraska Book Company (Neebo) survey, 55% of college students are more worried about the cost of textbooks than the cost of tuition. While students have methods of addressing high tuition via scholarships and financial aid that may be paid over time, textbook purchasing is an immediate cost. As a result, 95% of surveyed students sought discounted purchasing options for required materials—including 47% who illegally pirated their materials. Just under half of students reported that they reconsidered their college choice based on the availability of free textbooks. This, NEEBO found, was a more significant deciding favor for students than traditional metrics such as class size, graduation rate, and quality of professors.[8] A similar 2018 survey conducted by Cengage revealed that 85% of students were financially stressed by textbook purchases. About one third of those surveyed reported changing their major, taking fewer courses, and avoiding trips home for financial reasons associated with required textbook costs. 43% reported skipping meals to save money for textbooks.[9]

The textbook crisis is real—both overshadowed and exacerbated by the rising cost of college tuition. To address these inequities in higher education, the Open education movement offers a solution in the form of Open Educational Resources (OER). OER are broadly defined as a no to low cost resource that can be freely shared and adapted by students and instructors. These qualities are adopted from the broader Open knowledge movement and are intended to allow instructors to better collaborate and customize their materials, as well as break down the inequitable access to traditional educational materials. Specially licensed for these purposes, OER are primarily digital materials, to enable quicker online distribution unbound from copyright restrictions. [10] As awareness of OER

grows, state and national governments in the US and globally are developing policies to encourage the use and development of OER as a viable solution to the textbook crisis and help improve access to information and education.[11]

Policy Issue

In 2016, Rhode Island Governor Gina Raimondo created the Open Textbook Initiative, the first and only state-level policy to promote the use and adoption of OER. The OTI's goal is to work with faculty at all institutions of higher education in Rhode Island to reduce student expenses on textbooks by $5 million dollars over the course of five years. To this end, the OTI partnered with Open educational leaders like the Open Textbook Network and the Scholarly Publishing and Academic Resources Coalition (SPARC) to better integrate OER into Rhode Island's public higher education curriculums.[12] While these goals are admirable, the OTI is not supported by legislation from the General Assembly. It is also less ambitious than other state OER programs, including those passed by Massachusetts and Connecticut.[13] State interest in OER is driven by the rapidly growing cost of university textbooks, which undermines access for lower-income students and students from traditionally under represented populations. To address this threat to educational inequity, Rhode Island needs to take stronger legislative action to promote OER as an alternative to high-cost textbooks. Doing so, the state can increase access to higher education regardless of one's background.

Literature Review Summary

Policy recommendations in favor of OERs come from a variety of stakeholders in government and education. Educators are often more concerned with the practicability of OER use and the implementation process on campus. Consequently, recommendations are framed to suggest precedent, and that existing expertise is capable of handling necessary curricular and technological shifts. Activists and large-scale organizations take a more idealized stance, denouncing the consequences of unchecked textbook prices, and focusing on the direct benefits OER use grants students.

The Student Public Interest Research Groups (SPIRGs) are among the most vocal advocacy organizations in favor of OER use. Over the past half-decade, SPIRG affiliates like Ethan Senack and Kaitlyn Vitez wrote several articles critically examining predatory practices within the scholarly publishing industry and monetary impact on college students, such as textbook bundling.[14] They typically argue that students will collectively save millions to billions of dollars annually if OERs replace traditional textbooks—even if only in select core courses.[15] Collectively, the SPIRG authors support the use of OERs as a "student friendly" solution to high textbook costs, and they broadly endorse both on-campus and legislative methods to promote their use.[16]

Librarian OER advocates, by contrast, often focus their recommendations on how to encourage OER adoption within the existing legal and campus infrastructure. The Scholarly Publishing and Academic Resources Coalition (SPARC), founded as a professional alliance in support of the Open movement, offers the most direct OER recommendations, and most notably compiling a legislative playbook of current in-state OER laws and templates for other interested legislatures to use as a model.[17] Additionally, SPARC affiliates have written extensively about the economic feasibility of Open publishing in general, and how Open publishers may acquire funding, which is of applicable interest to OER advocates.[18] The American Library Association (ALA) likewise endorses OER use, but they focus their recommendations on campus-centric adoption strategies and ways to better position the profession as an OER and Open advocate on campus.[19] Both SPARC and the ALA's precedent focused recommendations help position OERs as a viable solution with both the infrastructure and legal precedent worthy of expansion to address the ongoing textbook price crisis.

Advocacy for OER use by international organizations tends to strike a tonal balance between activist and professional supporters.

Most prominently, the 2007 Cape Town Declaration of Open advocates defined the issue of OER adoption as one driven both by on-campus reform and legislative action, calling upon lawmakers to support open educational initiatives with tax funding. [20] Since the Declaration, other international organizations such as the OECD, UNESCO, and ICDE have funded studies regarding the use and benefits of OERs across the world, and they have recommended the development of governmental policies and public infrastructure to encourage their use.[21] Though the individual context of particular nations precludes these organizations from offering specific recommendations, their international prestige grants OER advocacy notable legitimacy and credibility.

Several New England states, including Massachusetts and Connecticut, have developed commissions to study OER use and make recommendations on statewide actions. In 2018 and 2019, both commissions from Massachusetts and Connecticut recommended greater public funding for the development and improvement of OERs digital infrastructure, and educator training.[22] Like SPARC's recommendations, those made by these commissions supports policy proposals with regard to existent state conditions. To strengthen and further develop their own OER policies, Rhode Island can use these states' findings as a practical model.

Historical Framework

The history of education in both the United States and Rhode Island includes the democratization of educational opportunities. Since the 18th century, educational reformers expanded the scope of both public and higher education to serve an increasingly wider portion of society. OER are best understood in this context, as a present-day example of the historical ideals of educational opportunity.

On August 20th, 1640, Rev. Robert Lenthal became the first schoolmaster in Rhode Island when the people of Newport voted to appropriate one hundred acres of land for a public school. Providence followed with their own allocation in 1663.[23] These colonial schools were not "public" as understood today, as they received limited municipal assistance, and they were overseen by private proprietors. [24] While towns often granted land, employed schoolmasters, and built school houses at the public expense, as in Newport and Providence, colonial schools were for the benefit of the elite.[25]

After the Revolutionary War, middle-class reformers pushed for the creation of tax-supported free public education. In Rhode Island these reformers, including John Howland and James Burrill, Jr., were upwardly mobile professionals often associated through social and political organizations. Collectively, they believed that education was essential to instill republican moral and civic virtues within future generations and improve their social standing. [26] These reformers were often members of urban professional organizations, like the Providence Association of Mechanics and Manufacturers, which collectively lobbied for educational reform. P.A.M.M. advocacy was primarily responsible for the Free School Law of 1800 – an early attempt to build a public educational system in the state before its repeal in 1803. Despite a promising start, opponents chafed over the loss of local school control and the associated costs.[27] Nearly three decades later, the General Assembly passed the School Act of 1828, which allocated funds for public, but not necessarily free, education.[28] By 1845, the Barnard School Law, the product of an exhaustive study of the state's schools by the future Commissioner of Public Schools Henry Barnard, took steps to improve the 1828 Act's limitations, creating much of the public school infrastructure which exists in Rhode Island today.[29]

As public schools developed, educational reformers sought to make changes in higher education as well. Established in 1764, Brown University dominated higher education in Rhode Island near-exclusively for its first century of statehood. Like other American universities established in the colonial era, it adopted the English educational model, focused on

instructing society's elites.[30] This premise was not seriously challenged until Francis Wayland became Brown's President in 1827. Wayland, a moralist and ally of the free school movement, worked to transform Brown's elitist curriculum into one that met the need for vocational skills in the wider public. [31] Wayland believed that universities prospered by democratizing their offerings and expanding access to meet the public's educational needs. [32] This idea was mirrored most prominently on the national stage by the 1862 Morrill Act, which allocated federal funds to the states to establish schools dedicated towards the agricultural and mechanical arts. In 1863, the General Assembly bestowed these funds on the prestigious Brown University, as the state's only institution of higher education. But, after Wayland's retirement in 1855, Brown's leadership became more conservative and hostile to new initiatives. As such, Brown only instituted token reforms to satisfy the Morrill Act's most basic interpretation over the following decades.[33]

Nationally, the Morrill Act was a watershed for the expansion of educational policy. Combined with the Reconstruction amendments, many reformers advanced the argument that education was a natural right.[34] As new western states joined the Union, many included provisions for state-supported public and higher education within their constitutions.[35] In Rhode Island, the state finally abolished public school tuition in 1868, making public education free for the first time.[36] In 1882, earlier school laws were made mandatory, and towns were no longer able to opt out of establishing public schools. [37] By 1893, the state removed the final cost of attendance by requiring public schools provide free textbooks to their students, a goal of educators since Henry Barnard who wished to improve school attendance.[38]

Near-concurrently, the federal 1887 Hatch Act provided funds to the states to establish experimental agricultural stations, as an extension of the aims of the Morrill Act.[39] By that time, dissatisfied Rhode Island farmers were organizing opposition to Brown due to its failure to adhere to the spirit of the Morrill Act. Grange and farmers' associations lobbied the General Assembly to establish the Rhode Island State Agricultural School with the Hatch Act funds, rather than deliver them to Brown. [40] The Agricultural School instituted an experimental curriculum based on practical education alongside commonly attainable admission standards and free tuition in order to serve the broadest student body. [41] Further agitation by Agricultural School's supporters pushed the General Assembly to create a commission to investigate the issue of the Morrill funds. The Commission ruled against Brown, and in 1892, the Assembly stripped Brown of the land-grant funds and transferred them to the newly-upgraded Rhode Island College of Agricultural and Mechanical Arts. Brown challenged the legality of the transfer in the following years, but they accepted defeat by 1894 after a failed appeal to the Supreme Court. [42] Though the transition from experimental college to state university was rocky, a 1909 report commissioned by the General Assembly argued in favored of continued and greater support, to transform the institution into the democratic capstone of higher education in Rhode Island. To this end, they gave the college a new name: Rhode Island State College, and later, the University of Rhode Island.[43]

Throughout the early 20th century, long-sought public and university educational reforms took root. By the mid-point of the century, as the United States emerged as a global superpower, the institutions proved resilient despite legal and practical challenges. The U.S. Supreme Court's 1954 landmark decision in *Brown v. Board of Education* to deny the legality of segregation on the grounds of education set the judicial precedent that state-provided public education was protected under the Fourteenth Amendment. [44] Combined with their 1973 decision in *San Antonio Independent School District v. Rodriguez* deferral to state localism, the Supreme Court established education as a state-supported, but not Constitutional, right.[45] On the state level, the 1968 decision by the Rhode Island Supreme Court in *Bowerman v. O'Connor,* using the U.S. Supreme Court's 1968 *Board of*

Education v. Allen decision as precedent, preserved a 1961 law that extended the free provision of textbooks to parochial school students.[46] Combined, these decisions cemented the centrality of both free public education and textbooks in Rhode Island.

No ruling granted higher education the same status. But, in the following decades, Rhode Island Senator Claiborne Pell worked to make it more accessible to students nationwide through legislation. In 1965, Congress passed the Higher Education Act, which provided sweeping aid to colleges and universities across the country and created the basis of federal financial aid for students.[47] Senator Pell introduced amendments to the Act in 1972, which allowed the federal government to provide students direct need-based aid, regardless of the university they attended. These "Pell Grants" bypassed the aid-calculations of universities altogether by creating a national standard of aid to measure the needs of all college students. Pell personally believed that all Americans had a right to a college education, and he saw the Grants as the means to ensure equal opportunity, regardless of their background.[48] Since the 1970s, the Pell Grant system has endured as the primary public means of student financial aid.

The history of educational access in Rhode Island is defined by the slow transition from a profoundly restricted and elitist system into one designed to serve progressively more and more students. Though many of the earliest dreams of Rhode Island's educational reformers were achieved, the fight to uphold their highest ideals is not yet complete. Rather, the advent of new digital technologies provides the means for modern reformers to chip away at the current inequities of educational access—particularly within higher education.

Historiographical Summary

As OERs remain a recent phenomenon, few works examine their place within the historical record. The histories of textbooks and educational development and reform in Rhode Island, provide necessary context for the background of OERs within the state.

One of the few histories of OERs comes from Hewlett Foundation scholars T. J. Bless and M. Smith, who examine the intellectual origins of OERs from the 1990s through to the development of the Open Movement in the early 2000s.[49] OERs feature in other examinations of textbook development, but most often as a point of comparison between traditional and digital materials.[50] This is in part due to weaknesses in the overall field of textbook history, which John Issitt regards as caused by the, "uncomfortable closeness to market relations" that dims the scholarly view of textbooks as an item worthy of study.[51] Jordan Reed complicates this view, suggesting that textbooks are seldom regarded as worthy of study, and instead most often thought of as peripheral products of greater social and political trends. As a result, the field of textbook history does not contextualize recent developments, including OERs. The existent literature on historical trends lacks significant regard for its subject matter.[52] The history of textbook use in Rhode Island is limited to a select number of case studies rather than any comprehensive examination. Most prominent is Erik Chaput's scholarship of the controversial 1960s laws which made state approved textbooks freely available to parochial and private school students.[53]

Several highly detailed monographs of education in Rhode Island serve as cornerstones for the subject—though all are approximately a century out of date. Thomas Stockwell's *History of Public Education in Rhode Island,* Charles Carroll's *Public Education in Rhode Island,* and William Howe Tolman's *History of Higher Education in Rhode Island* all offer comprehensive accounts of their subject matter ranging from the state's colonial origins to their publication, though the newest – Carroll – was published in 1918.[54] As such, the majority of their content precedes the massive expansion of state involvement in education beginning in the late 1890s. Hermann Eschenbacher's *The University of Rhode Island* offers a more current history of public higher education in the state. Published in

1967, Eschenbacher's work lacks half of the institution's history.[55] It may be augmented by Nathan Sorber's more recent study of land-grant education across the country.[56]

These broad histories are supported by studies of educational reformers in Rhode Island, typically from the early-mid 19th century. Francis Wayland, the fourth President of Brown University, attracts interest from scholars such as Theodore Crane and Christine Desjarlais-Lueth who regard his ideas on expanded access to higher education as forward thinking.[57] William Shade and Francis Russo examine similar early educational innovators, such as John Howland, who pushed for a more expansive public education system during Rhode Island's early statehood.[58] G. Wayne Miller, Roger L. Geiger, and Christopher Loss offer examinations into 20th century Congressional debates on the expansion of federal power into higher education, in which Rhode Island Senator Claiborne Pell played a significant role.[59] Other authors, such as John Eastman, David Tyack, Thomas James, and Daniel Morton-Bentley examine the legal foundations upon which the public education system was built nationwide and in Rhode Island throughout the 19th and 20th centuries.[60]

Just as textbook historians might benefit from additional studies on textbooks, Rhode Island history needs new scholarship that synthesizes the strong body of literature on 19th century and earlier educational movements with content from the 20th and 21st centuries.

Comparisons, Analogues, and Parallels

From the standpoint of public policy, the use of OER is a decision driven by the possibilities of access. It is a fundamental tenant of the Open movement to improve educational accessibility by removing the cost barrier for course materials accessed through resources like OER. As such, the most pertinent historical parallels are those derived from the lengthy policy battles to improve access to public and higher education since the 18th century.

The development of Rhode Island's public school system provides one of the clearest comparisons. In the early 19th century, the idea that basic education was the right of all citizens was not established, and opponents argued against efforts to establish a state-wide system using the argument of local control.[61] Rural towns in particular were hesitant to submit to state control over education, out of distaste for loss of autonomy and the associated costs, despite the fact that the early free school laws were designed to benefit these communities the most.[62] However, reformers continued to echo their refrain that a system of publicly funded free education was an essential right in order to develop the necessary characteristics of an informed and civic minded citizenry.[63] As they won victories establishing this public system, these same reformers soon advocated for free textbook access, arguing that, like school tuition, the cost of materials was a barrier to access and impacted attendance.[64] In the 18th and early 19th century, the privatized, elitist system of semi-public education mirrors the state of higher education in the present day. These reformers provide the language by which higher education can be made more accessible, as they transformed public schools.

The 1862 Morrill Act, 1887 Hatch Act, and other late-19th century legislation to expand the scope of higher education provide a second comparison. Both acts address a fundamental educational need in society: practical and applied studies in agricultural and mechanical trades.[65] In Rhode Island, Francis Wayland foresaw the need to transform higher education to serve the growing needs of the state's whole population rather than just society's elites.[66] To these ends, Wayland and the leaders of Rhode Island's experimental schools established under these acts, such as the Rhode Island State Agricultural School (RISAS) went to great lengths to expand enrollment. At Brown, Wayland pushed the University to the brink of bankruptcy funding tuition scholarships to increase enrollment and instituted sweeping curricular changes.[67] He went as far as to abolish required reading lists from classrooms, instead requiring that all professors only assign material held in University's library.[68] In its early years, the RISAS

charged no tuition—which was not without precedent. The Rhode Island School of Design and State Normal School likewise charged no tuition when first established. While this did not mean students were not responsible for the cost of living and many other service fees, it was intended to make attendance more accessible.[69] As RISAS, RISD, and the Normal School were all founded to meet the societal need for educated professionals, it was necessary to reduce the cost barrier to education.[70] As the 19th century saw the transition from an agricultural to an industrial economy, the 21st is witnessing the transition from an industrial to digital economy. Today, educators and public figures increasingly speak about the ever-growing demand for skilled workers to meet new digital and technological necessities. One way to address these needs is to adopt the mindset of the mid-19th century reformers and institutions and dramatically reduce cost barriers to higher education.

Lastly, Senator Claiborne Pell's 1972 amendments to the Higher Education Act of 1965 and the creation of the Pell Grant system provides a direct and more recent comparison. Pell, like the state's early reformers, saw education as a necessary right for all citizens. The Pell Grant system acknowledges that higher education is not affordable to all Americans, and, wealthier citizens have privileged access to it.[71] As such, the Pell Grants are designed to ensure that students with the greatest need receive the most aid, helping to diminish the effects of inequality in higher education. Pell Grants, like OER, are a tool to eliminate costs in higher education entirely. Senator Pell's rationale remains true to this day, and, as the cost of education grows, justifies a wider variety of solutions.

Historical Analysis

Free Public Education in Rhode Island

In 1842, the State of Rhode Island adopted its first post-colonial constitution. Since independence, the state was governed by its increasingly archaic colonial charter. On educational matters, the charter was entirely silent.[72] The new constitution, written in the aftermath of the Dorr Rebellion and at a time when public education was quickly becoming more accessible throughout the state, rectified this deficiency. In Article XII, Section 1, it set forth that:

> The diffusion of knowledge, as well as of virtue, among the people, being essential to the preservation of their rights and liberties, it shall be the duty of the General Assembly to promote public schools, and to adopt all means which they may deem necessary and proper to secure to the people the advantages and opportunities of education.[73]

Framed as such, the new constitution established provisions for a permanent public school fund, not to be redirected, "for any other purpose, under any pretense whatsoever."[74] Despite this milestone, Justice William Staples of the Rhode Island Supreme Court wrote only a year later that, "it is matter of regret, that education has not always received the same degree of attention in Rhode Island, as in other New-England states… that the soil of Rhode Island has never been particularly favorable to schools, or institutions of learning."[75] The contrast between the idealized language of the 1842 Constitution and Staples' regretful observation highlights the long struggle of public education advocates in Rhode Island. Following independence, it was a century before free public education was fully established. At stake was the idea that all citizens were entitled to a basic education, regardless of their financial or social background.

At the time of American independence, Rhode Island's educational system, like those of the other colonies, blurred the line between publicly supported and private schools. In most cases, school houses were erected at the public expense, but leased to schoolmasters who independently organized their finances. They were broadly considered public schools, but they were not freely accessible, nor did they serve the entire school-age population of their

communities. Not until the eve of the Revolution, as the needs of its rising middle class grew, did this begin to change. In 1768 a group of prominent citizens led by Moses Brown petitioned the town of Providence to construct more school houses, with the additional demand that, "Every inhabitant of this town… shall have and enjoy an equal right and privilege of sending their own children… for instruction and bringing up, to any or all of the said schools."[76] Providence officials rejected their petition.[77]

After the Revolutionary War in 1789, the Providence Association of Mechanics and Manufacturers was organized by a cohort of middle-class professionals with an interest in education. "The question was asked," founding member John Howland reflected later in life, "ought not our children to have better advantages of education than we have enjoyed? And the answer was yes." [78] Unlike Browns' petition, the PAMM advocated publicly for a state level education policy, organizing newspaper writing campaigns to generate public support for their cause. The PAMM had the good fortune to count among their allies members of state's post-Revolution leadership, including Governor William Jones, Deputy Governor Jabez Bowen, and Attorney General James Burrill, Jr. [79] In consultation with PAMM advocates led by Howland, Burrill drafted legislation that created a state-funded free public school system which passed both houses of the General Assembly and was signed into law by 1800.[80] The Bill began with a grand preamble, declaring that, "unexampled prosperity, unanimity and liberty… are to be ascribed… to the general diffusion of knowledge and information among the people… and this General Assembly being desirous to secure the continuance of the blessings aforesaid, and moreover to contribute to the greater equality of the people," justifies the enactment of free public schools. [81] Thanks to the PAMM's organizing strength and network of state connections, the bill met little opposition in Providence. "The Rhode Island Legislature, having thus… provided for the full enjoyment of a right which forms so essential an article in the great system of social order," the city's instructions to their representatives in the General Assembly boastfully declared, "will be mentioned with high expressions of gratitude and honor, through the ages and generations which are to succeed."[82] After the passage of the bill, city and PAMM leaders quickly worked together to organize a city-wide system of free public schools. It was the only community to actually carry it out, for elsewhere in the state, opposition rallied.[83]

Despite Providence's enthusiasm for free public schools, the rest of the state regarded the bill dimly. The state's economic and intellectual elites' reactions ranged from marginal support to general disinterest. As they were well-served by the existent educational system, they had little reason to support the PAMM's transformative plans. Howland expressed more surprise at the reception the bill received from the "common people." "It is a curious fact, that throughout the whole work [of the school bill]," he noted, "it was the most unpopular with the common people, and met with the most opposition from the class it was designed to benefit."[84] The general mood in most communities outside of Providence was that state-controlled schools infringed upon the traditional jurisdiction of towns. Both houses of the General Assembly had little desire to vote on the bill initially, for fear of angering either side of the issue, and the bill was passed only after an extensive lobbying campaign led by Howland and other PAMM advocates. As Howland and his allies focused on building Providence's schools, opponents forced the swift repeal of the bill in 1803. [85] Writing later in the century, Commissioner of the Public Schools Thomas Stockwell noted that legislative records did not specify the exact arguments made to justify the bill's repeal, but that it was supported by a wide coalition of towns, suggesting that localism ultimately triumphed. [86] His predecessor, the renowned educational reformer Henry Barnard, reflected bitterly on the bill's failure in 1845, observing that, "Had the other towns followed [Providence's] example, and the State persevered in introducing [free public schools], Rhode Island would at this time have the best school system in New England."[87]

Though Providence preserved its new school system, the bill's repeal relegated school creation, and the issue of free public schooling to a local matter for most of the first half of the nineteenth century.[88] In the following decades, the Providence school system was met with widespread public approval.[89] Combined with public school innovations in other states, the General Assembly began to reconsider public school legislation in the 1820s.[90] In 1825, Newport followed Providence's example in establishing a local system of free public schools, providing additional momentum for the movement.[91] In 1828, the General Assembly passed a new school law which preserved town control over education, but provided state funds for the foundation and management of local schools.[92] Over the following decades, communities across Rhode Island accepted funds from the state to expand, repair, and construct new school houses and organize school districts. In 1839, the state's funding methodology was significantly revised, but otherwise maintained the localist tenor of the 1828 bill.[93] Howland, continually an exponent for free public schooling, believed that the bill did not provide enough funds nor was it inclusive enough to compare to the 1800-inspired scope of the Providence school system.[94] Significantly, neither bill included clauses establishing that these public schools were to be free schools, an object of Howland's ire.[95]

That same year, Horace Mann, the recently appointed Secretary of the Massachusetts Board of Education, was beginning his long career of educational advocacy. In a speech titled, "The Necessity of Education in a Republican Government," he asked his audience:

> Is it not manifest to us all, that no individual, unless he has some acquaintance with the lower forms of education, can superintended even the coarsest and most common interests of life, without daily error and daily shame? The general utility of knowledge, also, and the higher and more enduring satisfactions of the intellect, resulting from the discovery and contemplation of those truths with which the material and the spiritual universe are alike filled, impart to this subject a true dignity and a sublime elevation.[96]

For supporters of public school systems like Howland and Mann, public education was a moral, political, and social necessity to the young American Republic. Speaking in 1833, the Rhode Island-born minister William Ellery Channing argued that, "Every school, established by law, should be specially bound to reach the duties of the citizen to the state, to unfold the principles of free institutions, and to train the young to an enlightened patriotism."[97] Public education was regarded as a means of economic and social mobility, as well as a way to instill republican values in young generations. These values were reflected in Article XII of the 1842 Constitution and in the1828 and 1839 public school laws. The notion that public education be entirely free from cost, first suggested in the state by Howland and the PAMM, was yet to become mainstream.

In 1843, Governor James Fenner appointed Henry Barnard, formerly the Secretary of the Connecticut Board of Education and later the first United States Commissioner of Education, to survey the condition and efficiency of Rhode Island's public schools.[98] Barnard's appointment was supported most strongly by State Assemblyman Wilkins Updike, who argued that the laws of the previous decades created a public school system that varied wildly in quality due to a lack sufficient standardization for school administration and curriculums.[99] Two years later, Barnard presented his exhaustive report to the Assembly, addressing every conceivable topic pertaining to education in the state, ranging from the design and furnishings of school buildings, school scheduling and yearly calendars, and standards of qualification for teachers and school types. Analyzing the state's weaknesses and areas for improvement, he condemns the localistic approach taken over the past decades, noting that, "Most of the deficiencies in whole classes of schools, as well as the most glaring inequalities in the means and conditions of

education in different sections of the same town, and in different towns, are the direct result of the organization through which the schools are conducted." [100] Barnard's findings pushed the General Assembly to adopt a new school law in 1845 which centralized state educational policy under the newly-created office of Commissioner of Public Schools. Barnard, naturally, became the inaugural administrator, and he began implementing many of his recommended standardizations.[101]

The 1845 school law stipulated that, "No child shall be excluded from any public school… on account of the inability of the parent, guardian, or employer of the same, to pay his or her tax, rate, or assessment, for any school purpose whatever," but the law did not firmly abolish the practice of public school tuition.[102] Though Barnard identified student attendance at public schools as lacking throughout the state and recognized tuition as a possible barrier, he recommended only that, "[Rhode Island's schools] must be at once good and cheap,-- good enough for the children of those who know what a good school is, and cheap enough to be within the reach of the poor."[103] Barnard's successor, Commissioner Elisha Potter, took a stronger position, writing in his own 1852 evaluation, "that the rate bill system… has the effect of inducing many parents to keep their children from school there can be no doubt. By law the poor are exempted from assessment, but this is a privilege which very few will claim. Few are willing to have their children considered as charity scholars. This is a commendable pride."[104] Driven by advocacy from Potter and likeminded reformers, the General Assembly abolished the practice of rate bills for public schools in 1868 and simultaneously increased public school appropriations to make up the difference.[105] Newspapers took more notice of this increased expense rather than the novel implication that, for the first time since 1800, Rhode Island public education was free.[106]

In 1870, the first Rhode Island Board of Education reported that, "free schools… have aided in preserving the rights and liberties of the people." [107] "A system of free schools to be universally popular must be universally practical, so much so, that the dullest comprehension may see something of intrinsic value in it," the report added, somewhat patronizingly in a call for efficiency.[108] This universality was not a given. "The old saying—'That which costs nothing, is worth nothing,'" James Eldredge, the clerk of the East Greenwich school district observed in 1865, "seems to apply, in the opinion of many, to the privileges of education, which are bestowed upon them so entirely gratuitously by the State and town." [109] The 1870 report reflected this reality as well, noting the widespread opposition to the state's public school system by the state's "foreign population," even in Providence, where free schools had been the norm for decades.[110] The opposition of 19th century immigrants to the initiatives of middle class, Anglo-Protestant reformers fits a broad national pattern, driven by class and religious animosity. As does, too, Eldredge's observation on the quality of "free" services, reflecting American skepticism of public services and welfare, even to the present day. Nevertheless, after seventy years of progress on the free public school issue, the 1870 law endured. By 1882, towns were legally required to maintain public schools, and in 1902 attendance was made compulsory.[111]

Table 1 illustrates the rapid growth in total state educational appropriations following the 1839 school law, as well as the overall increase in enrolled students over time. By 1864, school reports begin to track school-age students in the state, rather than enrolled students. This reflects the developing scope of public education as its focus shifted to all of the state's youth, rather than only paying, enrolled students. These numbers are, therefore, higher than the total number of students enrolled in public schools. However, the 1871 Board of Education report estimates that, of the total number of school age youth, 90% were enrolled to some degree.[112] The total students reported in 1832 also appears unusually high. This number is reported by Commissioner Thomas Stockwell in his 1876 survey of public education in Rhode Island, and he cites the work of Oliver Angell, a teacher who collected data on behalf of the Providence Town

House. Though Angell may have been a respected educator, this total stands out as perhaps inflated given the marked decline in school attendance only seven years later.[113]

TABLE 1 - Number of Students Enrolled in and Expenditures on RI Public Schools Between the 1825 School Law and 1870 Abolition of Rate Bills

Year	*Total Students Served by Public Schools*	*Total Population of State (with Nearest Census Date)*	*Total Appropriations (State & Local) for Education*
1832	17,034	97,210 (1830)	$21,490
1839	13,748	108,830 (1840)	$32,383.36
1844	22,156	108,830 (1840)	$48,335.76
1852	26,654	147,545 (1850)	$94,471.96
1856	27,130	174,620 (1860)	$151,842.59
1864	56,934*	174,620 (1860)	$168,080.77
1871	64,930*	217,353 (1870)	$259,801.63

*Total School-Age Population of State
Data via Stockwell's *Public Education in Rhode Island,* Rhode Island Commissioner of Public Education yearly reports, U.S. Census Bureau.[114]

Later laws removed the cost associated with textbook purchases as well. In 1870, the General Assembly prohibited any public school associate from profiting from or promoting the sale of any school book or other material.[115] In 1893, this was followed by a law that mandated school districts purchase and provide textbooks for student loan, free of charge.[116] In his 1845 report, Commissioner Barnard observed that, "It would be better in most of the districts, and even the towns, to have [textbooks] purchased by, or under the direction of the school committee or trustees, and furnished when needed to the children, and the expense put into the tax or rate bill of the parents," recognizing that an unstandardized process of textbook acquisition produced inefficiencies.[117] In 1856, Christopher Robinson, the chairman of the Cumberland School Committee, argued for greater reform, suggesting,

> The propriety of supplying each desk with a full set of the text-books used in the schools [be furnished] either at the expense of the Districts or the Town… It would be much better if each desk could be supplied at the public expense. For, if the teacher may borrow, so as to oblige two scholars to use one book, so may scholars be neglectful, or parents penurious, leaving their children to depend on others.[118]

Both educators saw textbooks provision as necessary to a complete education, and framed their solutions within the context of their greatest concerns—a lack of standardization, and the effects of cost on school attendance.

Evaluating a report on the subjects taught in Rhode Island schools in 1875, Commissioner Stockwell observed that, "to comprehend the full bearing of this brief schedule, we must look back to the time (1800) when a leading school-committee man in Providence [John Howland] had never seen a grammar, and could find no geography for sale in the town."[119] The history of free public education in Rhode Island was measured over centuries of slow reform, rather than the instant Howland and the PAMM nearly achieved. It highlights the triumph of steady persistent reform against a wide array of opponents who preferred local school control, and opposed the centralizing efforts of free school advocates. Disentangling the effects of the abolition of the rate bill or the provision of free textbooks on school attendance rate was near impossible due to the overlapping and competing initiatives to advance educational improvements. The claims of educational advocates, who grandly tied public education to patriotic national ideals were equally nebulous. Stockwell's observation of the educational progress made since Howland's time, in line with Mann's 1839 oratory, provided human perspective on the unspoken significance of education on the lives of all experience it.

Today, support for the idea of free public education is essentially unanimous, and basic education is seen as one of the fundamental services offered by state and local governments.

In Rhode Island's earliest days, this idea was radically forward thinking. The importance of Howland, Barnard, and other educational reformers' actions and advocacy, are both the tangible impact of education upon society, but also the normalization of the idea that all citizens are entitled to a basic free education. They recognized the critical role that cost played (and continues to play) in barring people from education, and they strove to eliminate those barriers alongside their promotion of that idea. Later educational reformers, including the advocates of OER today, seek and have similarly sought to normalize similar ideas for higher education. The idea of state support for OER development relies on the same reasoning that public school textbooks were made free: that cost is a harmful and detrimental barrier to access. Though the aims of these 19th century public school advocates largely were achieved, there remains opportunities for the state to promote higher educational access—of which OER development is a first step.

The Morrill Acts and Land Grant Education in Rhode Island

The United States federal government first became a significant force in higher education during the Civil War, when President Abraham Lincoln signed the 1862 Morrill Land-Grant Act. The act granted thousands of acres of western land to each state, intended for sale, to raise the funds to establish a university dedicated to teaching agricultural and mechanical sciences.[120] Vermont Congressman Justin Morrill interpreted the education land-grants as a continuation of land policy established by the Northwest Ordinance of 1787, "Religion, morality, and knowledge, being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." [121] The land-grant system established by the Morrill Acts radically expanded upon the idea that education was necessary for the public good and it needed to be open and accessible to all. These values motivated the development of public schools. Higher education, land-grant supporters argued, must be free for all. This necessitated a new curriculum for universities other than a classical education for societal elites.[122]

Congressman Morrill came from a working middle class background. Receiving a limited formal education, he was self-taught and only entered politics after retiring from a successful business career. Elected to Congress on the eve of the Civil War, he first introduced land-grant legislation under the presidency of James Buchanan, who vetoed the proposal.[123] In 1853, Morrill framed the act in practical terms, citing trends in land use and degradation alongside technological developments as justifying the establishment of new centers of higher education. "Our country relies upon [mechanics] as its right arm to do the handiwork of the nation," Morrill noted in language easily applicable to farmers, "Let us, then, furnish the means for that arm to acquire culture, skill, and efficiency." [124] After Lincoln's election, Morrill reintroduced the bill in 1862. Addressing a more amenable Congress and President, Morrill spoke more broadly, declaring that, "this bill proposes to establish at least one college in every State upon a sure and perpetual foundation, accessible to all, but especially to the sons of toil." For Morrill, the establishment of land-grant colleges was necessary to spread the benefits of education through society, and to enable the growth and development of the American economy.[125]

Initially, the bill only applied to the Northern states. By 1890 Morrill, then a venerable Senator, oversaw the passage of the 1890 Morrill Land-Grant Act, which appropriated additional funds to existing land-grant universities and included the Southern states.[126] At the time of Morrill's death in 1898, the two Morrill Acts instituted sixty-four colleges and universities, employing and enrolling approximately 1,500 teachers and 25,000 students, with an overall investment of more than $25 million. [127] The success of the Morrill Acts also spurred additional federal investment into agricultural research and education, including the Agricultural Experiment Stations Act and Hatch Act of 1887. These

established and funded, respectively, experimental agricultural stations to disseminate agricultural knowledge and promote scientific investigation.[128]

Figure 1: Map of Currently Existing Land-Grant Colleges and Universities

United States Department of Agriculture.[129]

Morrill frequently reiterated that the land-grant colleges were not intended to replace existent traditional universities. In an 1876 Senate speech, Morrill noted that, "A general advance… of the population at large, cannot prove detrimental to men in the so-called learned professions or to literary colleges," and that he, "[felt] sure that no true American will ever prize his own education higher because there may be others who cannot get it."[130] This echoed the same sentiment he expressed when introducing the first land-grant bill in 1853, where he noted that, "It is not designed to make every man his own doctor, or every man his own lawyer; but to make every man understand his own business… Our present literary colleges need have no more jealousy of agricultural colleges than a porcelain manufactory would have of an iron foundry."[131] Morrill did not intend for the agricultural colleges to function purely as vocational institutions. The 1862 act mandated that the land-grant institutions include, "other scientific and classical studies… including military tactics."[132]

President Buchanan's veto of the original 1859 land-grant bill represents the most significant opposition to the Morrill Acts on the national level. Buchanan balked at the prospect of granting land directly to the states for sale rather than selling them to raise federal funds. Further, he saw the bill as blurring the lines between federal and state authority and simultaneously an example of unenforceable federal overreach. He also viewed the bill as unjust both to existing colleges and potential future western states which might emerge from the land earmarked for land-grant sale. Buchanan's veto focused primarily on the legal practicability of the land-grant mechanism, and he concluded with the Biblical passage of, "sufficient unto the day is the evil thereof." In Buchanan's estimation, the land-grant system had the potential to do more harm than good.[133] Fundamentally, Buchanan's concerns and fears matched both the ideological and partisan tenor of the pre-war Democratic Party, which promoted states and settlers' rights over reform initiatives.

Buchanan's caution was not entirely unwarranted, at least within the context of Rhode Island. The land-grant system ultimately proved cumbersome and inefficient as the state tried to dispose of its allocated lands. Of the 120,000 acres provided by the 1862 act, Rhode Island only acquired 40,000 acres due to disputes with railroad claims, other states, and Native Americans physically inhabiting the contested lands. Ultimately, Rhode Island sold their allotted land for $50,000, or 41 cents per acre, a rate significantly lower than all other New England states.[134] This reality, combined with the General Assembly's decision to transfer the responsibility for agricultural education to Brown University, stymied the implementation of the Morrill Act's intent and ideals for three decades. After receiving the land-grant funds in 1863, Brown took no steps to establish the requisite departments of study. Instead, they handled the land-grant income as a scholarship fund. Agricultural education in accordance with the Morrill Act's intent and supported by its land-grant funds did not fully begin until 1894, after a compromise was reached between Brown and the state.

Brown's supporters argued that because the Morrill Act funds were appropriated by federal law, the State of Rhode Island did not have the authority to revoke them. Opponents believed that the fund belonged to the state, and that because Brown failed to adhere to the Morrill Act's intent, the State had a right to reclaim it.[135] After the passage of the 1890 Morrill Act, the state diverted the new funds to the Rhode Island College of Agriculture and Mechanic Arts. The College was founded only three years prior as an experimental station under the Hatch Act. Brown challenged the legality of this action, but the U.S. Circuit Court ruled in favor of the state. Though Brown appealed the Circuit Court's decision to the U.S. Supreme Court, they reached a compromise agreement with the state before a ruling was made.[136] The state agreed to pay Brown for expenses accrued over its three decades as the state's land-grant institution in exchange for rights to the 1862 Morrill fund, which they transferred to the College.[137]

The Rhode Island College of Agriculture and Mechanic Arts grew slowly over the following decades, often without the means to expand its facilities, even after receiving control of the Morrill fund. The foundation of the College itself was acrimonious, created as an independent institution due to the General Assembly's dissatisfaction with Brown's handling on the Morrill fund.[138] As Charles Carroll observed in 1918, on behalf of the State Board of Education, "The growth of the college was not rapid in its earlier years; its functions were not clearly understood by the people generally, and it was not a distinctly popular institution."[139] Friends and alumni of Brown University resented the college for their supposed usurpation of federal funds, and broadly opposed any further state support for the College. Additionally, the influential community of alumni and associates of Brown University resented the growth of the state's second college, and they broadly opposed state financial support of the College. Critics, such as State Assemblyman Olney Arnold, the Democratic candidate for governor in 1908 and 1909, believed that its education was inferior to Brown's and that any investment in the College was misplaced.[140] These same critics often contended that the College's focus on agricultural education neglected traditional subjects, and so was of lower value.[141] These criticisms largely echoed the concerns of President Buchanan decades before, centered both upon the financial unsustainability and redundancy of state-funded colleges. To resolve and clarify the matter, the General Assembly appointed a Commission of Inquiry to investigate the operations of the College and make recommendations regarding appropriate endowments.[142]

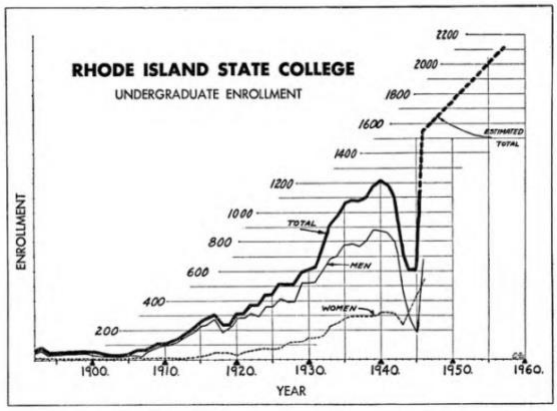
In 1909, the Commission issued a glowing report which, "[hoped] that it might make an end of useless and harmful, and sometimes trivial, disputes regarding the college, and make clear what course the state should pursue in respect to it."[143] Addressing the financial concerns of the College's critics, the Commission conceded that the College did not always spend wisely. They argued this point, but justified further spending on the College. In the Commission's estimation, the College was so preoccupied with stretching its limited finances that they had no guiding future plan, creating inefficiencies.[144] Its defense of the College's role in the State's educational system was grounded on the notion of access, which the Commission used to justify additional investment. "The college was founded for the purpose of giving to all people of the state an opportunity to secure free collegiate education," the Commissioners stated succinctly, clarifying that the College was not intended to operate only as a technical school, "The Rhode Island college, then, was founded for the purpose of enlarging the field of opportunity for collegiate education." This argument found its roots in the phrasing of the original Morrill Act, which directed agricultural schools to offer rounded, liberal curriculums.[145] They opposed the notion that the College charge tuition for profit because it placed, "a serious burden upon its youth whom the very foundation of the college seeks to help for the common good."[146] They concluded, "Without question…the state received value in the increased efficiency and more enlightened citizenship of the college's graduates and

students," and included a litany of improvement and investment opportunities to increase that value. [147] In drawing these conclusions, the Commissioners acknowledged that the institutions founded by the Morrill Act, including the young Rhode Island college, "have gone far beyond the purpose of their founder and have not only supplemented the older institution but enlarged and broadened the whole field of public education."[148] They saw the value of land-grant education, and its radical potential to dramatically improve access to higher education.

This notion of accessible education was not limited exclusively to young white men. The 1890 Morrill Act, with an eye on the Southern states, included provisions that limited land-grant funding only to schools which did not make, "a distinction of race or color" in the admissions process.[149] Though neither Morrill Act addressed the issue of sex, women were permitted to enroll at the Rhode Island college from its earliest days, with the 1894 College Report of the Board of Managers noting that, while no dormitories existed for women, they were permitted to enroll.[150] Until the construction of a designated dormitory for women in 1908, most female students resided in the Watson House, which the Board of Managers regarded as, "difficult to keep comfortable" and, "far from attractive." [151] By 1909, the College established a home economics department specifically to improve educational opportunities for women. That same year, the construction of East Hall as a men's dormitory allowed the home economics department and female students to move into Davis Hall.[152]

At the time of the 1909 Report of the Commission of Inquiry, fewer than 200 students attended the College.[153] While the College only grew steadily, but slowly, over the first decades of the 20th century, it grew more rapidly during the World War II era, and begin to rival Brown's enrollment post-war.[154] The uptick in enrollment throughout the 1930s was partially attributed to President Raymond Bressler, who zealously expanded the scope of the college's instruction to better meet the state's educational needs. Over the course of his nine-year tenure, he more than doubled the number of enrolled students and size of the alumni body, seeking to extend the college community beyond the campus. Bressler also significantly expanded the College's facilities, drawing funding from New Deal-inspired agencies like the Rhode Island Emergency Public Works Corporation.[155]

Figure 2 - Rhode Island State College Undergraduate Enrollment (1892-1946)



"Dividends Unlimited," *Bulletin of the Rhode Island State College*.[156]

Despite Bressler's success through the 1930s, the 1946 Board of Trustees envisioned even greater possibilities. They still saw the possibility for growth, noting that Rhode Island ranked only thirty-nineth of the forty-eight states in per capita spending on higher education and that the College's enrollment was dwarfed by other land-grant colleges in New England.[157] Following the Second World War, they recognized an increased need for specialized, technical education throughout the state, in large part fueled by the flood of veteran applications caused by the G. I. Bill. To meet these needs, they envisioned further infrastructure expansions and revised the College's admissions policies, deciding to accept all qualified applications, with no enrollment cap.[158] "The State College, as part of our public education system," the Board of Trustees wrote in a 1946 brochure, "is maintained by the state to provide essential services for the benefit of the people… On what grounds can we reject qualified Rhode Island boys and girls, sons and daughters of taxpayers, of sound character and ambition, who give definite promise of ability to perform

college work?" [159] They concluded, a massive, publicly funded expansion of facilities and services was required in order to fulfill the College's democratic intentions.[160]

The success of the College's growth through the 1930s and 40s did not go unrecognized. In 1951, Governor Dennis Roberts signed a bill re-designation the College as the University of Rhode Island. For decades the College had aspired to university status, which the General Assembly denied. Though the redesignation was opposed by those in the state who still believed that the College's education was insufficient, including the editorial board of the *Providence Journal,* the General Assembly overwhelming approved.[161] Though largely a symbolic change, it nevertheless provided public legitimation for the newly christened university.

In a 1934 interview, President Bressler stated that, "Rhode Island State College has no desire whatsoever to ape any other institution, but it does desire to provide an education that will promote the welfare of the citizenry of the State of Rhode Island."[162] Despite this sentiment, it's impossible to discuss the history of URI without comparison to Brown University. URI's birth was the product of Brown's mismanagement of the Morrill funds, and Brown consistently proved an opponent through the years of the University's early development. University status, after half a century of unfavorable comparisons, symbolically placed URI on equal footing with Brown. Within the decade, URI dramatically surpassed Brown's enrollment, finally living up to the dreams of its boosters as most serviceable institution of higher education in the state. As of 2020 14% of Brown's 10,000 students are from Rhode Island. [163] Comparatively, 53% of URI's 18,000 come from within state. [164] Fundamentally, the two universities serve different purposes. While Brown, as an ivy elite institution, won justifiable accolades for its international reputation, URI is, first and foremost, Rhode Island's university, to serve the state's educational needs. By this measure alone, URI undoubtably has served the goals of the Morrill Acts.

The following Table 2 compares the enrollment statistics of URI and Brown University over a fifty-year period.

Table 2: Comparing Enrollment at Brown University and the Rhode Island State College (URI) 1909-1961

Year	*Total Enrollment Rhode Island State/URI*	*Total Enrollment Brown University*
1909	183	~900
1919	342	1,213
1929	608	2,164
1941	1195	2,209
1951	2,366	3,261
1961	6,189	4,103

Data via R.I. College of Agriculture Reports of Board of Managers, the *Providence Journal,* U.S. Office of Education, and Brown University.[165]

"Broad and comprehensive in program, as democratic in its purpose as in its operation," the Trustees noted in 1946, reflecting on the fruits of the Morrill Act, "it is uniquely American." [166] Today, the spirit of the Morrill Act and the founding principles of land-grant education are on unsteady ground. The days of free tuition championed by the 1909 Commissioners are long gone. As of the 2020-21 academic year, tuition at the University of Rhode Island costs $28,000 per year for Rhode Island residents, without taking into account all invisible expenses and fees not accounted on the public price tag.[167] The once-pioneering free land-grant schools have declined in accessibility as tuition rises.

Much like Morrill Act visionaries, OER proponents promote educational access. The questions regarding who institutions of higher education serve and their overall cost are multifaceted, and cannot be easily addressed. OER are a means to address one part of that barrier to accessibility, by eliminating the cost of educational materials. Senator Morrill's language of the agricultural and industrial classes might sound antiquated, but at the heart of such language is a timeless truth. Governments need to strive to ensure that all of their citizens, regardless of background, have an equal opportunity to higher education.

Senator Claiborne Pell and the Basic Educational Opportunity Grant Program (Pell Grants)

Upon signing the Higher Education Act of 1965, President Lyndon B. Johnson remarked, "a high school senior anywhere in this great land of ours can apply to any college or any university in any of the 50 States and not be turned away because his family is poor."[168] To achieve this dream, Title IV of the Higher Education Act created the program of educational opportunity grants which allocated funding to qualifying colleges and universities to provide grants to students from low income families. It was the first time that the United States federal government became an agent of financial aid, "to assist in making available the benefits of higher education [to students] who, for lack of financial means of their own… would be unable to obtain such benefits without such aid."[169] In 1972, the act was amended to expand this role even further. Most significantly, the 1972 Educational Amendments reorganized the 1965 grant system into the basic educational opportunity grant program, which directly provided grants to students rather than distributing them through colleges.[170] These basic grants became the first step for calculating federal financial aid need, and they were later renamed Pell Grants in honor of one of their chief sponsors, Rhode Island Senator Claiborne Pell.[171]

Senator Pell believed that all students in the United States had the guaranteed right to college education. "When one considers the changes that have taken place in our society over the past 85 years," Pell noted in a 1985 interview, "it becomes clear that we are long overdue in moving from 12 to 16 years of formal education…the demands of our increasingly technological society literally cry out for [it]."[172] Pell equated federal spending on higher education access as a capital investment—necessary to develop highly skilled workers suited to the changing needs of the job market. He believed that accessible higher education enriched society and positioned American students as informed and talented leaders on the global stage, rejecting the Cold War notion that global leadership was driven by military supremacy.[173] Ultimately, he conceded that it was beyond the realm to achieve universal higher education in his lifetime, but he saw pursuing that goal "to the fullest extent possible" as worthy in itself.[174]

When introduced, the Pell Grant program immediately and dramatically expanded the availability of higher education to millions of students. "The basic grant program," Pell argued upon the introduction of the 1972 Amendments, "is intended to be a floor supporting the present student aid programs," supplementing existing programs by establishing a non-discretionary baseline for federal aid.[175] By the 1983/84 academic year, "over 2.7 million students received nearly $2.8 billion in grants," according to the Office of Postsecondary Education's report for that year.[176] Between 1973 and 1984, the overall number of students qualifying for Pell Grants rose from 268,444 to 3,541,191 nationally (see Table 3). In 1985, 51,941 students attended college in Rhode Island. Of that number, 11,895, more than 1/5th, qualified for Pell Grants.[177] By contrast, a 1958 report drafted by the state-appointed Commission to Study Higher Education prior to the passage and effect of the Higher Education Act and related legislation, calculated a maximum of 20,000 undergraduate students at Rhode Island colleges by 1980.[178] Every dollar spent on the grants, then as now, was the product of an extensive need analysis calculation designed to specifically address college affordability.[179] Even if Pell Grants truly enabled only a fraction of their recipients to attend college, they were and continue to be a great success, as they advanced both Pell and Johnson's vision of making higher education more accessible to low income students.

Table 3 – Pell Grant Recipience 1973-1984

Year	*Total Qualifying- Pell Grant (USA)*	*Total Qualifying- Pell Grant (RI)*	*Average Amount - Pell Grant*
1973/74	268,444	1,373	$270
1974/75	681,648	2,984	$628
1975/76	1,455,187	5,683	$761
1976/77	2,258,043	9,549	$759

1977/78	2,390,320	(data not available)	$758
1978/79	2,228,603	9,334	$825
1979/80	3,029,745	15,985	$987
1980/81	3,330,534	16,376	$887
1981/82	3,398,237	16,331	$849
1982/83	3,341,371	13,700	$959
1983/84	3,541,191	13,606	$1014

Data via the U.S. Department of Education Federal Pell Grant Program Annual Data Reports.[180]

Despite these measurable successes, the Pell Grant program was not without its critics. When first introduced, the 1972 Educational Amendments passed the Senate with an overwhelming majority in favor, with 88 Ayes, 6 Nays, and 6 absent Senators. The Nays were split evenly between both Republicans and Democrats, though they were mostly conservative ideologically, including Senator Barry Goldwater (R-AZ) and John Sparkman (D-AL). The basic grant program did not feature in the debate surrounding the amendments, which instead focused on the more controversial issue of student busing.[181] The Pell Grant program was expanded significantly in 1978 when President Jimmy Carter signed the Middle Income Student Assistance Act (MISAA) into law. The act loosened Pell Grant eligibility requirements in order to extend their coverage to an additional 1.5 million students (note the difference in Total Qualifying for Pell Grants between 1978/79 and 1979/80, Table 3).[182] Its passage was more contentious than the Amendments six years prior, with country's economy in a period of recession. Fiscally conservative senators, including Robert Morgan (D-NC), chafed at the notion of increased deficit spending during a financial crisis. "There has to come a time," Morgan argued on the Senate floor, "when we simply have to say to ourselves that we cannot do everything that we would like to do… [The national debt] may not be important to some Members, but it is important to my people who happen to believe that we ought to pay for what we have now and not leave the debt for our children to pay."[183] Senator Ted Stevens (R-AK) quoted his own argument from debates two years prior, stating that, "I am going to oppose any further extension, ever, of this retreaded concept that continues to pile program on program and administrative cost on administrative cost, and refuse to simplify the process of providing assistance to the students who are in need."[184] Despite this increased opposition, the Act passed the Senate easily with 68 Ayes and 28 Nays.[185]

The increased interest in cutting costs during President Ronald Reagan's administration placed Pell on the defensive for much of his remaining time in the Senate, working to defend the Pell Grant program from budget hawks. Reagan and his Congressional allies pushed to reduce spending on education, seeking to replace the Pell Grant program with "self-help grants" administered through the federal work-study program.[186] "I have always felt that, like a living, a college education should be earned… Government should encourage college education, not guarantee it," noted Representative Dick Armey (R-TX), speaking in counterpoint to Pell's vision of guaranteed college access in a shared 1985 interview.[187] Armey and Congressional conservatives regarded grant distribution as "an inheritably inequitable transfer of tax dollars," framing student aid spending as creating, rather than addressing, inequality through taxation. Like Reagan, they worked to expand federal work-study and education savings programs designed to "promote individual initiative" rather than direct assistance.[188] Reagan's efforts to defund the Pell Grant program in 1983 were defeated in Congress, which refused to authorize large cuts to educational assistance.[189] Despite this victory, Pell took umbrage with the idea that student financial assistance was a subject of possible cuts at all. "To my mind," he argued in a 1983 speech: "It is an unrightable [sic] wrong that we have had to spend the first part of this critical decade, not in the pursuit of excellence, but in keeping the doors of educational opportunity from slamming shut on millions of deserving young man and women. And make no mistake about it, the responsibility for the situation we have endured… can only be laid at the doorsteps of the Reagan Administration."[190]

"While we in Congress have been able to hold the line and prevent severe budget cutbacks," Pell remarked two years later, in 1985, "the plain fact remains that we have lost ground. …Federal spending for education as a percentage of the national budget is at a twenty-five year low."[191] During the 1986 reauthorization of the Higher Education Act, Pell felt compelled to meet the Reagan administration half-way, reluctantly supporting lower spending on the Pell Grant program than desired in order to secure President Reagan's support.[192] The willingness of Pell and his allies to compromise, defending what they had already gained if at the expense of further advances, ensured the widespread bipartisan support for the continuation of the Pell Grant program. The Higher Education Act was reauthorized unanimously.[193]

The end of the Reagan administration did not improve the prospects for the Pell Grant program. Instead, increasing political polarization and partisanship continued to erode bipartisan support for educational spending. In 1992, the Senate again reauthorized the Higher Education Act with near-unanimity. Only the notoriously conservative Senator Jesse Helms (R-NC) voted Nay, citing the expense and national debt.[194] At the same time, they soundly rejected efforts by Pell to include provisions transforming the Pell Grant Program into an automatically funded entitlement program. Senator Nancy Kassebaum (R-KS), often one of Pell's allies, argued against such a designation, stating: "As much as anyone might like to see more generous grants supported, establishing a new entitlement program has consequences far beyond the immediate gains. Spending money we do not have and making that spending virtually uncontrollable by giving it entitlement status simply contributes to a debt burden which will come due to our children." [195] Senator Strom Thurmond (R-SC) put his opposition more simply: "With a $3.8 trillion Federal debt, and a projected fiscal year 1992 deficit of $348 billion, additional entitlements are neither appropriate nor wise."[196] At the end of his senatorial career, Pell lamented that a once a unifying issue was now fodder for partisan politics. "Here in the Senate," Pell wrote in 1995, "education-related legislation has developed a partisan edge," describing efforts by Congressional Republicans to dismantle the Department of Education and a growing fixation on partisan credit for specific bills. In contrast, he cited the bipartisan support that higher education received over the past decades, and his partnerships with Republican Senators like Kassebaum, Jim Jeffords (R-VT), and Robert Strafford (R-VT).[197] "These are different times, indeed," he concluded, adding that, "we face severe budget constraints and very limited resources. Some would contend that given those conditions, we cannot afford to continue federal spending on education. I would simply contend that we cannot afford to do otherwise."[198]

Despite the critiques of fiscal conservatives, Pell remained committed to the idea that improving access to higher education was both a moral imperative and a societal boon. Pell believed that investments in educational opportunities were of greater future value for the country than it cost to provide assistance.[199] Arguing in favor of the MISAA in 1978, Pell sympathized with the arguments advanced by budget cutters, but maintained that, "the last place I should want to see us cut back in is education," as, "the Nation is exactly as rich and strong as the quality of the education of its people."[200] The Pell Grant program also received criticism regarding the reported misallocation of grant funds. Occasional investigative reports accused grant administrators of mismanagement due to errors in need calculations and misreported applicant information, which resulted in alleged overdistribution of grant funds.[201] Pell regarded these errors as unfortunate, but largely the product of human error rather than intentionally malicious wrongdoing, and not a significant flaw in the grant program's concept. Nevertheless, such episodes provided valuable ammunition for the program's opponents.[202] Pell himself criticized the development of federal student loan programs as an alternative means of financial assistance, accusing the industry of fueling the systematic indebtedness of college students. He

believed that debt impinged upon a student's contribution to society by altering career, home purchasing, and family building patterns.[203]

Today, the Pell Grant program continues to function as a cornerstone of federal financial aid for college students. Even as the cost of college tuition and fees dramatically rises, the Pell Grant program continues to keep pace with the overall price. Between 2000 and 2018, the average total cost of college, adjusted for inflation, rose from $15,333 to $23,835 per semester, or an increased rate of about 55%.[204] Between that same period, the average Pell Grant rose from $2,040 to $4,031—nearly double. The overall percent of college cost that the average Pell Grant represented each year fluctuated, but demonstrated a gentle increase (See Table 4). The growing disconnect between college costs and overall earnings remains a significant problem for low income students, but the Pell Grant program remained effective to face this challenge.

Table 4 – Average Cost of College Attendance v. Average Qualifying Pell Grant 2001-2018

Year	*Average Cost College Attendance*	*Average Qualifying Pell Grant*	*Percentage of Average College Cost Addressed by Average Pell Grant*
2000/01	$15,333	$2,040	13.30%
2001/02	$15,847	$2,298	14.50%
2002/03	$16,369	$2,436	14.88%
2003/04	$17,272	$2,473	14.32%
2004/05	$17,854	$2,477	13.87%
2005/06	$18,247	$2,456	13.46%
2006/07	$18,822	$2,482	13.19%
2007/08	$19,019	$2,648	13.92%
2008/09	$19,703	$2,971	15.08%
2009/10	$20,206	$3,706	18.34%
2010/11	$20,735	$3,833	18.49%
2011/12	$21,154	$3,555	16.81%
2012/13	$21,700	$3,579	16.49%
2013/14	$22,171	$3,634	16.39%
2014/15	$22,780	$3,683	16.17%
2015/16	$23,367	$3,728	15.95%
2016/17	$23,612	$3,738	15.83%
2017/18	$23,835	$4,031	16.91%

Cost of college attendance data via the National Center for Education Statistics.[205] Pell Grant data via the U.S. Department of Education Federal Pell Grant Program Annual Data Reports.[206]

By the numbers, the Pell Grant program is an unquestionable success. According to the most recent data available from the Department of Education, exactly $492,796,151,352 – almost $500 billion – was allocated to 267,007,729 eligible applicants since the program's creation.[207] Though Senator Pell's dream of guaranteed higher education for all has yet to be fully realized, the Pell Grant program made extraordinary progress in its mission to make college education more affordable and attainable for low-income students. Today, that mission remains just as relevant as it was in the 1970s, and the basic premises of the program are still true.

OER use fulfills the same purpose as the Pell Grant program: lowering the cost barrier to educational accessibility. While textbook cost and access is ultimately only a small part of the overall financial barrier to higher education, it is perhaps a more tangible goal, and one less liable to the political and funding challenges Pell Grants have historically faced. The decision in support or against OER, like educational funding, reduces to a debate between democratic idealism and fiscal caution. Though programs have historically been expensive, and increasingly prone to partisan disputes over responsible spending, they have also proved enduring, for the idea they represent is widely popular. "What we do in education today," Pell noted in a 1985 speech, "will have benefits for our society for years and years to come."[208] Low-cost to free OER, like Pell Grants, takes American society one step closer to the Senator's ultimate vision of guaranteed higher education to all who seek it, no matter their means or background.

OPTIONS

Viewed collectively, the work of educational reformers throughout the 19th and 20th century fits into the larger narrative of educational access. The basic foundation laid by the early

advocates for public education helped to create the framing language that education was a public right critical to an informed citizenry. In Rhode Island, the enshrinement of Article XII in the 1842 Constitution best exemplifies this progress.[209] This development, alongside the economic growth of the nation, allowed land-grant supporters to frame access to higher education as a societal necessity for the common good. This attitude was reflected in the 1909 inquiry into the quality of land-grant education in Rhode Island, which concluded that land-grant education was of incalculable economic and cultural value to the state's citizens.[210] The greatest achievement of land-grant colleges and universities was their ability to broaden higher education's accessibility beyond societal elites, and at a low cost, mirroring the growth of basic public education. In the late 20th century, Senator Pell's work on the Pell Grants continued this mission as he further diminished the cost barrier to higher education, advocating for the right of all citizens to higher education.[211] Unlike grade school education, this concept has yet to be ingrained in the public consciousness. The century-long development of that very notion in Rhode Island illustrates the significance of incremental reform in reaching societal acceptance. The growth of public, land-grant universities and federal financial aid are examples of that reform.

Today, state support for the development and use of OER in higher education has the potential to be a next step, further normalizing the role of the state in promoting accessible and affordable higher education for all. The following three policy options seek to provide guidance on how the State may support the development and expand the use of OER, inspired by historical trends in educational access. While the public circumstances, available resources, and technology vary wildly, to the point that a direct comparison to any one historic event does not fully match the present-day realities of OER use, the language, advocacy, and thinking used by educational reformers remains applicable. Each option is based upon the same fundamental notion that underlays the previous historical analyses: that public access to education is fundamentally a positive good. Equally important to the availability of OER is their actual use in university curriculums, and so notions of OER development represents both the cost of creating individual OER as well as providing financial incentives for university faculty and curriculums to create and utilize OER. The primary concern of each option focuses on how to best fund and implement a statewide system of OER development in higher education.

Every option represented below is likely to be met with similar arguments that have defined opposition to educational spending over the previous two centuries. As public spending on higher education does not enjoy universal acclaim, budget hawks are liable to treat OER funding as a government handout that disrupts free market forces. Historically, the Pell Grant program has faced this same criticism as opponents argue that college access must be determined by an individual's work rather than government support.[212] The promotion of publicly funded educational materials can potentially anger and mobilize both textbook publishers as well as free market advocates in the same way that traditional universities and small government conservatives opposed land-grant colleges.[213] The independent authority of college faculty to determine what materials they use, even at publicly funded institutions, are analogous to the traditional independence local schools enjoyed prior to state oversight. Faculty members resistant to curriculum change are perhaps one of most fundamental obstacles to OER use. Despite these historical challenges it is important to consider, that over time educational reformers have traditionally emerged victorious. Once established, programs that expand educational access proved very popular and resilient. In this regard, OER benefits as a focused initiative, and one that is comparatively small compared to greater debates on the overall cost of university attendance. Further, OER are long lasting: an OER developed one year does not need to be immediately replaced the next. Consequently, an investment in OER generates a return for many years.

Option 1: The Free Schools Approach

The history of the development of public schools in Rhode Island is just as much the history of public school standardization as much as the history of accessible free education. Throughout the 19th century, reformers sought to develop statewide systems and standards of basic education accountability where none previously existed. This history highlights the role of the State as the overseer of educational policy and standards that, over time, eclipsed the authority of local communities and institutions. Over the course of the 19th century, the expansion of the State's power was often driven by the need to improve the quality of and access to basic education, as highlighted by the 1845 Barnard Report, and the efforts of John Howland and the PAMM in 1800.[214]

Independently of the need to fund the development of OER, the State of Rhode Island must weigh the consequences of expanding the scope of educational authority against the cost. The challenges of incentivizing OER use in the state can be consolidated by the Office of the Postsecondary Commissioner and URI Board of Trustees as the overseeing bodies. Such rules can range from mandates that courses using OER be identified in university catalogs, creating grant programs to incentive faculty and departmental use of OER, and most drastic, a direct mandate to utilize OER.

Much as Henry Barnard was commissioned by the State to assess the strengths and weaknesses of the public school system, the State today must examine how its public colleges and universities are promoting (or not) affordable educational materials. A state-sponsored study must investigate affordability, the most effective funding means to develop OER, and how to encourage their use. Effective strategies employed in other states can serve as a model. Much as Rhode Island was slow to develop a free public school system, Rhode Island is slow compared to its neighbors to investigate OER funding initiatives. The findings of OER studies in Massachusetts and Connecticut provide a useful starting point for any future reports conducted in the State.[215]

The state's public universities are not dissimilar from its public schools in that they possess fixed curriculums. While an individual student's focus of study varies, general education requirements provide a useful starting point to guide OER development. As general education courses are required, it follows that these courses must be made as accessible as possible. Curricular and major requirements, provide an ample first-step for cooperation between public university administrators and State educational overseers to pioneer the process of developing and implementing OER.

Mirroring the development of public education in the state is a high-risk, high-reward initiative for education policymakers today. Successful OER initiatives can normalize access to affordable higher education as a public right. At the same time, the risk is reflected in the 19th century jurisdictional feuds beyond the control or scope of state and local authority which may worsen institutional relations and stymie reform initiatives.

Option 2: The Morrill Land-Grant Approach

The federal system of land-grant universities allocated and sold public lands in the west to fund the creation of new higher educational institutions. Unfortunately, a modern OER based direct equivalent to the Morrill Act is not an option. But, a Morrill-inspired approach to statewide support for OER initiatives can be funded by the General Assembly. This itself is not a strong deviation from the historical development of land-grant colleges and universities. The second Morrill Act of 1890, relied on direct congressional appropriation for the establishment of agricultural colleges in the former Confederacy, and expansion of existent colleges in the North and West.[216] Inspired by the novel idea of funding education through public land sale, lawmakers can also tie OER funding to other sources of revenue. This may include excise taxes levied on particular products, such as tobacco or legalized recreational drugs, an

increased sales tax, or funds from state lottery programs.

The second most striking feature of the Morrill Acts was the type of education they promoted. The Acts identified a lack of educational opportunities in the critical fields of agriculture and mechanics, and created institutions to address that deficit. In doing so, the Morrill Acts provided educational opportunities for necessary professions in the expanding American economy. Throughout his speeches advocating for land-grant education, Morrill continually referred to the economic benefits of agricultural education.[217] This idea of targeting accessibility through necessary professions offers a suitable analogue for the application of OER funding.

If an individual course of study can be considered equal to any other academic discipline, the economic value of an academic discipline may be measured by enrollment data. An individual OER serves a defined academic subject as a textbook substitute. While several OER may be developed across many disciplines, OER funding policy priorities must target specific high need gateway courses. These courses can be identified within the state university system, as these institutions must meet the educational needs of the state's citizens, and strive to increase access for all.[218] The development of pilot programs will be crucial to this process. While not every Rhode Island resident attends a state college or university, nor are all matriculated students from Rhode Island, their institutional missions align with OER development.

This methodology ensures that state-sponsored OER expansion focuses on the fields most in-demand at the state's institutions, and prioritizes OER to impact the greatest number of students. Similar to the initial curriculums at land-grant institutions, this selective method of funding allocation must not overlook some subjects entirely at the expense of others, but rather to provide guidance on specific funding initiatives.

Option 3: The Pell Grant Approach

Contrasting with the subject-specific emphasis of the Morrill Acts, Pell Grant program distributes aid for students directly. Its complex financial formulas provide direct aid for individual students, no matter the college or university that they attend, awards are distributed based on the level of need.[219] It is challenging to tether OER to student need directly, as OER materials are strongly tied to academic disciplines rather than their user.

The system of federal financial aid created by the Pell Grant are a fundamental part of the college application process as part of FAFSA. Using data collected by the State's public universities and the federal government, it is possible to create an OER funding allocation formula determined by the existing need formula. After the State apportions for OER development, each resident student attending any public college or university systems can be assigned a numerical rating based on financial need, perhaps on a sliding scale of 1, with the most financial need, to 10, with veritably none. Each rating must correspond with a practical dollar amount, to be calculated as a percentage relative to the other needs-based ratings and the overall OER appropriation. These ratings can then be tallied with a student's major to produce an overall rating for that academic discipline. The lower the number, the greatest financial need of that discipline's students. This discipline rating will need to be converted to a percent of the highest rating possible to account for differences in enrollment across disciplines. This scale may have significant overlaps with the most popular academic subjects, but the additional nuance of this calculation, in theory, produces a list more finely tuned to the financial need of the state's students. The dollar amount corresponding to each rating, along with the overall rating of a particular academic subject, then provides guidance on where the State's OER appropriation is best directed to assist students with the greatest financial need.

Notably, this system is imperfect and complex. In particular, it requires an association

between students and a single academic field of study, which may change over time or may not be entirely clear. Many students change majors, or pursue multiple majors. Building these associations between disciplinary studies and economic needs are the greatest challenge. The data driven approach of this solution, along with the necessity of incentivizing OER use, makes a focus on the state's public universities preferable for the sake of simplicity. Pilot programs and small-scale testing to determine the most efficient way to operate such a program are absolutely necessary before wider use. In this case, the State's institutions of higher education are the most efficient way to increase access higher education.

Option 4: Economic Necessity

Like Senator Morrill, Senator Pell stressed the importance of accessible higher education to the needs of the nation's economy. Both Senators directly higher education to the strengthening of American industry, technology, and culture.[220] Along this model, it is possible for the State to use OER development and targeted offerings in particular for critical and foundational subjects as way to incentivize particular fields considered to be economically valuable. As OER availability eliminates the cost barrier of required texts, fields with OER are more accessible. If the State judges a critical need for additional doctors and medical professionals, for example, OER availability is a way to lower barriers to medical study, and at the same time maintain academic rigor. Regardless of the strategy selected to implement, the expanded use of OER at state colleges and university systems can benefit students and make higher education more affordable. Historically, advocates for higher education have long argued, the state reaps the rewards of an educated and skilled citizenry.

RECOMMENDATION

The need to make higher education accessible to low-income students is of the greatest concern in developing OER policy. In an ideal scenario, where the State's primary concern is doing the greatest good for students of need, Option 3, is the best recommendation. As noted, there may be significant overlap between the most common subjects studied (Option 2) and subjects with the greatest financial need (Option 3), but this link cannot be directly assumed without the requisite study. The overriding concern of higher education reformers throughout the state's history, from Senators Morrill to Pell, was to service students who do not have the means of obtaining higher education. The matter of framing OER development as a program of financial assistance rather than one servicing the most common subjects studied is critical both philosophically as politically. Historically, programs that promote accessible education have been popular, and while often criticized for necessary increases in spending, have outlasted their critics.

However, the complexity of this solution cannot be overlooked. The need to ensure OER are adopted in universities at all is of perhaps greater importance. This is only possible through legislative or executive rule-making authority, to preserve their widespread use and ensure the longevity of OER. To this end, ideas recommended in Option 1 are valuable. The state must first conduct studies regarding how to best develop and implement OER, their current use in the state, and the financial need of the state's students. Importantly, these studies must derive a standardized procedure with the legal backing to financially develop and encourage the use of OER in the state university system, much as public school procedures were standardized in the 19th century.

Though the solution recommended in Option 2 does not target students with economic need specifically, it is significantly simpler in concept than Option 3. As result Option 2 is likely preferable until state leaders develop a more nuanced understanding of OER development and use and the public learns the utility of OER. OER pilot programs targeting high need gateway courses can be funded. Funding for these programs can be collected from indirect sources of government revenue, such as excise taxes and the state lottery to avoid universal, direct

increases in taxation. As direct OER creation is not necessarily a continuous progress, continuing funds can be transformed into state-sponsored faculty development grants for professors within the state university system These grants can help fund the OER adoption process by rewarding faculty who adopt them and covering the costs associated with transforming their syllabi to incorporate OER. These corollary recommendations are inspired by the slow reform of public education and the necessity of mixing regulatory reform with localized benefits. In the future, once the success of these programs can be determined, policymakers can develop more complex and specified OER initiatives, such as that advocated for in Option 3.

Rhode Island has a long history of delayed educational reform, from the repeal of the 1800 School Bill to the slow growth and development of the University of Rhode Island. Senator Pell's advocacy for accessible higher education on the national stage helped to break this trend, through his deep convictions in the promise of accessible education. State leaders today have the opportunity to advance Senator Pell's legacy by developing a concrete OER policy based on the idea that all students have a right to accessible higher education. Though often delayed by financially-concerned skeptics, the ideas of educational reformers have historically won acceptance. The role of OER in promoting accessible higher education are a crucial next step in that historical narrative. There is still time for Rhode Island to be on the right side of history.

NOTES

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[15] Senack, *Access Denied,* 4-5; Vitez, *Open 101,* 8.

[16] Senack, *Access Denied,* 7-8; Senack et. al., *Access Denied,* 6-7.

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[41] Eschenbacher, *The University of Rhode Island,* 32-36, 41.

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Appendix A - Literature Review

While the skyrocketing prices of college tuition is justifiably infamous, the cost of college and university textbooks are perhaps even more egregious. In 2015, NBC News conducted an evaluation of data available from the U.S. Bureau of Labor Statistics, and found that the price of college textbooks rose by 1,041% since 1977, compared to the average 308% inflation rate on all other items. The data indicates a 961% overall increase in college textbook prices.[1] Since 2006, the rising cost of college textbooks outpaced the rising costs of college tuition and fees by nearly 50%.[2] Student concerns regarding the price of mandatory textbooks have grown to such an extent that a 2014 survey conducted by the Nebraska Book Company (Neebo) found that, "more students (55%) worry about textbook costs than worry about the cost of tuition (50%)."[3]

The price of college textbooks and course materials is an invisible fee not represented in traditional calculations of the costs of higher education. Depending on the university, materials typically add anywhere from several hundred to over a thousand dollars per semester to a student's fees and debts. For many students, particularly those from low-income backgrounds, these costs impose a barrier to educational access. The market for used and rental textbooks makes lower-cost materials available but these materials become obsolete with the publication of new editions. Used textbooks have become a less-sure option for students as publishers lock content behind unique access codes, preventing resale.[4] To address textbook affordability, many educators and lawmakers have turned away from traditional publishing models entirely and towards Open Educational Resources (OER). OER are typically defined as materials that are freely accessible and licensed for reuse, remixing, and redistribution, and usually exist digitally. The creation, funding and implementation of OER in colleges and universities is an ongoing subject of debate, and varies dramatically by institution and state.

Opposition to OER usage often comes from within universities. Many academics are opposed to revising their courses to include OER as their primary texts, and educators balk at the time required to produce an OER. Others simply do not regard OER as highly as traditional textbooks, mirroring the stigma that many Open Access journals face when contrasted with traditional serials. Established publishers, conscious of their profits, support this view and have increasingly turned towards bundled digital textbooks that include a multitude of supplementary resources. Unfortunately, these bundles are often more costly to students than a textbook alone, and they are typically not resalable. As OER opposition represents the current status quo, there are few to no policy arguments against OER: silence is the primary alternative. As public concern regarding the price of textbook grows, state legislatives have taken action to promote OER use. In the past decade, more than half of the states have initiated legislation encouraging OER usage and production.[5] Due to the lack of coordination between the states' educational systems, OER policies and laws vary radically, advocates include: students, librarians, education technologists, and international supporters.

Student Advocacy: The Student Public Interest Research Groups

College and university students are among the most vocal supporters of OER adoption and creation for clear reasons: they are most affected by high textbook costs. Student Public Interest Research Groups (SPIRGs), advocacy organizations aimed at encouraging student activism on and off campus, are especially vocal in support of OER adoption, focusing primarily on how the increasing cost of course material directly impacts students.

In 2014, SPIRG affiliate Ethan Senack authored a policy guide for the adoption of OER in the context of rising textbook prices, arguing that they presented the most direct solution to students' financial challenges. According to Senack, students' will collectively save millions if

each had just one textbook replaced with an OER, and he argues that OER return purchasing power to students.[6] To promote OER use, he recommends funding programs to encourage their acceptance on college campuses. Additionally, he endorses state and federal policymakers' promotion of OER as the best solution to the textbook issue.[7]

Senack and affiliates Robert Donoghue, Kasya O'Connor Grant, and Kaitlin Steen later published a 2016 report evaluating the usage of textbook access codes across universities, and they exposed that approximately 32% of courses required unique access codes for course materials. They found these rates to be significantly higher at public universities and community colleges compared to private institutions, and they argued that this disparity was likely due to the need for more ready-made resources to serve larger courses.[8] As access codes are commonly associated with bundled textbooks, they are often more expensive for students than traditional textbooks. The SPARC argue that this reality, "[threatens] the traditional ideal" that a student's hard work determines their academic success, replaced instead by their ability to purchase necessary materials.[9] For this reason, they suggest that OER adoption is the most student-friendly solution to rising prices, adding that the proliferation of access codes is even less preferable than the status quo.[10]

In 2018, SPIRG affiliate Kaitlyn Vitez took a stronger stance, arguing that colleges and universities, "should provide leadership by giving faculty the infrastructure to support their switch to open textbooks," investing whatever financial and human capital needed. She called on policymakers to sponsor legislation to provide incentive for OER adoption and to utilize their public platform to highlight and challenge predatory publishing practices like bundling.[11] Her recommendations reflected findings of further SPIRG studies, which examined the cost effects of access codes versus OER. She estimated that if only ten core courses used OER nationwide, students will save $1.5 billion per year.[12] "When materials are switched from proprietary to open," Vitez concluded, "students not only experience significant cost savings, but they understand that their academic success matters above all else, including above profits for publishers."[13]

As a whole, the Student PIRGs represent a politically progressive point of view, drawing upon a legacy of student activism originating in the 1970s. Aside from OER adoption, they also advocate for hunger prevention, environmental protection, and increased student involvement with politics. The vast majority of their data is derived from publicly available consumer records. Despite their progressive origins, alarm regarding the rising cost of textbooks is not a partisan issue, as conservative thinktanks such as the American Enterprise Institute also report on the issue with concern.[14] SPIRG authors generally focus on spreading awareness on existing inefficiencies in the textbook market, how that impacts students, and promote OER as a solution to best meet students' needs. These solutions mostly do not address challenges associated with OER adoption, such as production cost and technical support. While their viewpoint is idealistic, their recommendations typically focus on campus-policy, rather than legislative, solutions.

Librarian Advocacy: Sparc And The ALA

Next to students, librarians are among the most vocal advocates for OER, drawing upon their professional commitment to freely available information and access to learning materials. Most vocally, the Scholarly Publishing and Academic Resources Coalition (SPARC), founded and supported by an alliance of academic and research libraries dedicated to the wider open source and knowledge movements, have pushed for OER legislative action. The American Library Association (ALA), the premier professional organization for librarians in the United States, has also included OER advocacy and use within the guidelines of their profession.

SPARC recently released the 2020 edition of their OER State Policy Playbook, containing ten recommendations on how state policymakers can promote OER usage. It endorses the

establishment of grant programs to subsidize OER creation, the development of OER task forces of in-state stakeholders to conduct studies on and oversee implementation and use, and creating laws promoting the use of free to low-cost materials within state university systems. Each recommendation is paired with a case study implemented in at least one state, and as a consequence none of their proposals come across as especially radical, which may be enticing to policymakers concerned with unprecedented action.[15]

Over the past two decades, SPARC published a number of policy recommendations relevant to OER adoption, often written by senior consultant Raym Crow. In 2006, Crow argued that nonprofit scientific and scholarly societies have the potential to lower costs, increase the visibility of their publications, and mitigate risk by forming publishing cooperatives to produce journals.[16] According to Crow, cooperative publishing enables nonprofit societies to better compete and resist the corporatizing pressure of large academic publishers, benefiting universities and libraries through the availability of low-cost journals.[17] In 2009, Crow authored a guide on sustainable open publishing models. Though he refrained from advocating for any one approach, he examined the positives and negatives of both supply- and demand-side models of publication as applied to open journals.[18] Crow focused his analyses on the logistical challenges and opportunities available to those seeking to publish openly, outside of the traditional corporate model. His 2009 consideration of supply-side grant-funding is precisely what SPARC recommends in their 2020 playbook.

SPARC's status as a professional organization rather than an activist or strictly policy driven one is evident in the tenor of their publications, which pragmatically present a variety of policy options. Each is based on the fundamental assumption that open publishing is a valuable endeavor, but each also acknowledges the logistical challenges of that ideological goal. As such, their recommendations are based upon currently existing policy and financial models, which suggests that OER adoption is practical and viable, rather than fully revolutionary.

Generally, the ALA is most concerned with library-level policies rather than state or national policy advocacy. However, they view OER as a transformative moment in librarianship, and they have positioned themselves as expert stakeholders in discussions regarding materials access. In their 2019 Environmental Scan, the ALA recommended that librarians become, "campus experts in authorship rights and open access requirements."[19] They additionally identified OER as a critical tool that allows campus libraries to promote college affordability, and they recommend that librarians act as liaisons to faculty members to assist in evaluating adoption strategies and material quality.[20]

An earlier 2013 white paper on library policy towards scholarly communications and information literacy argued that college librarians include programs on publishing into their traditional services for students, covering open access, author rights, copyright, and fair use. By using that model, the ALA reasoned that students learn to evaluate resources by understanding how they are produced. They also suggested that this methodology provides students the skills to both explore and advocate for new models of information that encourage a broader dissemination of knowledge than traditionally available.[21] OER in particular, they noted, "[provide] a rich area for education about open access, Creative Commons licenses, and restrictions of commercial publisher licenses."[22]

Though the ALA's publications refrain from making policy recommendations to lawmakers their proposals to librarians make it clear that OER have a strong support network on college campuses to assist in their development and use. Librarians are continually evaluating traditional services to better serve students' needs and address changes in their field. OER advocacy often translates to the promotion of OER adoption. Consequently, universities already have professionals ready to assist in legislated OER implementations, ready to work with advocates and university administrators and faculty to develop a series of best practices.

Educational Technologists

OER have emerged as a common topic of interest among academic specialists in educational technology.[23] Their research forms the basis upon which OER policy is constructed and justified, though policy advocacy is often beyond their scope. Like librarians, these scholars form a core of existing interest and expertise on university campuses.

Eulho Jung, Christine Bauer, and Allan Heaps' 2017 article "Strategic Implementation of Open Educational Resources in Higher Education Institutions" is one of the most complete accountings of OER use. Concluding a deep study of existing OER literature, they identify a step-by-step process that institutions can follow to successfully integrate OER into their curriculum. Based on these findings, they recommend that institutions focus on achievable outcomes to guide OER implementation, and to follow established precedent for the most success.[24]

John Hilton's 2016 "Open Educational Resources and College Textbook Choices: A Review of Research on Efficacy and Perceptions" studies perceptions of quality between traditional textbooks and OER. He concludes that faculty and students, "Generally find that OER are comparable in quality to traditional learning resources, and that the use of OER does not appear to negatively influence student learning," and his analysis directly counters arguments labeling OER as low-quality. Accusations of low quality tend to be common among traditionally minded academics, who bristle at deviations from the conventional method of publishing and their free availability. As such, Hilton notes that OER financial savings makes them preferred to costly textbooks.[25]

While these scholars prefer to examine how OER are currently used rather than advocate for a particular policy. The findings of their research nevertheless make the benefits of OER adoption clear, and are a useful counterargument against campus opponents of OER who denigrate their quality or are loath to change existing course structures.

International OER Advocacy

OER advocacy is not strictly limited to special interest organizations in the US. Issues of high materials costs and restricted access to academic resources are a global challenge. As such, international organizations concerned with attainable education and information access have adopted OER advocacy as part of their ongoing global missions.

Possibly the most famous instance of international OER advocacy is the 2007 Cape Town Declaration. The product of a meeting of open education advocates convened by the Open Society Institute and Shuttleworth Foundation, the Declaration broadly calls on, "governments, school boards, colleges, and universities [to] make open education a high priority."[26] Specifically, the declaration advocates for tax-funded OER development and preferential use of open resources.[27] While very much an idealized statement, the Declaration best marks the beginning of the international OER advocacy movement, much like the 2002 Budapest Open Access Initiative functioned for the broader Open movement.[28]

The Organization for Economic Co-operation and Development (OECD)'s 2007 publication *Giving Knowledge for Free: The Emergence of Open Educational Resources* followed the Cape Town Declaration. Most space is devoted to providing a background to the development of OER, the definition of Open, and the benefits of their use. The OECD is tentative in making concrete policy suggestions. However, they cautiously recommend that member nations evaluate copyright restrictions that limit OER use and develop policies making publicly-funded research freely available. "From the national point of view," the report argues, "the most natural perspective might very well be not to have a particular policy regarding OER in higher education, but to take a holistic approach to all kinds of digital learning resources."[29]

By 2015, the United Nations Educational, Scientific, and Cultural Organization (UNESCO) published *Guidelines for Open Educational*

Resources (OER) in Higher Education, which strongly advocates for OER policies. The *Guidelines* offer a variety of policy suggestions, ranging from the governmental scale to student organizations. To governments specifically, UNESCO suggests the adoption of open standards and licensing frameworks to promote OER development and dissemination, help raise awareness of OER issues, and set standards for higher educations that promote OER use.[30]

More recently, in 2020, the International Council for Open and Distance Education (ICDE) released "A Comparative Study of National Infrastructures for Digital (Open) Educational Resources in Higher Education." Noting that the practical benefits of OER use are well-known, the report acknowledges the lack of studies regarding necessary technical infrastructure to expand and to support their widespread use. Their report argues that stronger broadband resources are necessary in order to make ambitious plans for their widespread use feasible. The ICDE notes that most countries examined in their study face significant structural challenges, but they argue that the report is "a wake-up call" to "justify their push for the improvement of OER infrastructure."[31]

The challenge that international OER advocates face is best illustrated by the ICDE's work, and they note that actual OER use and policies depends largely on the conditions specific to individual countries. Consequently, their recommendations tend to be broader and less specific than those offered by American OER advocates. However, there is symbolic and real power behind the recommendations of these organizations as they place pressure on their member nations to take action. International advocacy makes an ideal partner to special interest advocacy, as they provide high-level, respected credibility to localized policy issues.

OER Laws In Practice

Several states have already adopted legislation supporting the adoption and development of OER, but Rhode Island is slow to act. Currently, the Rhode Island State Office of Innovation, operating under the authority of the Governor's Office, is responsible for the Rhode Island Open Textbook Initiative (OTI), Rhode Island's only statewide OER policy. Though the OTI supports partnerships with local colleges and universities to promote OER use, it is not mandated by legislation, and so lacks permanency.[32] Concurrently, Rhode Island's neighbors, Massachusetts and Connecticut, are more actively pursuing the use of OER, and they have produced reports detailing their successes and failures.

In 2019, Connecticut's Commission for Educational Technology (CET) launched the "Go Open Connecticut" campaign to promote OER use and adoption. After conducting broad studies of their use across the state, the CET concluded that educators in Connecticut can benefit from further professional development opportunities on the use, sharing, and revision of open materials and the creation of technological platforms to facilitate OER adoption. They also called for further charitable, federal, and state funding for OER development, arguing that "the cost savings that come out of using OER justify modest investments to support training and technology platforms."[33]

In Massachusetts, the Commissioner of Higher Education created the Open Educational Resources Working Group, and likewise conducted a statewide survey in 2018 to serve as the baseline for further action within the state. Based on those findings, the OER Working Group recommended a broad series of policies, including the adoption of a statewide policy defining the guiding principles of OER, including the establishment of a more permanent OER office within the government to coordinate future policies. This includes OER training and development opportunities on use and implementation for educators. In the long-term, they recommended future OER policy to support the technological needs of their use and access by improving state wireless and broadband capabilities.[34]

As OER adoption and creation efforts are largely uncoordinated nationally and internationally, their use and implementation

vary significantly throughout the United States, dependent upon the resources of a state and interest of local lawmakers. Since the Rhode Island OER initiative is largely voluntary, the Governor's Office and General Assembly can consider and evaluate the OER policy recommendations of neighboring states with similar demographic, political, and economic situations to provide and to develop a viable model for Rhode Island.

In constructing OER policies, lawmakers need to consider arguments from all of OER' advocates. The question of whether or not to use OER is not a debate, so much as a question of how and when to act—for which OER advocates have answers. Student, library, and international promoters have aptly presented both ideological and practical arguments in favor of OER use, grounded in financial savings for students and the positive effect on college affordability. Present legislative options for lawmakers can directly and indirectly promote the development and use of affordable materials, and oftentimes is based in existing precedent. That standard is further supported by educational technologists, whose studies support the activists' claims and offer concrete blueprints for OER implementation on the institutional level. Rhode Island can benefit from the bold actions of neighboring states, which they can use as a model to construct a similar OER policy. Although OER and the technology that supports them are new; their benefits and beneficiaries are clearly identified and defined.

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[14] Mark J. Perry, "Chart of the day…or century?" Carpe Diem, American Enterprise Institute, July 12, 2019, https://www.aei.org/carpe-diem/chart-of-the-day-or-century-2/.

[15] *OER State Policy Playbook 2020 Edition* (Washington, DC: SPARC, 2020): 7, 9, 12. Accessed February 20, 2020. https://sparcopen.org/our-work/oer-state-policy-playbook/.

[16] Raym Crow, *Publishing Cooperatives: An Alternative for Society Publishers* (Washington, DC: SPARC Publications, 2006): 2. Accessed February 20, 2020. https://sparcopen.org/wp-content/uploads/2016/03/cooperatives_v1-2.pdf.

[17] Ibid., 27-28.

[18] Raym Crow, *Income Models for Open Access: An Overview of Current Practice* (Washington, DC:

SPARC Publications, 2009): 8-9. Accessed February 20, 2020. https://sparcopen.org/wp-content/uploads/2016/01/incomemodels_v1.pdf.

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[20] Ibid., 13-15.

[21] Association of College and Research Libraries, *Intersections of Scholarly Communication and Information Literacy: Creating Strategic Collaborations for a Changing Academic Environment* (Chicago: Association of College and Research Libraries, 2013): 20-21. Accessed February 5, 2020. http://www.ala.org/acrl/sites/ala.org.acrl/files/content/publications/whitepapers/Intersections.pdf.

[22] Ibid., 8.

[23] Educational technologists are specialists who work within educational institutions assisting educators in the use of technological resources, like virtual classroom platforms and digital resources, to assist in the learning process.

[24] Eulho Jung, Christine Bauer, and Allan Heaps, "Strategic Implementation of Open Educational Resources in Higher Education Institutions," *Educational Technology 57,* no. 2 (March-April 2017): 82.

[25] John Hilton III, "Open Educational Resources and College Textbook Choices: A Review of Research and Efficacy and Perceptions," *Educational Technology Research and Development* 64, no. 4 (August 2016): 588-589.

[26] The Open Society Institute, now the Open Society Foundations, is a private grant-funding institution supporting civil society, social justice, human rights, and democratic governance (https://www.opensocietyfoundations.org/). The Shuttleworth Foundation is a private investment organization interested in experimental philanthropy that advocates for social change and the advancement of knowledge (https://shuttleworthfoundation.org/); The Cape Town Open Education Declaration, "Read the Declaration," accessed September 16, 2020, https://www.capetowndeclaration.org/read-the-declaration.

[27] Ibid.

[28] The 2002 Budapest Open Access Initiative was a meeting held by the leaders of the burgeoning Open movement from around the world. Collectively, they produced a statement defining "open access" and outlining the principles that have come to define the Open movement since. See: Budapest Open Access Initiative, "Read the Budapest Open Access Initiative," accessed September 16, 2020, https://www.budapestopenaccessinitiative.org/read.

[29] Centre for Educational Research and Innovation, *Giving Knowledge for Free: The Emergence of Open Educational Resources* (Paris: OECD, 2007): 121-124. https://www.oecd.org/education/ceri/38654317.pdf.

[30] UNESCO, *Guidelines for Open Educational Resources (OER) in Higher Education* (Paris: UNESCO, 2015): 5-6. http://www.unesco.org/new/en/communication-and-information/resources/publications-and-communication-materials/publications/full-list/guidelines-for-open-educational-resources-oer-in-higher-education/.

[31] Victoria I. Martin, et al., "A Comparative Study of National Infrastructure for Digital (Open) Educational Resources in Higher Education," *Open Praxis* 12, no. 2 (2020): 242, 253-254.

[32] SPARC, "OER State Policy Tracker."

[33] *Open Educational Resources: Survey Results and Opportunities for Connecticut Schools and Universities* (Hartford, CT: Connecticut Commission for Educational Technology, 2019): 26. Accessed February 20, 2020. https://portal.ct.gov/-/media/DAS/CTEdTech/publications/2019/OER_in_Connecticut-2019.pdf.

[34] *OER Working Group Final Report & Recommendations Fall 2019* (Boston: Massachusetts Department of Higher Education, 2019) 3-5. Accessed February 20, 2020. https://www.mass.edu/strategic/documents/OER%20Working%20Group%20Final%20Report.pdf.

Appendix B - Historiography

Through the first decades of the 21st century, Open Educational Resources (OER) have rapidly evolved as a significant alternative to the traditional textbook used in universities and grade schools. By definition, OER are materials used in place of textbooks that are free to use, adapt, and redistribute. OER creators receive no monetary benefit and users bear no cost for their use. Per this definition, OER are almost universally digital materials. With little to no associated costs, there are fewer clear incentives for academics to produce OER, as they will not profit from that work due to their intentionally generous reuse licenses. OER have the potential to eliminate the rapidly growing cost of textbooks. Given the existence of free textbook loan policies throughout grade school education in the United States, this benefit is most often associated with college students, who bear the full burden of purchasing materials. Today, both the growing costs of higher education and college textbooks is dramatically outpacing other goods, straining the means of students to pay. Compounding this challenge, an increasing number of college students come from low-income backgrounds and are the first-generation students. In the two decades since the development of the first OER, both the federal and state governments have taken tentative legal actions regarding OER use, ranging from full support to preliminary study. Due to the decentralization of education policy in the U. S., the states' actions vary dramatically. In placing OER use and development in its historical context, one must consider OER and textbook history alongside the history of educational reform and material use in a particular state. The development of these trends in Rhode Island is of specific interest to this study. Though the technology and unique challenges and advantages of OER are new, prior developments in education reform may contextualize present-day methods to address OER use and adoption.

The History of OER and Digital Educational Technology

As OER are a recent development there are few examinations of their history. Perhaps the best history of OER comes from T. J. Bliss and M. Smith's "A Brief History of Open Educational Resources," in Rajiv Jhangiani and Robert Biswas-Diener's *Open: The Philosophy and Practices that are Revolutionizing Education and Science*.[1] As Hewlett Foundation scholars, Bliss and Smith emphasize the role that Hewlett played in financing and developing some of the earliest OER. This may come at the expense of other aspects of OER' early history, but they nevertheless succeed in summarizing OER development from its intellectual origins in 1990s. They frame OER as a natural development within the wider Open Access movement, which continues to advocate for universal access to knowledge.[2] Spurred by the success of Open Access scholarly journals and the 2002 Budapest Open Access Initiative, scholars at MIT partnered with Hewlett financiers to develop what became the first Open Educational Resource in the early 2000s.[3] This process served to both define the concept, and gave OER their name.[4] Conceptually, Bliss and Smith framed freedom as the most groundbreaking aspect of OER use: "freedom of access to content, freedom from cost, and freedom to use in any way."[5] In this sense, they argued that the development of OER was motivated by the need to aid underserved populations with accessible materials both in the United States and abroad.[6]

Some historians have contextualized new digital textbook technologies within the broader scope of educational history. In "The Textbook as Technology in the Age of Open Educational Resources," Jordan M. Reed compares the evolution of the popular history textbook *The American Pageant* and its use of cutting-edge pedagogical materials to the development of the open textbooks *The American Yawp* and *Building the American Republic*.[7] Reed suggests that, while OER have clear benefits driving their adoption, traditional textbooks historically adapt better to changing educational pedagogy.[8] However, he concludes that OER have succeeded in returning

scholarly texts to their original historical concept, independent of the market considerations that drive the production and sale of present-day textbooks.[9]

Paolo Bianchini's "The Databases of School Textbooks and the Web 2.0" does not directly concern OER, but examines how digital technologies have transformed the work of educational historians concerned with textbook use. Specifically, he notes how schoolbook catalogs, which have historically kept inventory of textbooks in use, have transformed into digital repositories for educational materials.[10] As such, he argues that, "the most important challenge facing the historical study of textbooks for the first time is the competition, or rather the relationship with the documentary resources… [made] available to all the browsers as part of [the repositories'] mission."[11] Where Bliss and Smith emphasize the potential for freedom in generating increased access to resources, Bianchini argues that confusion and the promulgation of "texts online that are of little scientific and commercial value" is muddying educational scholarship.[12] He concludes with a call for historians of textbooks to more effectively connect their field to current trends, suggesting a disconnect between contemporary digital developments and studies of prior textbook use — a suggestion that becomes more explicit in the following works.[13]

The History Of Textbooks

In "Reflections on the Study of Textbooks," John Issitt dimly observes that the very word "textbooks" produces, "many, mostly negative responses," that characterize all interactions, from casual conversation to scholarly study.[14] In an effort to dispel those associations, his article serves as a brief narrative of textbooks' history, tracing their origin from ancient times to the modern day. The present-day negative associations, he concludes, is largely the product of a "sense of uncomfortable closeness to market relations that promotes the literary snobbishness [surrounding] textbooks."[15] He then suggests that the historical study of textbooks is often overlooked or undervalued due to these negative connotations and the poor preservation of historical materials.[16]

Also writing broadly on textbook history, Reed conducts a historiographical study of the field in "The History of the Textbook: The State of the Discipline."[17] Contemporary scholars, he concludes, largely attribute the content of textbooks to the political environment in which they were produced, accounting for censorship and special interests. Like Issitt, he concludes that the study of historical textbook content and their development is largely ignored by historians, and he attributes this to the view that textbooks represent peripheral products of larger political and cultural forces.[18] In Reed's view, this necessitates reform of the scholarly field of textbook studies—particularly in regard to the ongoing digitization of textbook technology and development of OER.[19]

This shared sentiment, particularly in Reed's more recent study, and echoing Bianchini suggests that the traditional studies of textbook history may be incomplete and unreliable in contextualizing new developments, like OER. While the development and use of OER are, as Reed suggests, the next natural focus for scholars of textbook history, they have yet to become a significant topic of study as textbook historians face significant cultural and disciplinary challenges.

Textbook Use And Reform In Rhode Island

While the history of educational reform in Rhode Island is extensive, not all educational issues are relevant to OER. However, even tangentially related subjects provide useful context to frame OER development and use. The following two sections represent a small collection of pertinent historical scholarship regarding textbook use in Rhode Island, as well as the development of Rhode Island public and university education. The historical scholarship concerning textbook use falls in the context of a broader political or cultural movement—a conclusion supported by both Reed and Issitt's findings.

Erik J. Chaput is the author of two articles on educational controversies in the 1960s regarding textbook use and tuition grants: "Battle over the Books in Rhode Island: The Case of Bowerman v. O'Connor" and "'Diversity and Independence in the Educational Marketplace:' The Rhode Island CEF and 1968 Tuition-Grant Debate." In the first, Chaput examines the origins of a 1963 law that granted all children attending public, private, and parochial schools free access to state approved textbooks. Dissenters framed their opposition in the language of religious liberty, and argued that to supply students at private parochial schools with books construed state favoritism to a particular religion. Nevertheless, the state's Superior Court upheld the law.[20] "Diversity and Independence" similarly examines the controversy of state aid for private education, defining it as "one of the most formidable public policy issues in [Rhode Island's] post-World War II period."[21] The 1963 textbook controversy, he writes, helped to spur further reform in the field of state aid to private institutions, resulting in a 1968 bill to grant tuition waivers to students attending private grade-schools. Despite the success of the 1963 law, opponents, once more arguing against perceptions of collusion between church and state, defeated the proposal.[22]

In "Books behind Bars: The Rhode Island Commission to Encourage Morality in Youth, 1956-1964," Sarah Y. Feldman examines a similar period in Rhode Island history, concerning the moral panic of the 1950s and 60s and its impact on book censorship in the state.[23] For approximately ten years, the state-supported Rhode Island Commission to Encourage Morality in Youth sought to investigate and educate the public regarding what they considered to be "trash literature," including pornography and leisure reading. Like the controversies examined by Chaput, the Commission drew battle lines between organized religion, arguing in favor of the public good, and an alliance of civil libertarians and publishers opposed to government intervention.[24] While primarily concerned with popular culture rather than academic materials, the Commission's ultimate dissolution and controversial history demonstrates the uncertain nature of Rhode Island's legal interventions in the publishing industry.[25]

Educational Reform In Rhode Island

On topics of broader educational reform, Francis Wayland, a 19th century reformer and President of Brown University, attracts significant attention within Rhode Island history. His legacy is substantially explored in Theodore R. Crane's two-part article "Francis Wayland: Political Economist as Educator."[26] Controversial in his time, Wayland redesigned the curriculum and structure of Brown around his personal moral convictions and, "his desire to render colleges useful to students whose intended vocations were not directly served by the existing course."[27] Wayland's reformist ambitions extended to Rhode Island's public schools as well, and he advocated expansion and improvement. Crane concludes that his reforms were broadly designed to make higher education more serviceable to the state's population, augmenting useful professions.[28] "He insisted," Crane posits, that, "colleges would survive only if they re-examined their role and sought to serve the needs of the workingman and farmer as well as the learned professions."[29] Christine Desjarlais-Lueth also writes on Wayland's reforms in "Brown University and Academic Library History," with an eye towards Wayland's restructuring of Brown's library.[30] She credits Wayland with overseeing an unprecedented expansion of the library's collections and services that pioneered much of modern academic librarianship. This expansion was heavily justified by Wayland's ban on class textbooks, instead preferring to augment instructional sessions with library materials.[31]

Concurrently, the 19th century witnessed fierce debate regarding the establishment of free public education in Rhode Island. In "The 'Working Class' and Educational Reform in Early America: The Case of Providence, Rhode Island," William G. Shade examines the role of the middle-class in establishing private educational institutions and programs when the Providence government failed to meet their demand for an

expansive public school system.[32] Francis X. Russo writes on the history of free public schooling more broadly in "John Howland; Pioneer in the Free School Movement," and focuses on the titular Howland, a late-18th and early-19th century middle class advocate for educational reform. According to Russo, Howland believed that, "a good common education [would] provide a practical preparation for useful living," and in, "the social duty of all men to make adequate provision for the common right of every child in society to an education."[33] Howland emerged as a leader of Rhode Island's free school movement, and helped to create and implement the state's first legislation. He spent several decades assisting with the structure and financing of public schools across the state.[34]

G. Wayne Miller's *An Uncommon Man: The Life and Times of Senator Claiborne Pell* offers an examination of a more contemporary advocate for education.[35] Miller focuses broadly on Pell's entire life and career, including significant treatment of Pell's interest in and advocacy for education. Miller attributes Pell's consistent support for improving the quality of education nationwide to his patrician sense of noblesse oblige and unerring belief that all Americans deserved access to the same opportunities. Pell helped pass nearly every major piece of educational legislation on the federal level through the 1960s to 1990s, including the 1965 Higher Education Act. His signature educational achievement was the creation of the Basic Educational Grant Program of federal financial aid, later renamed the Pell Grants in his honor.[36] Roger L. Geiger's *American Higher Education Since World War II: A History* and Christopher P. Loss's *Between Citizens and the State: The Politics of American Higher Education in the 20th Century* examine many of these legislative initiatives in detail, and are useful supplements to Miller's work.[37]

Rhode Island Educational History

A few select resources write broadly on the history of education in Rhode Island, covering subjects such as educational reform and practices, institutional establishment, and legislative history. Though more than a century old, Thomas B. Stockwell's *History of Public Education in Rhode Island* and Charles Carroll's *Public Education in Rhode Island* are two comprehensive accounts, if limited to the 19th century and earlier. Stockwell, writing while Commissioner of Public Schools, examined the development of education through specific places and institutions, such as the City of Providence, Brown University, and the Redwood Library and Athenaeum. Stockwell's publication precedes Rhode Island's first free textbook law, and thus says does not include that subject, but is comprehensive for its time and includes examinations of John Howland and the public-school movement and the state of school law as it stood.[38]

Carroll, an instructor at what became Rhode Island College, organized his text chronologically, and focused primarily on the public school-system rather than all educational institutions in the state. His examination thus overlapped with much of Stockwell's, but significantly incorporated many late-nineteenth century reforms, including the foundation of the University of Rhode Island and passage of the state's first free textbook law in 1892 and 1893, respectively.[39] The age of both resources does not diminish their usefulness—rather, the close association both authors had with the development of education in Rhode Island contributes to their detailed accounts.

William Howe Tolman's *History of Higher Education in Rhode Island* offers a history similar to Stockwell and Carroll in both scope and style, focused on the early history of higher education in the state. Tolman notes that the early history of university education in Rhode Island is largely contained exclusively to Brown University, he incorporates an expansive view of the term "higher education," including preparatory schools and academies. Similar to Stockwell and Carroll, Tolman's history omits key developments in the state's educational evolution, it provides a useful foundation for the previous centuries.[40]

Hermann Eschenbacher's *The University of Rhode Island: A History of Land-Grant Education*

in Rhode Island is the only published history of the state university. It is far from comprehensive, covering only the first half of URI's history. Of particular interest is the attention he gives to the applications of the 1862 Morrill Land-Grant Act in Rhode Island. Eschenbacher characterizes the purpose of the Morrill Act, to establish agricultural and mechanical colleges across the United States, as aligned with Francis Wayland's vision of the University as an institution responsive to the needs of all people rather than a select elite.[41] It was not until the state transferred their land grant funds from Brown University to the Rhode Island College of Agriculture and the Mechanic Arts (later URI) that, in Eschenbacher's estimation, the state first began to fulfill the spirit of the Morrill Act.[42] Nathan Sorber's more recent *Land-Grant Colleges and Popular Revolt: The Origins of the Morrill Act and the Reform of Higher Education* examines the history of land-grant education more broadly, across the United States.[43] His examination of the development of the University of Rhode Island supplements Eschenbacher's analyze, particularly as it contextualizes URI's development within wider trends in land-grant education.[44] The history of land-grant education in Rhode Island provides a useful background for the historical process by which higher education became more widely available in the state.

In "Rhode Island's School Funding Challenges in Historical Context," Daniel Morton-Bentley focuses on the funding legalities for public schools.[45] He offers a brief history of Rhode Island public education, particularly as impacted by the Dorr Rebellion and subsequence 1842 Rhode Island Constitution. With that historical context established, he devotes the majority of his work to analyzing the notion that Rhode Islanders have a constitutional right to education.[46] As a legal scholar, Morton-Bentley focuses on the legal precedents for current policies, establishing their historical continuity.

Joanne Pope Melish's "Reconsidering Rhode Island History" offers a much more recent historiographical examination, focusing on works post-1997.[47] Though educational history does not feature significantly in her analysis, she engages with the subject in her examination of recent studies on women's history. In particular, the professionalization of women as educators parallels late-19th and early-20th century educational reforms, such as free textbook laws, as well as the development and expansion of librarianship.[48] She also summarizes recent scholarship on the history of class and poverty in Rhode Island--relevant to the expansion of public services within the state, including free education.[49] While many of these connections are incidental, the focus of recent literature on social history is useful to contextualize the historical lineage of OER, as their creation is driven by equity issues.

Educational Reform Nationwide

Some scholars have conducted broader studies of the development of public education nationwide. Much like Morton-Brentley, they study the historical origins of educational policy and reform. Rather than focusing on developments in a specific state, they trace the origins of ideas, including those of universal access to education and the acceptance of education as a public service.

John C. Eastman's "When Did Education Become a Civil Right? An Assessment of State Constitutional Provisions for Education 1776-1900" conducts an analysis of state support for both public and higher education through the lens of state constitutions.[50] In this regard, Eastman identifies a strengthening of state provisions for public education over time, evolving from vague Constitutional statements in favor of public schooling to explicit educational requirements for all children. Like Eschenbacher, Eastman specifically identifies the 1862 Morrill Act as a watershed in government and public higher education, noting that it, "marked the entrance onto the national stage of the view… that a free, common-school education is a natural [Constitutionally-protected] right."[51]

David Tyack and Thomas James reach similar conclusions in their article "State Government and American Public Education: Exploring the

'Primeval Forest.'" Recounting the mixed views Americans have traditionally held towards government services, they argue that education emerged as one of the most wildly accepted forms of government activity, but on an extremely local level.[52] Conducting a similar constitutional analysis as Eastman, they track specific provisions for education across state constitutions, sharing the conclusion that provisions for and language regarding education strengthened over the course of the 19th century.[53]

Scholars must continue significant research to contextualize OER within both textbook history and the history of educational reform in Rhode Island. Late-20th and early 21st century technologies, like OER, occupy an uncertain place in history due to their ongoing and relatively recent development. This uncertainty deserves to be clarified—particularly as OER near their thirtieth year of development. The historical place of OER is influenced by the broader social, economic, and political issues they exist among. OER are a direct solution to these challenges, rather than a peripheral result. Unfortunately, the history of textbook use seems to place a premium on societal context at the expense of exploring the actual history of educational materials use. Very few studies evaluate materials used in colleges and universities, instead focusing on grade schools. Consequently, historians must establish both the place of OER in textbook history, as well as better understand the educational context and framework. Rhode Island's history may offer useful historical analogies and comparisons to their development, but OER expansion is not limited to one state; it is part of larger national and global Open movements. In this sense, establishing the place of OER in Rhode Island's history requires scholars to bring together interdisciplinary subjects that have often been marginalized within their fields perhaps fitting for the disruptive nature of OER to the status quo.

Notes

[1] T. J. Bliss and M. Smith, "A Brief History of Open Educational Resources," in *Open: The Philosophy and Practices that are Revolutionizing Education and Science,* ed. Rajiv S. Jhangiani and Robert Biswas-Diener (London: Ubiquity Press, 2017), 9-27.

[2] Ibid., 10-12.

[3] The 2002 Budapest Open Access Initiative was a meeting held by the leaders of the burgeoning Open movement from around the world. Collectively, they produced a statement defining "open access" and outlining the principles that have come to define the Open movement since. See: Budapest Open Access Initiative, "Read the Budapest Open Access Initiative," accessed September 16, 2020, https://www.budapestopenaccessinitiative.org/read.

[4] Bliss and Smith, "A Brief History of Open Educational Resources," 10-12.

[5] Ibid., 20.

[6] Ibid., 20.

[7] Jordan M. Reed, "The Textbook as Technology in the Age of Open Education Resources," *The History Teacher* 52, no. 4 (2019): 637-651.

[8] Ibid., 645-646.

[9] Ibid., 647-649.

[10] Paolo Bianchini, "The Databases of School Textbooks and the Web 2.0," *History of Education & Children's Literature* 9, no. 1 (2014): 127.

[11] Ibid., 129-130.

[12] Ibid., 129.

[13] Ibid., 134.

[14] John Issitt, "Reflections on the Study of Textbooks," *History of Education* 33, no. 6 (2004): 683.

[15] Ibid., 686-687.

[16] Ibid., 691-692.

[17] Jordan M. Reed, "The History of the Textbook: The State of the Discipline," *Book History* 21 (2018): 397-424.

[18] Ibid., 398.

[19] Ibid., 418-420.

[20] Erik J. Chaput, "Battle over the Books in Rhode Island: The Case of Bowermann v. O'Connor," *U.S. Catholic Historian* 28, no. 3 (2010): 109-111.

[21] Erik J. Chaput, "'Diversity and Independence in the Education Marketplace:' The Rhode Island CEF and the 1968 Tuition-Grant Debate," *The Catholic Historical Review* 95, no. 1 (2009): 59.

[22] Ibid., 74-75.

[23] Sarah Y. Feldman, "Books behind Bars: The Rhode Island Commission to Encourage Morality in Youth, 1956-1964," *Rhode Island History* 64, no. 3 (2006): 63-82.

[24] Ibid., 63-65.

[25] The beginning of the Cold War ushered in a period of moral panic in the United States spurred by fears of Communist infiltration of the government and their threat to traditional morality and values. This led to a period through the 1950s and 60s that saw conservatives on the offensive against a wide variety of cultural forces seen as promoting lax or un-American morality. The Rhode Island Commission to Encourage Morality in Youth was not an unusual phenomenon when examined in this context. See: Ibid., 63, 77-78. See also: Christine Pawley, *Reading Places: Literacy, Democracy, and the Public Library in Cold War America* (University of Massachusetts Press, 2010) for a further examination of the impact of Cold War morality on book distribution and library services.

[26] Theodore R. Crane, "Francis Wayland: Political Economist as Educator," *Rhode Island History* 21, no. 3 (1962): 63-90; Theodore R. Crane, "Francis Wayland: Political Economist as Educator," *Rhode Island History* 21, no. 4 (1962): 105-124.

[27] Theodore R. Crane, "Francis Wayland: Political Economist as Educator," *Rhode Island History* 21, no. 3 (1962): 88.

[28] Ibid., 80-82.

[29] Theodore R. Crane, "Francis Wayland: Political Economist as Educator," *Rhode Island History* 21, no. 4 (1962): 115.

[30] Christine Desjarlais-Lueth, "Brown University and Academic Library History," *Libraries & Culture* 25, no. 2 (Spring 1990): 218-242.

[31] Ibid., 220-221.

[32] William G. Shade, "The 'Working Class' and Educational Reform in Early America: The Case of Providence, Rhode Island," *The Historian* 39, no. 1 (1976): 19-20.

[33] Francis X. Russo, "John Howland: Pioneer in the Free School Movement," *Rhode Island History* 37, no. 4 (1978): 116.

[34] Ibid., 119-121.

[35] G. Wayne Miller, *An Uncommon Man: The Life and Times of Senator Claiborne Pell* (Lebanon, NH: University Press of New England, 2011).

[36] Ibid., 17, 103-104, 152-153.

[37] Roger L. Geiger, *American Higher Education Since World War II: A History* (Princeton, NJ: Princeton University Press, 2019); Christopher P. Loss, *Between Citizens and the State: The Politics of American Higher Education in the 20th Century* (Princeton, NJ: Princeton University Press, 2011).

[38] Thomas B. Stockwell, *A History of Public Education in Rhode Island, from 1636 to 1876* (Providence: Providence Press Company, 1876), 14, 38, 46.

[39] Charles Carroll, *Public Education in Rhode Island* (Providence: E. L. Freeman Company, 1918), 215-216, 224-226.

[40] William Howe Tolman, *History of Higher Education in Rhode Island.* (Washington: U.S. Government Printing Office, 1894), 9-12.

[41] Herman Eschenbacher, *The University of Rhode Island: A History of Land-Grant Education in Rhode Island* (Appleton-Century-Crofts, 1967), 1-5.

[42] Ibid., 68-69.

[43] Nathan M. Sorber, *Land-Grant Colleges and Popular Revolt: The Origins of the Morrill Act and the Reform of Higher Education* (Ithaca, NY: Cornell University Press, 2018).

[44] Ibid., 100-108.

[45] Daniel W. Morton-Bentley, "Rhode Island's School Funding Challenges in Historical Context," *Roger Williams University Law Review* 24, no. 2 (2019): 272-314.

[46] Ibid., 272, 286-287.

[47] Joanne Pope Melish, "Reconsidering Rhode Island History," *Rhode Island History* 64, no. 2 (2006): 49-60.

[48] Ibid., 52.

[49] Ibid., 54-55.

[50] John C. Eastman, "When Did Education Become a Civil Right? An Assessment of State Constitutional Provisions for Education, 1776-1900," *The American Journal of Legal History* 42, no. 1 (1998): 1-34.

[51] Ibid., 33.

[52] David Tyack and Thomas James, "State Government and American Public Education: Exploring the 'Primeval Forest,'" *History of Education Quarterly* 26, no. 1 (1986): 54-55.

[53] Ibid., 56.

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