TYPOLOGY OF OREGON CHARTER HIGH SCHOOLS:

DIFFERENCES THAT MAKE A DIFFERENCE

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DISSERTATION ABSTRACT

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Title: Typology of Oregon Charter Schools: Differences That Make a Difference

Two decades after Oregon authorized public charter schools, effects of this policy need evaluation. Comparison of performance of public charter school students to performance of other students is complicated by systematic differences expected between families that choose to leave traditional schools and families that accept default school assignment. Some researchers have used natural experiments in places where charter schools use lotteries to select students. Other researchers have used composite virtual control records as control groups in matched-pairs designs. Results of these studies have shown few statistically significant results, generally of small magnitude; as whole groups, public charter schools and other public schools produce similar results on students' academic tests.

Patterns of dispersion in those studies suggest that isolation of types and comparison within types of charter school could be productive. Moreover, change in Oregon state policy has resulted in fewer public charter school students participating in state testing. Comparison within types using outcomes other than test scores might lead to clearer understanding of the effects of public charter school policy in Oregon. A typology could facilitate productive research.

This study produced a descriptive typology of schools through an ideal-type analysis of Oregon public charter schools that serve 9^{th}-12^{th} grades, as the first stage in a concurrent-triangulation mixed-methods study. The second stage included comparison of schools, by type, to changes in Oregon law from 1999-2019 and to school locales identified by the National Center for Education Statistics (NCES). The three types are Innovations in Instruction, founded to attempt innovation in curriculum, instruction, or target student group; Heritage School Conversions; and Facilitated Instruction programs, which include subtypes of Homeschool Support, Virtual, and Early College programs.

Comparison to changes in law demonstrated that legislative action enabled emergence of types of schools other than those that dominated in early years of charter school policy. Comparison by locale demonstrated that the array of charter schools in Oregon differs by locale. These differences suggest value in further research comparing effects of schools within types.

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TABLE OF CONTENTS

LIST OF TABLES

Table Page

LIST OF FIGURES

Figure Page

CHAPTER I: TYPOLOGY OF OREGON CHARTER SCHOOLS

Public schools are the commonly held institution to which a community, a state, and a nation entrust the future. According to the most recent data held by the National Council on Educational Statistics (NCES), about 87% of American youth in Grades 1 through 12 are educated in public schools (NCES, 2019). Of those students, approximately 82% attend traditional public schools and about 5% attend public charter schools. Since Minnesota passed the first charter school law in 1991 (Schroeder, 2004), 45 states have authorized public charter schools (Ziebarth, 2020). Public charter schools are educating our children.

The idea of charter schools as a new form of public school has appealed to a variety of stakeholders across diverse state educational environments. These stakeholders include parents who value choice and more influence over schools, lawmakers who hope to achieve policy goals through a new kind of school governance, education leaders who value the flexibility granted with a charter, and other community members (Wohlstetter, et al., 2013, pp.1-14). But the idea also has critics, some of whom have many questions about charter schools (Ravitch, 2020). How do stakeholders know whether the charter school idea as conceived in a given environment is a good one? Are public charter schools meeting the goals legislators had in mind? Whom do public charter schools benefit, and how? How is our idea of the public charter school in Oregon changing?

Scholars have understood the need for research since the beginning of the movement. In fact, the idea that public charter schools would be laboratories for innovation, to allow study of new methods, was embedded into the earliest statements of charter school goals (Wohlstetter et al., 2013). Parental choice of public charter schools

over a default traditional public school creates inherent differences between the populations of public charter schools and other schools. These inherent differences have prompted the creation of innovative research methods. Those research methods in turn have illuminated differences among public charter schools in addition to differences between public charter schools and other schools. The aim of the present study is to explore pragmatic ways to compare public charter schools to one another in Oregon, to facilitate the understanding that stakeholders require.

Statement of the Problem

Oregon first authorized public charter schools in 1999 (Ziebarth, 2020). The law defined nine specific goals the legislature hoped would be achieved through public charter schools (1999 ORS 338). Oregon legislators placed significant limits on charter schools, compared to other states. Among these limits were these:

- An expectation that school districts would charter the schools, rather than the state Department of Education (DOE) or other agency, so that public charter schools would meet locally determined needs and values (1999 ORS 338).
- A prohibition on for-profit ownership or operation of public charter schools (1999 ORS 338).
- Initial limits on the percentage of the students in a district who could be enrolled in a public charter school, although districts were permitted to waive this limit (1999 ORS 338).

The state's public charter school law has undergone significant revisions every two years since 1999 (2019 ORS 338). A program evaluation commissioned by the Oregon Department of Education in 2011 described the array of public charter schools then in

existence and assessed some of the impacts of the program to that point. But as the law has evolved, the array of public charter schools has evolved as well. More study of Oregon's public charter schools is needed.

In 2019, records of the Oregon Department of Education (ODE) showed that 6.1% of Oregon's public school students attended one of 122 public charter schools in the state (ODE, Membership Report, 2019; ODE 2020)[1]. Since 2019, the COVID-19 pandemic has stimulated even more interest in school alternatives, including public charter schools, according to the interviews I conducted with public charter school leaders. With this growing population of public charter school students supported by Oregon's education budget, Oregon lawmakers, school board members, school personnel, and families have a legitimate interest in understanding what the impact of public charter school policy has been. Qualitative study of school programs, comparison of schools with similar aims, and study of community effects of public charter schools of different types may be productive ways to study the effects of policy, with the aid of a descriptive typology.

In some areas of the United States, many more families are interested in placing their children in charter schools than the charter school seats available, and students are admitted by lottery; in these places, lotteries create a natural experiment for studying the differences in outcomes from differing schools. Lottery-based designs use the students who are admitted to a charter school and those who are not as the treatment and control

[1] Oregon may have had 128 public charter schools operating in school year 2018-2019. Information I was able to obtain about six of the schools was contradictory about their status in that year, so I excluded them from my data.

groups, then track common outcomes such as state test results to measure the effect of the charter school (Cohodes, 2018). Oregon charter schools have systems for lottery admission when they have too many applicants for spaces. Few, however, seem to need those systems often. Lottery-based studies have succeeded in isolating types of schools that are more successful than others. Such isolation of types in Oregon, though, would be easier with a descriptive typology established first.

Other researchers have developed matched-pairs designs that compare public charter school students to composite student records as controls. These studies use students enrolled in public charter schools as the treatment group, but then construct a composite virtual student to compare to each charter school student. In studies conducted at the Center for Research on Education Outcomes (CREDO), for example, eight other actual students from the same area who match the charter school student on typical demographic variables and prior state test performance are used to form the composite student record to be compared to each charter school student. Composite student records combine to construct a composite virtual school, so that charter schools can be compared to an alternative that is the combination of many schools rather than to a specific neighborhood fallback school. This research approach allows public charter schools and charter school students to be compared to a control that represents the local traditional public school system. The most meaningful results from these studies, however, emerge when the population of public charter school students is relatively large. Studies like this could be done in Oregon, as they have been in Idaho and Washington, two states that have even fewer charter schools than Oregon. But the results of the Idaho and Washington studies offer little insight to guide stakeholders (CREDO, Charter School

Performance in Idaho, 2019; CREDO, Charter School Performance in the State of Washington, 2019). Other methods might be more productive in Oregon.

An additional obstacle to research on Oregon's public charter schools is that many quantitative studies of charter schools to date have used state school accountability testing data as an outcome measure. The use of these tests for comparison was entailed in the autonomy-for-accountability trade-offs in public charter school laws. However, Oregon passed legislation in 2015 that permitted students' families to opt out of state tests (2015 ORS 332.158). Since that policy change, some public charter schools have fewer students participating in state tests, according to the ODE. For example, in school year 2018-2019, about 15% of Oregon charter schools tested 80% or fewer of their students. Statewide across all schools, 94.6% of students took state exams in 2019 (ODE, Student Assessment, 2019), so a lower rate of testing in charter schools increases the difficulty in comparing them to traditional public schools. Furthermore, it is possible that different types of charter schools may be associated with different levels of opting out of tests. If a systematic difference among types of charter schools exists, the use of tests to compare public charter schools to one another or to other kinds of schools is further complicated.

A common finding of prior studies of public charter schools has been that the outcomes of public charter schools and other schools, as groups and as measured on state tests, differ very little. At the same time, many studies have shown relatively wide dispersion in the performance of public charter schools as compared to one another (Cohodes, 2018). Differences between types of public charter schools have led to productive studies of specific types, such as no-excuses models (Angrist et al., 2016). When researchers studying Boston public charter schools have isolated no-excuses

schools rather than treating public charter schools as a single construct, meaningful differences in outcomes have emerged, differences that could be traced to specific practices in this type of school. Comparison among public charter schools rather than between charter schools and others can produce useful new learning.

It is possible that isolation of types of public charter school and comparison of charter schools to one another could produce a better understanding of how public charter schools are functioning in Oregon. Moreover, Oregon public charter school law was based in theories about what would be gained from charter schools, and it is possible that the changes in charter school policy are associated with shifts in the types of public charter school produced. Examination of associations between shifts in law and the emergence of schools of differing types may permit comparisons that will inform policy going forward.

Purpose of the Study

To address the stated problem, the aim of this dissertation was to add to understanding of Oregon public schools through a descriptive typology of Oregon public charter schools obtained through ideal-type analysis (Stapley et al., 2021). Development of the typology was followed by analysis of the policy that has enabled the array, using a concurrent-triangulation mixed-methods design that used qualitative and quantitative data (including spatial analysis of the distribution of schools across geographic areas of Oregon). The types of schools in existence in the 2018-2019 school year and their charter dates were compared to change in Oregon state charter school law over time. I hoped to incorporate ideas that would be pragmatically helpful to the varied stakeholders interested in the existence and performance of Oregon public charter schools.

This research proceeded in two phases, with concurrent data collection and interpretation. In the first phase, ideal-type analysis resulted in a set of public charter school types in Oregon, based on data from the ODE, the American Community Survey (ACS), the self-descriptions in schools' published materials, and data from the National Center for Education Statistics (NCES) and its Education Demographic and Geographic Estimates (EDGE). After the identification of types and of an exemplar for each type, I conducted interviews with five school leaders, to add depth to the descriptions of types. In the second phase, changes over time in the Oregon statutes regarding public charter schools provided the ground for a study that describes the changes in the array of Oregon public charter schools corresponding to the changes in policy. The unit of analysis was schools.

Research Questions

Two overarching questions guided this study:

1. How can Oregon public charter schools be classified in ways that enable productive comparison? This question drove the first phase of the research.
2. What factors in Oregon public charter school legislation have enabled the emergence of the array of types of public charter schools observed? This question drove the second phase of the research.

Theoretical Perspective

Research that represents or evaluates the outcomes of a policy and measures them against the stated goals of the policy is inherently a form of policy or program evaluation. Phenomena that emerge from a policy change can be diverse and multi-dimensional; multiple measurements, therefore, provide a richer, more complete representation of the

outcomes of a policy (Rossi et al., 2004). The present study incorporated qualitative and quantitative data to more fully capture the forms of school that have emerged in response to a state policy. Moreover, since the primary aim of the study was to produce a descriptive typology of Oregon's public charter schools, mixing methods was an appropriate way to develop such a taxonomy (Creswell & Plano Clark, 2018).

This approach is useful under the pragmatic paradigm that grounds this project. A pragmatic researcher tests ideas to determine what is functional, without making a final claim of finding truth (Kaushik & Walsh, 2019). A pragmatic researcher also accepts that individual experiences, such as those expressed by individual school leaders, are an access point to understanding phenomena. At the same time, the pragmatic researcher may hold that many experiences are socially constructed and socially held. As such, a pragmatic approach to research may through examination of the particularities of some schools produce work that is useful to others.

To the extent that this work evaluates policy, however, the work carries a complication. The policy that enabled public charter schools has changed in significant ways over the last twenty years. As the legislation has changed form, so, too, have the material phenomena shaped by policy changed. It is possible both that Oregon's public charter schools may today have different implicit aims than when the policy was first implemented and that the idea of a public charter school has itself diverged from the original construct. For this reason, it is important to examine changes in the law, alongside the array of types facilitated by the law. The idea that shifting policy has contributed to the forms of current Oregon public charter schools is fundamental to this research.

Delimitations

1. During initial examinations of data, I studied Oregon public charter schools that serve kindergarten through grade 12 (K-12). The typology developed and the subsequent analysis, however, were based on schools that serve students in 9th-12th grades. My initial work with the data indicated that typology may be quite different for schools that only serve kindergarten through 8th grade compared to those that serve older students. A larger fraction of public charter schools for the elementary grades are suburban or urban projects that appeal to parents who want more specialized schools (such as world language immersion schools, place-based education programs, and schools affiliated with museums). By focusing the project on schools that serve 9th-12th grades, I would see the whole array of schools more clearly.

2. In school year 2018-2019, 65 public charter schools in Oregon served students in 9th-12th grades or a subset of those grades. This includes schools that served a broader age span in that year, such as schools that served grades K-12. Sample size would likely limit the statistical significance of quantitative analyses. The relatively small sample size, however, permitted a closer examination of individual schools, useful for a development of a more nuanced description of types.

3. Interviews were conducted with a school leader at one school representative of each type and subtype, to add depth to the descriptions of types. Interview data has been presented with the acknowledgement that each perspective is individual. The interview results have been integrated with other kinds of data, but no claim can be made that the perspective of an interviewee is a full and accurate representation of the nature of their

school. Nonetheless, individual perspectives arising from schools of clearly different types enrich and clarify type description.

Limitations

1. The nature of qualitative research makes it difficult for a researcher to exclude observer bias. In this study, the researcher is also a teacher in an Oregon public charter school; this is acknowledged as a source of possible bias. With this possible source of bias in view, researchers need to engage in reflexive practice throughout the work.
2. Ideally, this study would have involved site visits. The conditions of the COVID-19 pandemic made site visits impossible or impractical. In addition, at the time when the research was being conducted, schools may have been adjusting to pandemic conditions that changed the way school leaders perceived their schools or that changed the opportunities a school afforded to students or teachers. Quantitative data for the study reflect the 2018-2019 school year to avoid the impact of this unusual event. Of the data used for this study, only the five interviews were influenced by the circumstances of the COVID-19 pandemic. It should be noted that those same pandemic conditions may have increased the relevance of this study if the conditions drove increased demand for public charter schools.

Significance of the Study

This study may provide a path for studying effects of Oregon's public charter school policy. Large-scale studies of the outcomes of public charter schools, overall, have found that children who attend charter schools produce state test scores not much different from the scores of children who attend other public schools, but researchers sometimes find big differences in effects among charter schools (Cohodes, 2018). A

descriptive typology could be a tool for comparing charter schools to other charter schools within Oregon to describe Oregon's charter school landscape and facilitate study of varied kinds of outcomes that reflect the intent of Oregon charter school law. As such, this study may prove useful to other researchers.

This study may also produce information that is useful for statewide policy leaders. Public charter schools now have a 20-year track record in Oregon. Leaders should be able to determine whether changes that have come about because of Oregon's public charter school policy reflect the goals of the policy. Analysis of change in distribution among types over time, and analysis of distribution of types among the state's regions, may help clarify the functions that public charter schools are now filling in Oregon.

To the degree that this research is presented in a way that is accessible to the varied stakeholders with an interest in public charter schools, it may usefully clarify the concept of public charter school as it has developed in Oregon. Charter schools nationally exist in part to give choice to families and to educators (Oberfield, 2017; Wohlstetter, et al., 2013). Oregon's public charter school policy has been developed specifically to give power to local school boards and local community organizations as well (1999 ORS 338). This decentralization of choice means that people with varied interests and information need to evaluate effects of charter schools, for the state, the community, or the student and family.

CHAPTER II: REVIEW OF LITERATURE

The Oregon Legislative Assembly passed its first public charter school law in 1999 (1999 ORS 338). More than half of U.S. states had passed public charter school laws before Oregon, between 1991, when Minnesota passed the first such law, and 1999. By 2020, 44 states and the District of Columbia had public charter school laws (Ziebarth, 2020). Federal law and Department of Education policies have also encouraged states to permit public charter schools to open (Ravitch, 2020). Public charter schools represent a major shift in education policy, nationwide and in Oregon. Are public charter schools achieving the aims that early proponents hoped for? It is important to follow shifts in policy with evaluation to determine whether those shifts are associated with desirable results (Rossi et al., 2004). Public charter schools have been studied, but more study is needed to identify results of the varied charter school policies that have been implemented in different states.

Difficulties in Studying Public Charter Schools

The first difficulty arises from the characteristics of public charter schools as schools of choice: families choose public charter schools, and families that make a choice rather than accept a default may differ from families that accept the default. Stakeholders might naturally ask, “Which is better, public charter schools or traditional public schools?” Charter school laws in many states pointed to state test scores for an answer to that question, in an exchange of autonomy for test-based accountability (Wohlstetter, et al., 2013). Charter school laws typically require students to take the same state accountability tests that students in other public schools complete, so outcomes on those tests provide variables that can be used to make the comparison. But if families that

choose to leave a traditional public school to place their children in a public charter school are systematically different from families that accept the default traditional public school, a straightforward comparison would not account for those differences.

Researchers who study public charter schools have created innovative designs to overcome this difficulty (Cohodes, 2018). Some study schools only in limited areas where lotteries create a natural experiment, where students who apply to public charter schools but are not admitted function as the controls. Other researchers have created matched-pairs designs by constructing virtual control composite students (and virtual control composite schools) to use as controls (CREDO, 2013). Still others have looked at other measures: evidence that competition stimulates neighboring traditional schools to improve (Cohodes, 2018); analysis of economic effects on a community correlated with the presence of a charter school (Cohodes, 2018; Dobbie & Fryer, 2016); study of characteristics such as student population composition or teacher experience (Oberfield, 2017). The questions about whether public charter schools effectively meet the goals state legislatures set for them remain open in many cases, however.

A second difficulty arises from the diversity of environments in which public charter schools exist. The laws authorizing public charter schools in each state differ (Ziebarth, 2020). For example, in some states such schools are chartered only by the state's Department of Education; in others, schools are chartered by local school boards. Some states permit large networks of charter schools; in others, charter schools are chartered only individually. Some states allow fully virtual charter schools, while others do not. Some states cap the number or size of charter schools. Authorization rules, funding formulas, and performance monitoring systems differ. These varied public

charter school policies have enabled differing arrays of models of public charter school. The variety of models in turn has presented significant challenges to researchers who seek to evaluate the effectiveness of public charter schools (Cohodes, 2018). Stakeholders want to know if *charter schools* have merit, as though *charter schools* could be a single construct, but the concept is fragmented. Researchers working with these diverse school models have developed research designs that produce useful information in some places, but the results are not easily generalized from one environment to another.

Expressed Purposes for Public Charter Schools

Wohlstetter et al. published mixed-methods research in 2013 evaluating the public charter school movement nationally against the goals state governments and other entities had established for public charter schools. The researchers identified seven goals for public charter schools expressed in state policies: opportunities for teachers; innovations in education programs; improved student performance; autonomy and accountability for schools (often cast as a trade-off); parent involvement; and the benefits of competition to traditional public schools. Of these goals, the two that have been most frequently measured are test scores and financial management. Test scores and financial mismanagement are the most likely reasons public charter schools are closed (Consoletti, 2011). Opportunities for teachers and students or innovations in education programs have been less frequently studied systematically, even though these factors have been stated purposes of charter school policy in many states.

In 2019, Goodridge wrote a historical analysis of the public charter school movement, examining especially a potentially uneasy balance between two very different stated purposes. Goodridge documented origins of the charter school movement in Black

communities where parents desired public educational alternatives after the promise of Brown v. Board failed to materialize. Goodridge then described a coalition between Black education advocates and free-market conservatives that produced the legislative votes to make the earliest public charter school laws feasible. Without the coalition of Black parents and free-market conservatives, charter schools might not have emerged; yet the disparate purposes of families and free-market advocates built some internal contradictions into the core of the public charter school movement. The interest of free-market conservatives reflected their desire to reduce the cost of public education as well as to return more control of children's education to their families and local communities (Goodridge, 2019); the success of charter schools in achieving the goals of free-market conservatives might be reflected in the lower pay of public charter school teachers, as well as loss of teacher autonomy as compared to early charter school proposals (Roch, 2017). Black parents sought greater control so that they could ensure that schools would provide higher quality, more responsive public education.

The two goals Goodridge discussed are arguably visible in the seven goals identified by Wohlstetter, et al. (2013): the desires for greater parental involvement and improved student performance reflect the goals of families, while the goal of competition with other public schools reflects the free-market thinkers' priorities. But the story also illustrates the potential for tension between goals inherent in the original charter school idea. It could be that the full achievement of the original goals established by states might be impossible. Researchers who evaluate the success of Oregon's public charter schools should consider the effects of charter schools measured against all the original goals and be aware of ways that evolving policy emphasizes or de-emphasizes some goals.

Oregon's 1999 public charter school law expressed nine goals. The first three goals concerned students' academic needs. Public charter schools were intended to increase student learning, increase choice in learning opportunities, and meet student needs and interests (1999 ORS 338). The fourth goal considered the relationship of school and community, setting a target of building "stronger working relationships" between families, community members, and school personnel to provide laboratories for educational innovation, including methods that could then be used in other schools (Ravitch, 2020). Oregon's fifth and sixth goals included the use of innovative learning methods and opportunities for flexibility and innovation in instruction (1999 ORS 338). The trade-off of autonomy for accountability appeared in the seventh and eighth goals, as teachers were promised new professional opportunities while public charter schools would employ "new forms of accountability." The last goal was that public charter schools would bring "innovative measurement tools."

The Oregon Legislature's expressed goals for public charter schools resemble the seven goals described by Wohlstetter et al. yet are distinct in ways that help us understand Oregon public charter school policy. The first Oregon goal, increased student learning, reflects the same interest as the goal of improved student performance, although it emphasizes the learning that should drive test scores rather than the scores themselves. Oregon's second and third goals (increased choice, and capacity to meet student needs and interests) and fifth and sixth goals (innovative learning methods and innovation in instruction) seem to anticipate an array of public charter schools that would offer more variation in teaching and learning approaches than typically seen in traditional public schools. This accords with the early national idea that charter schools would be

laboratories for new methods that might be transferable to other schools. Oregon's fourth goal (stronger working relationships between families, communities, and school personnel) reflects the desire across the nation for families to have more influence on public charter schools than they have had on traditional public schools, but also seems to anticipate that other community organizations will engage more with public charter schools than they do with traditional public schools. The last three Oregon goals reflect the familiar trade-off of autonomy for accountability, though emphasizing new opportunities for teachers and new methods for measuring performance.

Oregon's public charter school policies have facilitated the appearance of some public charter schools and, presumably, prevented the emergence of others. Public charter schools in Oregon differ along dimensions that include at least size, curriculum, governance, and test performance. Legislators wrote limits and opportunities into Oregon's law; those limits and opportunities have shaped the array of public charter schools. The 1999 authorization of public charter schools was not the end of that process, however. Oregon's public charter school policy has evolved in response to historical circumstance; as it has evolved, it has enabled a changing array of new public charter schools. The changes in policy could reveal changes in our collective understanding of public schools. A changed understanding may further indicate a different standard for success, a different set of purposes, explicit or implicit in the policy and in the material structures that have emerged from it. The important differences for stakeholders may be in the material forms of Oregon's current public charter schools or in the outcomes that follow from those forms.

Measuring the Effectiveness of Public Charter Schools

The stated purposes for authorization of public charter schools, nationally and in Oregon, have included factors such as opportunities for teachers and involvement for parents. Yet across the country, measurement of the effectiveness of charter schools has focused especially, although not exclusively, on student performance and school accountability for student performance. Student performance has most often been measured by state test scores, although some studies have also used other academic measures, such as the National Assessment of Educational Progress (NAEP), the SAT, and non-test outcomes such as college placement (NAEP, 2004; Angrist et al., 2017). School accountability, in the law (1999 ORS 338) and in charters, includes sound financial management. Financial mismanagement has been one of the most common reasons for closure of charter schools (Consoletti, 2011) and innovative research has examined financial impacts from the presence of a charter school (Dobbie & Fryer, 2016). Still, accountability has often been measured by student performance on state tests, and when students do not record adequate or improving test scores, public charter schools may be subject to closure.

This is true in Oregon as in other states. Oregon's school accountability reports include information about teacher turnover, student attendance, "on track for graduation" percentages, and student college readiness. The reports center test scores, test participation, and test score improvement, however (ODE, At-a-Glance, 2019). Some public charter schools in Oregon have been closed because of low test scores (ODE, 2011). Since 2015, though, Oregon has had a legally recognized process for students' families to opt out of state tests. The test participation rate target for Oregon schools is

95%. In 2018-2019, 40% of Oregon public charter schools did not meet the state's participation targets for state tests (ODE, Assessment Group Reports, 2019). Study methods that use state test scores as a main outcome might be appropriate for other states; non-participation would likely threaten the validity of such a use in Oregon.

Outcome Measurement in Lottery Studies

In a 2016 meta-analysis of lottery-based public charter school studies, Chabrier et al. identified the circumstances that have made lottery studies of public charter schools possible: shortages of public charter schools, especially in urban areas in states where the laws specify lottery admission when schools are oversubscribed. Chabrier et al. outlined the methodologies used in these studies and summarized the findings of nine studies conducted in Boston, New York City, Chicago, Washington, DC, and an undisclosed city, as well as findings of four more studies that examined schools in multiple states. Their review did not find a consistent answer to the question of whether the public charter schools studied produced better outcomes on state tests than other public schools; rather, the researchers reported a wide "dispersion" (p.58), as some studies found quite large positive effects and others found quite substantial negative effects. Overall, the studies had large standard errors.

To compare public charter schools to traditional public schools, this dispersion might not seem informative. The dispersion, however, might invite a different question. Instead of asking how public charter schools compare to other public schools, perhaps the question is how public charter schools compare to one another, using state tests or other outcome measures. What are the sources of differences between the schools that exceed

the means and those that produce lower scores? Lottery-based studies have been able to explore that question in some locations.

Although lottery-based studies have not found large overall differences between public charter schools and other public schools, researchers have isolated no-excuses models as the urban charter schools that were most likely to produce positive effects (Chabrier et al., 2016). The no-excuses schools use a specific set of practices, including behavioral guidelines and tutoring. No-excuses schools have shown similar effects in a few places where all students are entered into the lottery, which strengthens the finding that it is the type of school which has the effect, rather than endogenous factors in the charter school applicant families. But Chabrier et al. also applied regression analysis to compare these public charter schools to the most likely fallback traditional public school. These fallback schools were the schools that students most likely would have attended in the absence of the public charter school. From this analysis, Chabrier et al. determined that when the effect of urban, poor-performing fallback schools was accounted for, other positive effects of charter schools were no longer significant; only a few practices, such as intensive tutoring and high amounts of teacher feedback, were still significant predictors of improved outcomes. In some cases, practices isolated by these studies have been successfully transferred to other environments (Fryer, 2014). By isolating a type of school, and then by further isolating practices common in that type of school, Chabrier et al. found differences that made a difference.

These lottery studies primarily have used state assessment scores as response variables. Chabrier et al. noted a concern about these tests since success on state tests is often a criterion in public charter school contracts and schools can be closed if they fail to

produce adequate or improving state test scores; public charter school teachers and administrators may focus on state test preparation for that reason. This matters because, as Place and Gleason demonstrated, charter school students' higher scores on state accountability tests may not be associated with other outcomes, such as college enrollment and completion (2019).

Angrist et al. (2016) sought other indicators of the effectiveness of education in public charter schools, indicators that would not be as subject to distortion as state accountability tests. Angrist et al. continued lottery-based study of Boston charter schools; they examined school practices and student outcomes for six public charter high schools. For outcome variables, they added several measures of college and career readiness and post-secondary success: four-year and five-year high school graduation, SAT scores, Advanced Placement (AP) scores, and college outcomes, in addition to state test scores. Attendance at these six urban, college preparatory, no-excuses public charter schools increased the number of AP tests taken, the rate of passing AP test scores (although not of upper-range scores), and the rate of enrollment in four-year colleges (although not increased enrollment in college overall). Moreover, Angrist et al. demonstrated a correlation between scores on SAT exams and state tests, indicating that the performance improvements credited to these no-excuses public charter schools were not just the result of preparing for state tests (to avoid penalties when charter contracts depend on state tests). Many of the lottery-based studies focus on middle schools; this study made a valuable contribution by examining high schools and college readiness, as well as by using additional measures.

A notable feature of the lottery studies is that, to find significant effects, researchers have often limited study to a single type of school, especially urban schools that serve the most disadvantaged students with a no-excuses model. Nationwide, many charter schools are not located in major cities. For example, in Oregon, fewer than a quarter of public charter schools would likely be classified as urban (ODE, 2020). Lottery studies produce valuable information about effective practices in some charter schools, but the results cannot be generalized to describe a larger landscape. The range of outcomes measured in more recent studies, though, might point a direction for researchers to compare charter schools to one another using tools other than state assessments.

Outcome Measurement in Matched Pairs Virtual Control Designs

Cohodes (2018) reviewed charter school impacts, especially impacts on the racial achievement gap in American schools based on studies other than lottery-based work. Cohodes described the studies produced by CREDO as "the broadest assessment of charter school effects" (p.4). The CREDO studies have used state assessment and other school data to construct composite virtual students, from a combination of eight actual students who match a charter school student on common demographic variables and on prior test scores. Rather than compare charter schools to actual fallback neighborhood traditional schools, the CREDO studies have composed virtual schools from these virtual control record (VCR) students (CREDO, 2013). The outcomes measured in the CREDO studies are the results of state assessments in core subjects. Cohodes noted that these VCR studies have allowed large-scale statewide and even national studies of all kinds of charter schools. Because the studies could use large numbers of schools and students,

often in analyses of all charter schools in a state, the method has also made significant results more likely.

Since 2009, CREDO has produced evaluations of the performance of charter schools at a national level (the 2013 study included 26 states and New York City) and in 20 individual states (CREDO, 2013). CREDO has also produced evaluations of urban charter schools across states and in several large cities and an evaluation specifically of virtual charter schools (CREDO, 2015). Across groups of schools with diverse models, CREDO studies have shown a similar pattern to those seen in early lottery-based studies. In the 2013 national study, 56% of schools showed no significant difference between public charter school students' performance on reading tests compared to the VCRs and 40% showed no significant difference in math test performance. Results with significant differences between public charter school students and other school students were split: 25% of charter schools had students who performed better on reading tests than the VCRs and 19% of charter schools had lower scores, while in math, 29% of charter schools had students who performed better than VCRs and 31% posted lower scores.

In 2019, CREDO published a study of Idaho public charter schools, based on students' performance in school years 2015-2016 and 2016-2017 (CREDO, Idaho, 2019). Idaho's public charter school policy differs from Oregon's public charter school laws, and Idaho's policy has produced a different array of public charter schools. But a brief review of the CREDO study of Idaho public charter schools sheds light on factors researchers might consider in Oregon. The study included 44 brick-and-mortar charter schools and ten virtual (online) charter schools. The outcome measures were limited to results of state assessments of math and reading. The results on a statewide level resembled national

results; about 40% of Idaho charter schools produced student test scores no different from VCR scores. About 40% of Idaho charter schools, somewhat higher than the numbers in national studies, produced higher test scores and about 20% produced lower test scores. But the differences were minor and, even when they were significant, rarely exceeded a tenth of a standard deviation over a year. A few disaggregated results did show differences from others, though. Rural charter schools appeared to have a more positive effect on students' test scores than any others, a finding in contrast with assessments of rural public charter schools nationally. In contrast, virtual charter schools, which serve more than 25% of Idaho charter school students, produced poorer test performance than both traditional public schools and brick-and-mortar public charter schools, especially in math.

These results invite further study of charter schools in Idaho focused on the variations between them; the aggregation of the data seems to mask differences between schools. By clustering together all public charter schools in a state, the CREDO studies have delivered valuable understanding of impacts of public charter schools on the total public education landscape, state by state. The differences between charter schools indicated by the CREDO studies invite other kinds of work. Do charter schools of different types have different effects? What outcome measures are useful for measuring disparate effects among and within types of charter schools?

Outcome Measurement for Oregon Public Charter Schools

Lottery studies and matched pairs studies are able in some circumstances to answer big questions, such as whether a state's investment in public charter schools has been associated with an increase in test scores for the students who have enrolled in them,

or whether students in virtual public charter schools are learning at the same rate as students in brick-and-mortar public charter schools. Despite Oregon's 20 years of public charter school history, the VCR and lottery-based methods seem unlikely to produce results in Oregon that would help stakeholders understand how charter school policy has shaped schools and the experience of students in this state.

Both the lottery studies and the matched pairs designs have often used state accountability tests as outcome measures. From the beginning of the charter school movement, tests provided a way for charter schools to prove their value. Autonomy was exchanged for accountability as measured by test scores. But test scores might not be the only way to measure the impact of charter schools. In fact, Goodridge has questioned the philosophical underpinning of charter school research based on state tests (2019). Ravitch has pointed out weaknesses in the argument for use of test scores to establish charter school accountability (2020). Some researchers have measured economic impacts of charter schools (Dobbie & Fryer, 2016). Test score data, although valuable, cannot answer all the relevant questions about the impact of public charter schools.

Even without studies showing definitive evidence for a positive effect on test scores, public charter schools have continued to grow in number and influence in Oregon. Although some schools in Oregon have been closed for low test scores, many other Oregon charter schools with low test scores have been allowed to remain open (ODE, At-a-Glance, 2019). Perhaps this outcome indicates that decision-makers are seeking some value from public charter schools that cannot be measured by tests. An examination of the types of public charter schools that have been produced through Oregon's policy might help to identify outcomes that are of more interest. Research that relies on test

scores as the primary outcome of interest may miss key information stakeholders need to measure the value of public charter schools with regard to varied goals. With a typology in place, other measures described above may become more useful for systematic examination of Oregon public charter schools.

Typology of Charter Schools: Model and Locale

In 1999, Oregon law opened the door for public charter schools (Ziebarth, 2020). After the first schools had been in operation for 10 years, the Oregon Department of Education released a program evaluation of the state's charter schools (ODE, 2011). The first three chapters of the evaluation dealt with history, enrollment, and grade configurations of Oregon public charter schools and with the reasons for closures of Oregon public charter schools that had closed by that date. The fourth chapter sorted the 103 public charter schools then in operation in Oregon according to a typology originally developed by Carpenter (2006). The fifth chapter reported the academic success of public charter schools individually and by type, using test scores, and the sixth chapter reported the results of an annual survey of charter school parents, students, and staff members.

Carpenter's typology identified five types of public charter schools: alternative schools, conversion schools, progressive schools, traditional schools, and vocational schools. Alternative schools included what are now considered virtual or online schools as well as schools that primarily provided support for homeschooling. Conversion schools were schools that had been traditional public schools or small school districts that converted to a charter form of governance. Progressive schools included schools with innovative or experimental models. Traditional schools emphasized back-to-basics or mastery learning. Vocational schools provided career preparation.

As the authors of the 2011 program evaluation noted, Oregon's law emphasized local control, and authorized local districts to charter schools that meet local needs and "local educational philosophy" (ODE, 2011, p.25). This emphasis in the original charter school law influenced the array of public charter schools that emerged. At the time of the 2011 evaluation, progressive schools comprised the largest group; 61% of schools were categorized as progressive, a category that included a very wide variety of models. The most useful typology would minimize the number of types while clearly defining exclusive ideal types (Werbart et al., 2016; Stapley et al., 2021), preserving some balance between the sizes of clusters typed.

The 2011 program evaluation did not categorize the schools by location (rural, town, suburban, or urban), as the CREDO studies and reports from the National Center for Education Statistics have done (cf. Wang, 2019). As the CREDO researchers found, though, rural charter schools likely perform differently from urban charter schools. Given the large percentage of Oregon public charter schools located in suburban, town, and rural areas, it is possible that a typology of Oregon's charter schools should include characteristics of place. Thier et al. (2020) studied five ways to differentiate school location along the urban-to-remote spectrum and demonstrated that use of geographic locale to categorize schools influences the ways that important information about school opportunities emerges.

Future Directions for Study of Oregon Public Charter Schools

Charter schools have been part of the public school landscape in Oregon for more than 20 years. A growing percentage of Oregon students attend public charter schools. Oregon public charter schools as a class, however, are not ideally suited to lottery-based

studies. They could be studied with matched pairs designs. In fact, CREDO has conducted such a study in Idaho, which has fewer schools in fewer locations than Oregon. But although such studies may identify important differences between schools, as evidenced by the pattern of effects the CREDO researchers noticed in Idaho, they are not generally designed to explore the reasons for those differences. A descriptive typology of Oregon public charter schools, taking into account geography and considering changes over time in Oregon public charter school policy, could produce new understanding of how public charter schools work.

CHAPTER III: METHOD

Research Design

This study employed a concurrent-triangulation mixed-methods design (Creswell & Plano Clark, 2018). A mixed-methods design uses rigorous methods from both quantitative and qualitative traditions. At some point in a mixed-methods study, the products of qualitative and quantitative analyses are mixed. That is, they are combined in a way that permits a deeper understanding of the subject of research. A mixed-methods study is appropriate when neither quantitative study nor qualitative study alone can fully capture the situation studied. Built on a pragmatic philosophical foundation, a mixed-methods study assembles the analyses that work to achieve and apply a deeper understanding of a phenomenon.

Quantitative researchers isolate and examine the relationships between variables that can be counted or measured. Quantitative researchers use statistical analysis to try to close in on definitive answers about causes and effects or predictable associations. Questions are posed in a manner that leads to clear conclusions. Appropriate instruments for quantitative research yield reliable and valid results; validity and reliability are measurable characteristics. Rigorous quantitative methods can justify generalization and application to a target population.

Qualitative researchers, on the other hand, propose open-ended questions. They listen to the experiences of participants who are directly engaged in the phenomena studied; these texts and recordings are data. Qualitative researchers integrate and analyze this data to tell the stories of the phenomena studied, to achieve a deeper and richer understanding of the phenomena. Results of qualitative inquiry cannot be broadly

generalized; they may, however, provide insight that can lead to information useful in future studies, including quantitative studies.

Like CREDO studies in Idaho and Washington, a quantitative study of public charter schools in Oregon could produce some broad information but would be unlikely to give the specific guidance stakeholders require. A descriptive typology of public charter schools that uncovered meaningful differences between types of charter school lays a foundation for future quantitative study comparing charter schools to one another within or between types to determine the practices or characteristics associated with desirable outcomes. The present study followed a triangulated design employing both quantitative and qualitative data to provide a detailed description of the public charter school landscape in Oregon. A visual representation of this design appears below.

Research Design Phases

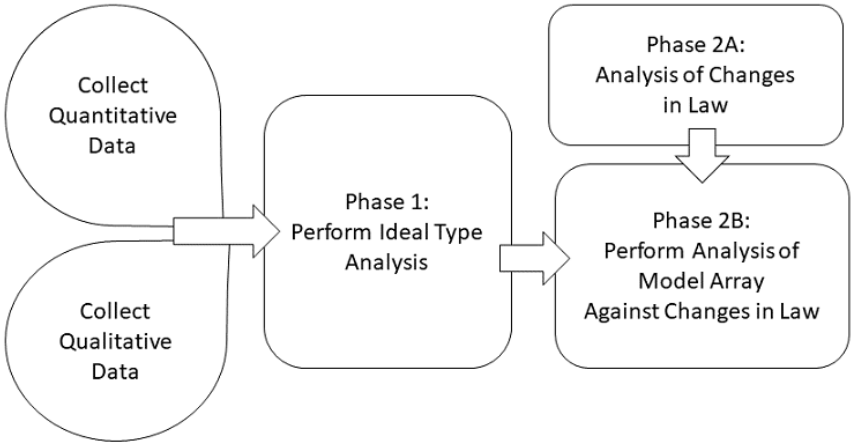

Figure 1. Phase 1, employing quantitative and qualitative data, leads to an ideal-type analysis. The typology is used in Phase 2, as array of types is compared across time to changes in Oregon law.

Phase One: Ideal-Type Analysis

In the first phase of the study, ideal-type analysis was applied to information about Oregon's public charter schools, with a focus on schools that serve students at the secondary level.[2] Pioneering sociologist Max Weber originated ideal-type analysis (Stapley et al., 2021). According to Stapley et al., ideal-type analysis proceeds through seven steps: familiarization with the dataset; writing case reconstructions; construction of ideal types; identification of optimal cases; writing ideal-type descriptions; checking credibility; and making comparisons. The sequence below relies heavily on the approach of Stapley et al.

Step One: Familiarization with the Data. In the first step of ideal-type analysis, the researcher becomes familiar with the data collected. The relevant data for the present study included these sources:

- Texts collected from the published websites of each of Oregon's secondary-level public charter schools.
- Self-descriptions submitted by schools for the Oregon Department of Education's 2018-2019 At-a-Glance Profile for each school (ODE, At-a-Glance, 2019).

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[2] It is possible that a typology that includes all K-12 Oregon public charter schools might be more useful than one that is restricted to those that serve secondary-level students. In Oregon, an initial examination of the array of charter schools and of the state policies that affect them showed systematic and large differences between schools that serve only elementary and middle-school students compared to those that serve secondary students. For this reason, the initial type analysis treated schools that serve grades 9-12, with cursory analysis of all Oregon charter schools.

- Characteristics of the school districts in which public charter schools are located, derived from the American Community Survey, and including district area, population density, median income, broadband internet penetration, and racial composition (EDGE, 2018).
- Characteristics of the school districts in which public charter schools are located, derived from the ODE At-a-Glance school district profiles and including district enrollment and demographics (ODE, At-a-Glance, 2019).
- Characteristics of the public charter schools, derived from the ODE At-a-Glance Profiles and Accountability Details reports for schools, including state test results, attendance rates, graduation rates, college-bound rates, student racial demographics, eligibility rates for free or reduced-price lunch, teacher-student ratios, teacher turnover rates, and teacher experience levels (ODE, At-a-Glance, 2019).

I began collection and exploration of data with a list of the 122 charter schools in Oregon that were operating in school year 2018-2019, obtained from the ODE (2020). I chose the year 2019 as the most recent year that pre-dated the COVID-19 pandemic, to avoid distortions of the data that would result from pandemic conditions. The 122 schools included schools that served only elementary grades, only middle-school grades, only high school grades, and many combinations that bridged age groups. Table 1 (next page) shows the number of schools in each grade range.

I considered creating a typology for study of all Oregon public charter schools by examining the websites for all 122 public charter schools. Many of the schools clearly were organized because of a vision for a specialized curriculum or target student group.

Table 1. Range of Grades Served by Oregon Public Charter Schools

Grade Range Served by School	Number of Schools	Percent of Charter Schools
Schools Serving Only Under Grade 9	57	46.7%
Grades K-3	1	0.8%
Grades K-5	12	9.8%
Grades K-6	3	2.5%
Grades K-7	1	0.8%
Grades K-8	34	27.9%
Grades 1-8	2	1.6%
Grades 4-8	1	0.8%
Grades 6-8	3	2.5%
Schools Serving Elementary and Secondary	54	44.3%
Grades K-10	1	0.8%
Grades K-11	1	0.8%
Grades K-12	38	31.1%
Grades 1-12	2	1.6%
Grades 4-12	2	1.6%
Grades 5-12	1	0.8%
Grades 6-12	2	1.6%
Grades 7-12	4	3.3%
Grades 8-12	3	2.5%
Schools Serving Only Grade 9 and Above	11	9.0%
Grades 9-11	1	0.8%
Grades 9-12	9	7.4%
Grades 10-12	1	0.8%
Total	122	100%

Some were organized to support homeschooling or online education. Still other schools were converted to charter governance to help small rural schools survive financially. But the distribution of schools among these preliminary categories was very different for the group of schools serving only elementary and/or middle school students, compared to the group serving high school students.

In this first examination of the list, I counted the schools that were formed to deliver a specialized curriculum. About one-fourth of schools that served high school students could be described that way. On the other hand, about three-fourths of schools

that did not serve high school students were formed to deliver a specialized curriculum. The difference in array of schools that only serve K-8 compared to the array of schools that included 9th-12th grades warranted separate consideration.

In the 2011 program analysis prepared for the ODE, the evaluators categorized 61% of public charter schools as progressive, a category that included several kinds of specialized curriculum and instructional methods. From my initial examination of all Oregon public charter schools, it appears that specialized curriculum is still the most common reason for forming a charter school, but that is true only when the schools that do not serve high school students are included with those that do. This difference is in part because some kinds of schools are more likely to serve a broad span of grades than others. Programs with specialized curricula appear to often target students in a narrower age range, while other kinds of schools are more likely to serve a broad range of grades.

The schools that are capped at 8th grade or below are also different in their geographic distribution. As Table 2 (next page) shows, schools that do not serve high school students are much more likely to be placed in high-density urban areas, compared to schools that serve high school students. Public charter schools that serve younger students seem to emerge in response to different conditions or demands, compared to the schools that serve high school students. The geographical placement of schools and the frequency of specialized curriculum, especially for grades K-8, appear to be related.

From the list of 122 public charter schools operating in 2018-2019, I selected the 65 schools that served students in grades 9-12. The distribution of grades served by those 65 schools appears in Table 2 (next page). For each of these schools, I read the school's

Table 2. Number of schools by grade and school locale. NCES identifies 12 locales for schools. City locales are 11, 12, and 13 for large, midsize, and small cities. Suburban locales are 21, 22, and 23 for suburbs of large, midsize, and small cities. Town locales are 31, 32, and 33 for small towns that are at the fringe of urbanized areas, distant from urbanized areas, or remote from urbanized areas. Rural locales are rural areas at the fringe, distant, or remote from urbanized areas. Grade spans include schools that serve only students below 9th grade, schools that serve students in a span that bridges grades below and above 9th grade, and schools that serve only students 9th grade and above.

Grades Served	City (11-13)	Suburb (21-23)	Town (31-33)	Rural (41-43)
K-3	1	0	0	0
K-5	5	2	1	4
K-6	0	2	1	0
K-7	0	1	0	0
K-8	10	5	5	14
1-8	0	1	0	1
4-8	0	0	0	1
6-8	3	0	0	0
Subtotal	18	11	7	20
Percent	32.1%	19.6%	12.5%	35.7%
K-10	0	0	1	0
K-11	0	0	1	0
K-12	1	5	8	24
1-12	0	1	0	1
4-12	0	0	2	0
5-12	0	0	0	1
6-12	0	1	1	0
7-12	1	0	2	1
8-12	1	1	1	0
Subtotal	3	9	16	29
Percent	5.3%	15.8%	28.1%	50.9%
9-11	0	0	0	1
9-12	0	4	3	2
10-12	0	0	1	0
Subtotal	0	4	4	3
Percent	0%	36.4%	36.4%	27.3%
Total	21	24	27	52
Percent	16.9%	19.4%	21.8%	41.9%

websites again in more detail. I read the ODE's published accountability files for each school and for their sponsoring districts (ODE, At-a-Glance, 2019). I read American Community Survey demographic information for each of the school districts (EDGE, 2018). I integrated data from these sources with the data on the ODE's list of public charter schools to produce a database that included the following categories:

- Date of school opening
- Location and contact information for school and sponsoring district
- Designation if the school is primarily virtual
- District population, size, and density
- District median income
- District and school racial demographics
- District broadband penetration
- District locale category
- District total population and total school enrollment
- School numbers of teachers and students
- School average teacher turnover rate
- School ratings for 9th-grade on track for graduation, four-year graduation rate, five-year graduation rate, and rate of college-bound students
- School percentages for students who qualify for lunch programs, who have disabilities, and who have ever been English language learners
- School attendance rates
- State test result information for Math and English Language Arts
- Vaccination rates

- Summary of publicly available information about curricular models
- Summary of publicly available information about school mission statements, stated values, and website images

Step Two: Case Reconstructions. Familiarity with the data leads to the second step of ideal-type analysis, which is writing case reconstructions. Case reconstructions are descriptive summaries of the data for each case in a study. Ideal-type analysis uses case reconstructions rather than the raw data to develop typologies (Stapley et al., 2021). The unit of analysis in the present study of Oregon public charter schools is the schools, so the case reconstructions are written descriptions of each school, based on information from the sources above. I created two forms of each case reconstruction. The first set of case reconstructions was composed of detailed descriptions of each school and was for my own use. The second set of case reconstructions consisted of anonymized descriptions in a standard form that could be shared with others.

I used the first set of case reconstructions to look for patterns of similarity and difference among schools as I worked toward a preliminary typology. As I considered and reconsidered these descriptions, I rechecked details with the original source documents and continued to add notes to the reconstructions. These descriptions were anonymized and then used by two readers in the first stage of credibility checks.

From the first set of case reconstructions, I created a second set of more condensed, anonymized case reconstructions. This second set has a standardized set of details and a standard narrative form. I used this set as I finished determining the characteristics of each school type in the typology. I also used this set to make cards for

other researchers to sort, to test the efficacy of the typology for sorting Oregon schools. The final set of brief, anonymized school case reconstructions appears in Appendix A.

Step Three: Typology Construction. After case reconstruction, the third step in ideal-type analysis is constructing the types. Types flow from the array of cases, as similar characteristics emerge among cases. An iterative process of identifying type characteristics, sorting types, redefining characteristics, and re-sorting types is normal in type description (Stapley et al., 2021). The most useful array of types would have types that are clearly defined and mutually exclusive, with few if any cases that are not easily distinguished by type (Stapley et al., 2021).

The present typology has three main types: specialized schools (schools with a vision for alternative curriculum or instructional method or for a special target student group), heritage schools (schools in continuity with a long-standing district school, typically in small, rural districts), and schools that delegate instruction to entities distinct from the school. The third type, schools that delegate instruction, has three subtypes: schools that support home instruction, virtual schools, and schools that solely or primarily place high school students in community college classes.

Steps Four and Five: Optimal Cases, Type Descriptions. The third, fourth, and fifth steps in ideal-type analysis are closely related. The fourth step is identification of optimal cases, which serve as anchors or orientation points for assigning future cases to types. The fifth step is writing the type descriptions. Type descriptions include both the core characteristics of the type and guidelines for distinguishing among types. The outcomes of steps three, four, and five are precise written descriptions for types and subtypes, with optimal cases associated with each one. In the present study, one

anonymized school stands as the optimal case for each type or subtype. After I had written preliminary type descriptions, I interviewed one leader from each of the optimal case schools (five brief interviews). I used insights from these interviews to add nuance to the type descriptions. Interview questions appear in Appendix B.

Step Six: Credibility Checks. The sixth step in ideal-type analysis is a credibility check. This is a form of validation of the types, although not in the way validation is understood in quantitative research. For the present study, credibility checks demonstrate that the typology has meaning and utility for potential users. One way to perform a credibility check, employed in the present study, is to have an independent reader examine the descriptions of types and optimal cases, then match a selection of case reconstructions to types (Stapley et al., 2021).

Four independent readers were asked to sort the types. The typology should be usable for a variety of stakeholders, so the readers were two graduate student researchers with experience in K-12 schools, a secondary-level educator, and one other adult without education experience, the kind of person who might be involved in community decision-making boards. Two readers independently sorted the preliminary case reconstructions. After I refined the type descriptions and case reconstructions to more standardized forms, the other two readers independently sorted the reconstructions. I debriefed the readers after they sorted the cases.

Step Seven: Comparisons. The last step prescribed by Stapley et al. is to write summaries of the similarities and differences among the cases within each type and of similarities and differences among types (2021). I performed a series of comparisons that included similarities and differences within and among types on the characteristics that

led to the division of types. I also compared the cases by type to the changes in Oregon law that I analyzed in Phase Two of the work. Finally, I evaluated similarities and differences in geographic distribution by type.

Phase Two: Review of Charter School Law

Phase One, the ideal-type analysis, and Phase Two, the review of charter school law, ran concurrently. Results of the two phases were integrated at the end of the study. Phase Two began with a survey of all mentions of charter schools in the revisions of Oregon Revised Statutes (ORS) from 1999 through 2019. From the results of that survey, I excluded incidental mentions, such as changes in requirements for defibrillators in public places or references to criminal background checks. Then I isolated, analyzed, and described features of Oregon law that may have affected the evolution of types of Oregon public charter schools serving secondary students. The material retained included the texts of Oregon statutes that met three tests. The retained texts referred to public charter schools, had provisions that affect secondary-level students, and involved substantive change to some aspect of the operation of public charter schools.

I organized the results of this analysis by year and then grouped results by the aspects of school operation the changes affected. Since the work on ideal-type analysis was proceeding concurrently, I also grouped changes in the law that pertained to the identified types, as the types emerged. Following this analysis, I integrated the results of Phase Two with the results of Phase One to determine ways that evolution in the law related to the evolution of the array of types of public charter schools serving students in 9^{th}-12^{th} grades.

This review of Oregon's public charter school policies addresses the research questions in two ways. First, Oregon's public charter school law contains explicit and implicit statements of intent for public charter schools. Qualitative analysis can illuminate possible paths for quantitative analysis (Creswell, 2015); analysis of the explicit and implicit purposes for public charter schools may suggest new quantitative tests of the effects of public charter schools. For example, quantitative tests of effects of schools using innovative methods might differ from quantitative tests of effects of conversion schools, if in fact the purposes for these schools differ by type. The second way the study of policies addresses the research questions relates to the sequence in which policies changed. If changing elements of Oregon's law are associated with changes in the array of charter schools, this understanding might contribute to future quantitative analysis and future policy evaluation. Typology can enable policy evaluation by better distinguishing effects of policies that affect schools of different types in different ways.

Strengths and Limitations of Concurrent Triangulation Design

This design was appropriate for this project because a need exists for new ways to evaluate the impact of public charter school policy in Oregon. A typology developed through ideal-type analysis provides a useful tool for such evaluation. By identifying the effects of public charter schools by type, researchers may be able to identify the differences that make a difference among and within types of public charter school.

Ideal-type analysis is a well-defined method with clear, sequential steps, making the path to implementation clear, and it allows for the use of both quantitative and qualitative data. The restriction to primarily extant data for this project facilitated concurrent examination of varied data. Ideal-type analysis in a concurrent triangulation

design, with an emphasis on qualitative methods, allowed examination of a relatively small set of schools. The public charter schools in Oregon are too small a set to produce meaningful and statistically significant comparisons through commonly used quantitative analyses. But researchers who compare schools within types compare like to like. This may produce more useful outcomes, as when researchers studying Boston public charter schools isolated specific practices within similar schools to identify practices that were most effective (Angrist et al., 2016).

Limitations inherent in this design are the result of the same factors that provide advantages. Ideal-type analysis produces detailed descriptions, but cannot demonstrate causation, nor correlation between factors. I chose an object of study better suited to qualitative or mixed-methods study than to quantitative analysis. Despite the relatively small number of public charter schools in the state, Oregon stakeholders have an interest in understanding the effect of state policy, and this typology may prepare the ground for other kinds of studies to answer questions those stakeholders have. If the typology does not enable quantitative study, the value of the typology as a qualitative study should still stand, providing rich, detailed information about the array of public charter schools in Oregon.

Research Permission and Ethical Considerations

Ethical guidelines were observed and ethical issues addressed at each phase of the study. Approval from the Institutional Review Board (IRB) was obtained for five interviews with leaders of optimal-case schools.

These interviews with school leaders were the source of the most sensitive data employed in the study, as all other data was publicly available. I rated the risk level for

these interviews as minimal for four reasons. First, the leaders were all adults and were professionally trained administrators. Second, interviews were conducted by phone and recorded while leaders were in a typical school setting. Third, the topics of interviews were not sensitive. Interviews dealt with topics that were an extension of publicly available material and were not designed to elicit any information that could endanger the interviewees even if revealed. Fourth, the identities of interviewees and schools were coded and protected, and an effort was made to anonymize school information in reports of interviews.

Informed consent was obtained from interviewees. The informed consent document described the questions that would be asked and included information about interviewees' rights. By signing the consent agreement, interviewees affirmed that they agreed to participate in the study and that they acknowledged that their rights were being protected. Interviewees were informed of the procedures that were followed to protect identity.

School sites as well as interviewee identities were coded at the point of case reconstruction. With a pool of 65 schools, it is possible that some readers might still be able to recognize some schools. But the absence of sensitive information about schools should minimize any risk of harm. Anonymity was preserved through all phases of analysis. Digital records of interviews, codes, and other identifiable information has been stored in a locked, metal file cabinet under the researcher's control and will be destroyed after a reasonable period.

The Researcher's Role

The researcher acknowledges potential for bias in studying this topic through subjective interpretations of the phenomena studied. I have taught in Oregon schools for 25 years. This period included 17 years in a public alternative school that converted to charter status three years before closing and 14 years in a charter school that is still operating. I have not conducted interviews at that school, but I have used the same publicly available data sources and analysis methods employed for other schools to write the case description for that school. I am not personally acquainted with leaders, teachers, or students at any other charter schools in the state at this time. I collected and analyzed the data for the project with four independent readers who performed credibility checks on the typology. All data collection and analyses were conducted using rigorous techniques and established methods.

Potential for bias could not be fully eliminated in this study. Researchers are wisely advised to avoid research in the "backyard," their own organization or setting (Creswell & Creswell, 2018). At the same time, the lack of study of Oregon charter schools, which serve approximately 6% of Oregon students (ODE, 2019 and 2020), is a gap that should be filled, and it is my hope that the present study may provide ground for other researchers to help fill that gap. Acknowledging the potential for bias, I have engaged in reflexive practice throughout the project.

CHAPTER IV: REVIEW OF OREGON PUBLIC CHARTER SCHOOL LAW

Varied state laws have produced varied arrays of charter schools in each state where public charter schools operate. An examination of provisions of the Oregon public charter school law can aid in understanding types of public charter schools in Oregon. The provisions of this law produced the array of public charter schools that now exists in this state. Changes in the law may have altered the array over the last 20 years. The present study defines a typology of public charter schools in Oregon. When public charter schools are examined by type, associations can be made between provisions of the law and their effects on the array of schools. An understanding of the changing provisions of the law can help researchers evaluate the success of public charter schools in achieving the goals set by Oregon's lawmakers.

Public charter schools result from a national idea interpreted through individual and differing state laws. State laws are negotiated through the unique political interests and processes of each state; therefore, state laws differ. The big national idea of public charter schools is that they are a hybrid of private and public institutions. They fill the function of any public school, to provide tuition-free, publicly funded elementary and secondary education, but with an ownership and governance structure that is a private alternative to the traditional school district.

Public charter schools are developed under rules that vary widely, however, and as a result, the forms public charter schools take also vary widely. Some states allow for-profit schools; others do not. Some permit large networks of charter schools; others either limit the size of networks or require each charter school to be a separate organization. Some allow religious groups to charter schools, while others do not. States have different

rules about the relationship between charter schools and pre-existing school districts. Funding flows in different ways (Education Commission of the States, 2022). In short, almost any question about how public charter schools compare to the non-chartered alternatives will be answered with "It depends." Oregon's charter school law produced an array of charter schools with characteristics that may differ from the array of charter schools in other states.

Oregon's 1999 Charter School Law

Oregon's original charter school law opened with a section of general provisions affecting all public charter schools. The opening section defined the parties that contract to form a public charter school (1999 ORS 338.005). The following section delineated the purposes for public charter schools (1999 ORS 338.015). Provisions of the section on purposes delegated broad authority to the ODE to establish the initial rules, exceptions, and waivers required to implement the legislation in accord with legislative intent. The remainder of the law set the procedures for the chartering, management, and termination of public charter schools.

Definitions of Contracting Parties

In public charter schools, the state still has responsibility for funding the education of children, but the state delegates responsibility for delivery of education to a private entity. In Oregon's 1999 law, the *applicant* was the entity that would propose a plan for delivery of education (1999 ORS 338.005). Applicants could be individuals or groups. The law identified applicants as those who develop proposals for public charter schools, but it did not require the applicant to also operate the school after the school was chartered.

Under the 1999 version of the law, the operating organization of the public charter school was required to register as a nonprofit organization before beginning to operate the school (1999 ORS 338.035). It appears that a for-profit entity could propose a school, under the original provisions of the law, if the school itself became a separate nonprofit organization. In addition, employees of a school district could propose a charter school, including the conversion of an existing district school to a public charter school, but again, under the original version of the law, the operator of the school was required to register as a nonprofit organization. The charter school law included provisions protecting the seniority and benefits of school district employees if they took a leave of absence to work for a public charter school sponsored by the school district (1999 ORS 338.135). It might seem, then, that such teachers would be employees of the nonprofit chartering organization, but the law also permitted the school district to continue to be the employer in some cases, even as the nonprofit organization operated the school.

The applicant would contract with a *sponsor*, and the default sponsor was a school district. The law specified in its original version that the sponsoring district must be the district within which the charter school would be located (1999 ORS 338.005). School districts could refuse a charter applicant, but the district was required to use specific criteria to evaluate the application (1999 ORS 338.055), and a district could not refuse without cause to sponsor charters (1999 ORS 338.135). If an applicant could not negotiate a contract with a sponsoring school district, the applicant could appeal to the State Board of Education. The State Board of Education was instructed to mediate between the applicant and the school district and, if no resolution could be reached, the

State Board itself could act as sponsor, with the school district nonetheless paying the bill, on less favorable terms (1999 ORS 338.075).

The designation of school districts as sponsors allowed school districts to negotiate with potential charter school operators to develop programs that would meet local needs, as understood by the district. This created a different relationship between public charter schools and school districts than other sponsorship arrangements might. Some states do not allow school districts to sponsor (or authorize) public charter schools, or only allow school districts to sponsor charter schools that are conversions from former district schools. Arizona and Mississippi are two states that generally do not permit school districts to sponsor public charter schools (Rafa, et al., 2020). Other states may permit school districts as well as many other agencies to authorize charter schools. Oklahoma law, for example, lists seven other kinds of authorizing entities in addition to school districts (Oklahoma Charter School Act, Section 42.14, 2010). By specifying school districts as the default authorizers of public charter schools, Oregon's legislature protected the interests of school districts and their already existing schools.

The law granted broad authority to the Oregon Department of Education to make the rules necessary to implement the law in accord with the legislature's expressed intent (1999 ORS 338.025). It is clear, though, from the elements the law did specify, that the legislature did not intend public charter schools to compete with district schools in ways that would damage the existing programs. The legislature's intent seems to have been to provide a new range of opportunities while still ensuring that school districts could shape those opportunities to meet local needs, as determined by school districts.

Goals for Public Charter Schools

The section of the 1999 version of Oregon's charter school law that defined goals clarified the legislative intent this way: "…that new types of schools….be created as a legitimate avenue for parents, educators, and community members to take responsible risks to create new, innovative, and more flexible ways of educating children within the public school system" (1999 ORS 338.015). The phrase "within the public school system" demonstrates that lawmakers intended that public charter schools would clearly be a part of the public school system. They did not intend public charter schools to be a full privatization, a replacement, nor a means of destruction of public education.

Moreover, school districts were explicitly permitted when evaluating an application to consider whether "the value of the public charter school is outweighed by any directly identifiable, significant and adverse impact on the quality of the public education of students residing in the school district" (1999 ORS 338.055). The lawmakers' desire was that public charter schools would offer ways of educating children (1999 ORS 338.015) through the efforts of a wider variety of stakeholders than in the past: individuals and groups with an interest in offering new educational approaches, under the oversight of school districts. The legislative intent was clarified by the enumeration of nine specific goals for public charter schools.

The first goal was that public charter schools would increase student learning and achievement. Public charter school laws across the country have offered charter schools autonomy in exchange for accountability, with accountability often measured by test scores. Moreover, the federal No Child Left Behind (NCLB) policies and the state laws that followed have emphasized the use of standardized tests (No Child Left Behind Act,

2001). Test scores have been a common way of measuring increases in student achievement, in Oregon as elsewhere (Wohlstetter, et al., 2013). The data reported to the public by the ODE for school year 2018-2019, the year used in the present study for establishing a typology, included this information:

- school average scores for state tests for English and math, disaggregated by grade and by demographic categories;
- a measure of growth in performance on those tests;
- four- and five-year graduation rates;
- the percentage of students in regular attendance; and
- the percentage of 9th grade students who are on track to graduate (ODE, At-a-Glance, 2019).

From these data points, any member of the public could make a judgment about the overall performance of, for example, 11th grade math students at a public charter school and how they compare to 11th graders in other district schools, in other districts, and in the state. This information does not tell us, however, whether the students whose families have chosen the charter school are learning more than they would at another school. Virtual control record and lottery-based studies of public charter schools do allow researchers to make claims about the public charter school's contribution to increased student learning, where they are appropriate. We can measure how students at a public charter school are performing on tests and whether the performance of students at that school has improved from one year to another. In this way, we can use tests for accountability, to decide if a school's student outcomes are acceptable. But it is more

difficult to determine the contributions a school makes to a child's education, compared to other schools.

The second goal for Oregon's charter school law was to increase "choices of learning opportunities for students" (1999 ORS 338.015). Public charter schools are inherently schools of choice. When a public charter school offers a different learning environment, a different curriculum, or a different instructional method, as compared to existing schools, it is clearly a choice of learning opportunities for students. The 1999 charter school law directed that all the schools in a single district could not become charter schools; in this way, charter schools would remain a chosen learning opportunity rather than the default placement (1999 ORS 338.035). On the other hand, in the same section of the law, school districts composed of a single school were allowed to convert that school to a charter school. Arguably, converting the single school in a small district to charter might maintain choice by allowing the school to remain open, if the alternative was to close the school. If choice is an end in itself, regardless of any outcome that results from choice, it might seem obvious that public charter schools offer choice. But as in the single-school districts, an examination of the kinds of choices public charter schools provide might be illuminating. An examination of the impacts of choice on the quality of a district as a whole or on the community might also be useful. Typology can identify differences in purpose for schools that help determine what choice means for a particular school. Researchers who use a typology to select schools to compare can make more appropriate comparisons by choosing schools for which the expectations of choice are similar.

The third goal of the legislation was to "better meet individual student academic needs and interests." Some charter schools in Oregon, as observed through their public-facing websites, offer language immersion or performing arts curricula, or professional certification programs, or schedules that do not require students to be on site all day every day. Such schools might better meet individual needs and interests. On the other hand, for single-school districts, the same question arises as for the second goal: does converting a school to charter status better meet student needs and interests? How does the change in governance impact student opportunities?

The fourth goal reflected the idea that public education is a partnership of students, families, and the communities that provide schools. The goal was to "build stronger working relationships among educators, parents and other community members." The language of this goal demonstrated the lawmakers' interest in strengthening the existing public school system rather than weakening it through the introduction of public charter schools. The section of the law that established goals included direction "to advance a renewed commitment by this state to the mission, goals and diversity of public education." The legislative intent was that public charter schools would "serve as models and catalysts for the improvement of other public schools and the public school system" (1999 ORS 338.015). When the legislature delegated to school districts the power and responsibility of chartering schools, lawmakers demonstrated a commitment to strengthening existing school districts. Research could examine the extent to which public charter schools have or have not contributed to stronger relationships between school personnel, community members, and families. The impact on those relationships may differ by type of school.

The fifth stated goal of the public charter school law was to facilitate "the use of different and innovative learning methods." Some public charter schools in Oregon exist primarily to offer educational methods that diverge from the methods of other public schools in the same area. Appendix A includes brief descriptions of each of the public charter schools that serve 9th-12th grade students in Oregon. One school has a place-based curriculum that is built around the topography, history, and culture of its location. Another school has an individualized, project-based curriculum. A third school has a curriculum grounded in the culture of an indigenous people. A fourth school functions as a model workplace, with quarterly contracts for student deliverables. When a school is founded for the purpose of offering such a program, it is trying "different and innovative" methods.

Clearly, the public charter school law has enabled some implementation of innovative methods. It is less clear, however, how widespread such methods are. It is also unclear whether these methods have provided in any district, as the legislature intended, "models and catalysts" to improve existing schools and school systems. The present typology may be a useful tool in identifying public charter schools that have served as "models and catalysts." Typology could help researchers identify schools and practices that could be transferred to other schools and measure the extent to which such transfer has taken place.

The sixth goal was closely related to the fifth, as both goals targeted facilitation of innovation. The sixth goal, though, explicitly aimed for a small scale laboratory with more flexibility than larger schools, to develop methods that could be transferred to other public schools. This goal said that public charter schools should provide "opportunities in

small learning environments for flexibility and innovation, which may be applied, if proven effective, to other public schools." If public charter schools have been effective small-scale laboratories for innovation, district leaders should be able to make judgments about the effectiveness of methods and the desirability of introducing those methods into other public schools. This would require distinguishing the public charter schools that are experimenting with innovative methods. Typology could help public school administrators identify practices to adopt.

The seventh goal in the original law was to offer more opportunities to teachers. To the extent that the law has enabled a wider variety of schools, it can be said to have offered different kinds of work for teachers. Moreover, some public charter schools are fully online, or are facilitating homeschooling, or have alternate schedules; such schools may provide opportunities for teachers who desire a different rhythm of work. Across the country, although some charter schools offer merit pay, bonuses, or higher salary levels to compete for teachers, teachers at charter schools generally earn less as a group than teachers in traditional public schools (Charter schools in perspective, 2018). This comparison is complicated, however, by the higher turnover of teachers in public charter schools, the frequency of recruiting less experienced teachers, the variation of schedules (e.g., schools that employ many part-time teachers), state laws that have less rigorous certification demands for charter school teachers, and the lower frequency of unionization in public charter schools. A study of the nature of opportunities for teachers at charter schools could be facilitated by a typology of schools, as comparing schools across types could show differing opportunities in different types of schools, and comparing within types could identify schools that are outpacing others, based on this outcome.

That seventh goal, opportunities for teachers, evidenced concern for the interests of public school teachers. The interests of teachers appeared in other ways as well. School districts could choose to convert public schools within the district into public charter schools. When this was done, teachers were explicitly permitted by Oregon's charter school law to choose whether they would work at the charter school. If teachers chose not to work at the charter school, the district had to have a plan for placement of those teachers (1999 ORS 338.055). In addition, a school district could also be the employer of the employees in a public charter school it sponsored rather than delegating that responsibility to an independent operator of a public charter school. Whether the school district or the independent operator employed teachers, teachers who had been employees of the school district before transitioning to a charter school must be granted a leave of absence. Moreover, school districts had to accept teachers back into employment with full seniority and benefits after teachers took leave to teach at a charter school sponsored by the district. Their experience in a charter school was to be considered equivalent to service in any other public school for licensure purposes (1999 ORS 338.135). The law protected the careers of teachers who took the risk of working at a public charter school. The same section of the law clarified that charter schools were to participate in the Public Employee Retirement System (PERS) and that charter school teachers were permitted to join unions.

Clearly the original 1999 law envisioned public charter schools providing opportunities of interest to current public school teachers. It also protected some rights while teachers were working and upon retirement. Still, the same provision of the law also permitted up to half of the full-time equivalent teaching and administration staff to

hold a lower level of state qualification than full licensure, called charter registration. The law did open the door to competition for teachers' jobs from employees who did not have the same experience required of fully licensed teachers. Despite the provisions of the law, many charter school teachers in Oregon are not members of unions or enrolled in PERS. While at one level protecting teachers, the law also gave schools ways to avoid these teacher protections. A typology might enable productive comparisons of teacher opportunities across types of schools.

The last two goals for public charter schools concerned the school's accountability for student performance. The eighth goal was to "establish additional forms of accountability" and the ninth was to "create innovative measurement tools." It is not clear from the original law if the authors envisioned the ODE adopting new ways of measuring student progress to meet the need to evaluate public charter school students, or if public charter schools themselves were considered likely to develop new ways to demonstrate to the public that they were educating children effectively. Perhaps this was another way for public charter schools to serve as laboratories for innovation. But Oregon authorized public charter schools in 1999 and the No Child Left Behind Act was passed two years later (No Child Left Behind Act, 2001), so perhaps questions of innovative measurement tools were set aside in the face of new federal testing requirements.

Roles and Procedures

Much of the remaining original 1999 law spelled out procedures for the approval, operation, supervision, and termination of public charter schools. The law listed elements to include in an application for a charter school (1999 ORS 388.045), a hearing process school districts were required to use, the criteria by which school districts should evaluate

an application, a timeline and process for decisions, a prohibition on fees for applicants, and a process for appealing a denial of charter to the State Board of Education (1999 ORS 338.055) and if necessary to a court (1999 ORS 338.075). When an application met with approval, the sponsoring school district and the applicant were expected to negotiate a written charter for the operation of the school (1999 ORS 338.065).

The law provided guidance for operation of public charter schools in several ways. Under the "autonomy for accountability" trade-off at the heart of the charter school idea, public charter schools have often been exempted from laws that applied to other public schools. The 1999 law broadly exempted public charter schools from laws that affected other schools and then listed the laws that still did apply to public charter schools (1999 ORS 338.115). The laws that still applied included laws forbidding discrimination, protecting health and safety, applying public records and public meetings standards, barring criminal activity, and requiring compliance with state education standards and state assessment systems. The charter school law also specified rules for priority admissions to public charter schools, limits on the percentage of students within a district that could be enrolled in a public charter school, and limits on the number of students from outside a district that a public charter school could enroll (1999 ORS 338.125). In subsequent years, more laws would be added to the list of those from which public charter schools were not exempt. Rules for hiring employees (1999 ORS 338.135), providing student transportation (1999 ORS 338.145), providing special education services (1999 ORS 338.165), setting funding levels (1999 ORS 338.155), and raising funds in other ways (1999 ORS 338.125) also appeared in the 1999 version of Oregon's charter school law.

The 1999 law divided responsibility for supervision of public charter schools between the sponsoring district and the state's education hierarchy. Charter schools were required to submit reports to both the sponsoring district and the State Board of Education at least once a year to demonstrate that the school complied with state rules and with the terms of the charter. The sponsoring district was required to visit the charter school at least once a year to verify compliance. Charter schools were required to submit annual audits of their accounts to both the sponsoring district and the State Board of Education. Finally, charter schools were required to report to the state the same kind of information about student academic performance and demographics that other schools submitted (1999 ORS 338.095).

The sponsoring district's responsibility for supervision of a public charter school extended to the school's closure if termination of a charter was necessary. A charter could be terminated for failure to meet the terms of the charter, including requirements for student performance, failure to correct a violation of law, or failure to maintain financial stability or required insurance. This section of the law spelled out a process and timeline for notification of termination, hearings and appeals, the ultimate closure of the school, and the disposition of assets (1999 ORS 338.105).

Subsequent Revisions of Oregon's Charter School Law

Since the 1999 charter school law went into effect, it has been revised by every regular biennial legislative session. Most revisions have been relatively minor updates and clarifications, but some enabled major changes in the Oregon public charter school landscape.

2001: Minor Revisions

The legislature amended the charter school law only in minor ways in 2001. One revision clarified that when a school district received a higher level of funding because of the level of poverty in the district, a charter school in that district would receive the same increase in its payments from the district (2001 ORS 338.157). That is, the public charter school would receive a proportional share of the increase, not dependent on the poverty level of the students enrolled in the charter school. The second revision directed that public charter schools could receive the services of an educational service district on the same basis as other public schools (2001 ORS 338.115). These revisions seem to reflect a commitment to the idea that public charter schools are embedded in the public education system, not outside of it.

2003: Changes for Small Districts, Changes for Testing

In the 2003 revisions of Oregon law, two changes may have affected the array of public charter schools that emerged in following years. The first was a change in the language of one section of the public charter school law. When the law first passed in 1999, school districts explicitly had been permitted to operate public charter schools, not just delegate operation to another organization. Moreover, single-school districts explicitly had been permitted to convert their sole schools to public charter schools (1999 ORS 338.005, 1999 ORS 338.035, 1999 ORS 338.135). The original law, however, required sponsors to register as nonprofit organizations (1999 ORS 338.035). The 2003 revision clarified that school districts that operated public charter schools did not need to register as nonprofit organizations (1999 ORS 338.035). This may have reflected increasing interest among small school districts in converting their only schools to public

charter governance. The new language could represent a clearer statement that the state approved of small districts converting their schools. Such conversions could give districts access to charter school funding grants that were available at that time. Conversions would also give these districts more flexibility in staffing.

The second relevant change in education law was the initiation of the Oregon 21st Century Schools Program (2003 ORS 329). This new standards and testing system appeared in response to 2001 changes in federal education law (No Child Left Behind Act, 2001). The new Oregon provisions included:

- a new set of standards across the curriculum;
- a new system of state accountability tests for students, with targets and benchmarks for schools and districts;
- a pair of new achievement certificates for high school students; and
- grants, requirements, and other assistance to help schools and districts meet the new standards.

The 1999 charter school law had set goals for new forms of accountability and innovative measures to emerge from public charter schools, but those goals were arguably eclipsed by the demands for all schools to prove via statewide standardized tests that they were meeting their responsibility to raise the level of Oregon children's academic performance. This change may also have had an impact on school districts' willingness to approve some types of public charter schools in subsequent years or on the closure of schools with specialized curricula that did not align well with the state's new tests. Typology can provide a way to assess the effects on public charter school array from policy changes such as those that followed NCLB.

2005: Process for Renewal, Status of Virtual Schools

The charter school law had specified in 1999 that initial charter contracts could not be longer than five years (1999 ORS 338.065). Accordingly, by 2005, charter contracts were due for renewal. The legislature then specified a process for renewal (2005 ORS 338.065). The process emphasized the public charter school's compliance with laws and with its own charter, progress toward student performance goals, and financial stability. The process also kept power in the hands of the sponsoring school district. If the sponsoring district did not renew a school's charter, the school could appeal to the State Board of Education and then to the courts, but the criterion for judgment would be whether the sponsoring district had followed the process spelled out in the law.

The 2005 revisions also introduced new limits on virtual (online) charter schools. In a section on the process for admission of students, the revised law dictated that schools that offered any part of their program online must enroll 50% or more of their students from within the sponsoring district (2005 ORS 338.125). This would prevent a district from starting a virtual charter school with a statewide student population far beyond the number of its own students. The new rules for virtual schools coincided with the creation of the Oregon Virtual School District (ORVSD), which was not a school district for the purposes of apportionment of funds but rather a means of providing free digital content to Oregon public schools and charter schools (2005 SB 1071). Of the sixteen virtual public charter schools operating in Oregon in 2019, two were chartered before 2005, but with a different curricular model, not as virtual schools. For comparison, Oregon's 16 virtual public charter schools enrolled 14,414 students in 2019 and the average virtual public charter school in Oregon had a much larger student population than other public charter

schools. The 2005 idea that the student population of a virtual public charter school would be mainly local did not hold for the long term.

2007: Clearer Paths for Small Districts and Early College

The 2007 revision of the public charter school law added a new definition to the opening chapter of the law. The new language defined a remote and necessary school district as one that served grades K-12, had daily membership of fewer than 110 students, and was located more than 20 miles by traveled road from either the nearest school or the nearest town of 5,000 people (2007 ORS 338.005). This definition was then used to expand the range of small districts that could convert all schools to public charter schools. Before 2007, only districts composed of a single school could do so; the change in definition permitted a school with separate small elementary and secondary schools to convert both without combining them as one entity.

Aside from revisions to the charter school law, another change in Oregon law in 2007 had significant impacts on public charter schools. The Expanded Options program had been signed into law in 2005 to help at-risk students continue education and connect to post-secondary institutions (2005 ORS 340). The Expanded Options program allowed students to take college or technical classes while continuing to accumulate high school credit for those classes. School districts could continue to pay for credit if the student had not received a high school diploma, within age limits. In 2007, a new section explicitly included public charter schools in the Expanded Options program, so long as the public charter school could pay for the college enrollment from the same per-pupil funding it already received through the sponsoring district. From that point forward, early college

became a feature or even a primary mode of delivery of instruction for some Oregon public charter schools.

2009: Changes for Online Learning

In 2009, a new section of Oregon's charter school law added requirements for virtual public charter schools beyond the requirements for brick-and-mortar public charter schools (2009 ORS 338.120). These requirements included student academic performance goals and criteria and specific plans for achieving those performance goals. These changes reflected the original aims for public charter schools to increase student learning in exchange for greater autonomy. Under the new requirements, virtual public charter schools had to submit a plan to involve families and school professionals in the student's program, to ensure students were receiving some adult guidance. The requirements for teacher licensure for virtual schools became more stringent than for other public charter schools, and higher requirements were established for keeping and publishing records of virtual public charter schools. Virtual public charter schools were required to show how they would provide computers, printers, and internet services, including equitable provision for low-income families. The law set standards for frequency and quality of in-person activities and meetings.

Altogether, the new requirements showed a desire for more careful monitoring of virtual public charter schools. The new requirements indicated that questions might have been raised about whether virtual public charter schools delivered the education they promised and operated in ethical and financially responsible ways. All Oregon public charter schools have been subject to monitoring for educational performance and

financial stability, but these requirements specific to virtual public charter schools indicated a heightened concern about this emerging school type.

Another new requirement reflected a feature unique to virtual public charter schools, though. Oregon's law required virtual public charter schools to be nonprofit organizations, like all other public charter schools unless they were operated by the sponsoring school district. But if a virtual public charter school contracted out its educational services to a third-party entity, that entity could be a for-profit organization, as some national virtual school programs are (Ravitch, 2020). The virtual public charter school was required to document financial information about that third-party entity (including supervisor salaries and business profit margins), and the for-profit entity could not be the employer of any employees of the public charter school (2009 ORS 338.135). While the law set some boundaries, this change was an opening for for-profit businesses to deliver publicly funded education in Oregon. The change clarified that for-profit virtual charter school providers were welcome to work in Oregon, within legal boundaries.

Legislators clearly considered the growing number of virtual public charter schools important. The changes authorizing virtual public charter schools did not take effect immediately. Rather, the law also created an Online Learning Task Force charged with determining how to provide access to online learning for Oregon students through public charter schools. The task force included a wide range of stakeholders. It was expected to make recommendations and draft legislation for many aspects of a potential new virtual charter school policy (2009 ORS 338.005). The law introduced a new definition of "virtual public charter school" as a public charter school that provides online

courses to its students and does not primarily serve students at a brick-and-mortar facility. Virtual public charter schools were added to the list of ways to establish public charter schools (2009 ORS 338.035), effective for the next school year. This array of changes and preparatory actions indicated the significance of the move to approve virtual public charter schools.

One important difference between virtual public charter schools and other public charter schools in Oregon is that a virtual school can enroll students who live a long distance from the school's physical headquarters. Prior to 2009, the Oregon legislature had already set limits on out-of-district enrollment in public charter schools. The new rules for virtual public charter schools required that virtual schools, like other public charter schools, restrict out-of-district enrollment to no more than 50% of their students. The new provisions also spelled out a complex set of waiver rules, however, setting broad parameters within which the State Board of Education could grant waivers to allow virtual schools to enroll larger numbers of out-of-district students (2009 ORS 338.125). Regardless of the 50% limit, the lawmakers apparently accepted that virtual public charter schools might enroll far more students than that original 50% limit would suggest.

The 2009 revision of the law strengthened requirements for financial management, specifications for detailed annual audits, and the sponsoring district's power to terminate a school for financial mismanagement (2009 ORS 338.035, 2009 ORS 338.095, 2009 ORS 338.105). Were these revisions related to the moves to authorize virtual public charter schools? Evidence for a relationship appears in the more stringent financial accountability requirements for virtual public charter schools, as well as the permission to subcontract education to for-profit entities. Lawmakers seem to have

anticipated a need for careful monitoring of the virtual schools' finances and their relationships with for-profit entities.

2011: Options for Sponsors and for Virtual Charter Schools

In the 2011 revisions, the legislature authorized institutions of higher education to sponsor charter schools. This provision expired in 2017, though, and as of 2019, no public charter schools in Oregon were sponsored by institutions of higher education (2011 ORS 338.065, 2011 ORS 338.075; Appendix A). The 2011 revisions also introduced a new governance model for public charter schools, in which a sponsoring district and a public charter school could enter partnerships with other school districts, with terms spelled out in the charter of the public charter school. Such an agreement would permit a public charter school sponsored by one district to develop additional campuses or service centers in other districts (2011 ORS 338.080). The description of this new governance model specified that children of cooperating districts would receive priority for admission over children from other districts (2011 ORS 338.125). Revisions in 2011 tightened rules about how public charter schools must demonstrate financial stability and transparency (2011 ORS 338.095, 2011 ORS 338.105), just as the networks of sponsors, operators, providers, and cooperating districts were becoming more complex.

A second set of changes in 2011 affected virtual public charter schools, as some rules were broadened or relaxed and others clarified or tightened. First, the revisions eliminated is a 2009 requirement that virtual public charter schools use "an interactive Internet-based technology platform that monitors and tracks student progress and attendance in conjunction with performing other student assessment functions" (2009

ORS 338.120). The requirements for virtual public charter schools to monitor and track progress and attendance and to administer assessments stood, but schools were allowed more flexibility in determining how they would perform these functions. Second, new requirements created more explicit distinctions between school districts, virtual public school governing boards and employees, and third-party (potentially for-profit) educational service providers (2011 ORS 338.120), targeting conflicts of interest that might occur if employees of for-profit third-party entities served dual roles – although it should be noted that 2013 revisions later softened those boundaries (2013 ORS 338.135). Third, other 2011 changes balanced interests of families against interests of school districts by declaring that families did not need their resident school district's permission to enroll their children in a virtual public charter school sponsored by another district – unless 3% or more of the district's students were already enrolled in such schools, in which case the district could refuse permission to enroll in a virtual public charter school (2011 ORS 338.125).

Altogether, the 2011 changes reflected a quickly growing and changing landscape of public charter schools. Networks of agents and stakeholders were becoming more complex. The interest of lawmakers in empowering different types of public charter schools might have been shifting. A typology of public charter schools could clarify ways that new rules were impacting educational opportunity by promoting changes in the array of public charter schools.

2013: Empowerment for School Districts

In the next regular session of the legislature, lawmakers approved new requirements for evaluation of charter school applications. One change added a step that

permitted a school board to dismiss an incomplete application, if the board gave the applicant adequate notice and the applicant did not address the inadequacies of the application. Moreover, school districts were explicitly directed to consider an applicant's prior experience operating a charter school (2013 ORS 338.055, 2013 ORS 338.075), perhaps giving districts a previously unutilized grounds for rejecting a proposal. This change and others may be related to incidents of charter school mismanagement that came to light in 2010 (Oregonian Staff, 2010). Other revisions of the same sections limited the range of decisions permitted to the State Board of Education in the event of an appeal, strengthening school boards' power by restricting the power of the State Board. These new standards seem to have increased a school district's discretion over acceptance of a public charter school application.

Revisions of the section of law on financial management, audits, and reports also appeared to strengthen the power of the sponsoring district. A new requirement explicitly permitted the sponsoring district to request at any time acknowledgement from any individual member of the governing board of the public charter school, declaring that the member understood the "standards of conduct and liabilities of a director of a nonprofit organization" (2013 ORS 338.095). This reinforced the power of a school district to hold the board of a public charter school accountable for misconduct. The section of the law on terminations of charters was also revised in 2013, with much more detail regarding processes and a school district's powers in the case of termination of a charter (2013 OR 338.105). The law established conditions, for example, under which the school district should hold in trust funds allocated to the public charter school and conditions under which the district must release those funds. The elaborations of these sections of the law

indicated, perhaps, that conflicts between districts and public charter schools had become more common, or at least that a set of high-profile charter scandals prompted policy changes (Oregonian Staff, 2010).

2015: Trends in Charter Schools and Changes in Testing

The changes to the charter school law in 2015 might have seemed small, but they indicated three trends related to types of public charter school. First, lawmakers turned their attention again to the small, rural, remote school districts. Under new language, if the only school in the district was a public charter school, the school district and public charter school could share their employees, assets, and liabilities, melding into a single entity (2015 OR 338.005). In the original 1999 form of the charter school law, sponsoring school districts and operators of public charter schools were conceived as separate entities. By this 2015 revision, the boundaries between sponsoring district and school operator were erased entirely. Charter school rules, in effect, became the rules for small school districts that chose to use them.

The second change permitted oversubscribed public charter schools to adjust their admission lotteries to weight applications of students identified with two or more historically underserved groups (2015 ORS 338.125). Schools were not required to do so, and of course, many public charter schools are not oversubscribed and do not use a lottery most years. Oversubscribed schools are typically in urban areas. There would be little or no overlap between the schools affected by the first 2015 change and this second one. Typology is useful for understanding legislative intent when new provisions affect some types of schools more than others.

The third change did not appear in the charter school law chapter but in a section devoted to local administration of schools. This change permitted a charter school sponsored by one district to open within the boundaries of another district (2015 ORS 332.158). If the sponsoring district itself leased or bought the facility and furnished it, then the district had to receive written permission from the district where the school would be located. But if the public charter school itself, as a separate entity from the sponsoring district, paid for and furnished the facility, it only had to inform the district where the school would be located before beginning instruction. Oregon's original charter school law seemed designed to protect the interests of school districts. This provision, however, took a different turn. It is not hard to imagine that a public charter school opened within the geographic boundaries of a non-sponsoring school district, without its permission, might seem to be unwelcome competition to district schools, even as it offered choice and opportunity to families.

Collectively, these three changes indicated the growing role of public charter schools in single-school districts, concern about equitable admission to public charter schools in areas of denser population, and an increase in moves that could pit school districts against one another in competition for students. But perhaps the biggest change in law affecting charter schools in 2015 was in another section of the statutes. The Student Assessment Bill of Rights allowed parents or adult students to opt out of statewide assessments by filing a form (2015 ORS 329.479). The change also meant that if students met all other diploma requirements, a diploma could not be withheld because the student had opted out of tests. In prior years, students had been required to demonstrate proficiency through exams, or to submit an alternate proof of proficiency in

essential skills. The exchange of autonomy for accountability, measured largely by test scores, had been at the heart of charter school law not just in Oregon, but around the country. The nature of that bargain was changed in Oregon by the Student Assessment Bill of Rights.

2017 and 2019: Change in Law Slows

Very few changes affecting public charter schools appeared in the 2017 revisions of the Oregon Statutes. The requirements for teachers dropped the requirement that teachers be "Highly Qualified," following changes in federal law that removed that requirement (2017 ORS 338.120). A new category of students who could be favored in a lottery for admission to a public charter school appeared in 2017: students from a non-chartered public school that the sponsoring district has recently closed, when the public charter school is within the attendance boundaries for the closed school. In 2019, lawmakers made no significant changes to the public charter school law.

Summary of Oregon Charter School Law and Changes

The analysis for this study proceeded in two concurrent stages, an ideal-type analysis and this analysis of changes in Oregon law regarding public charter schools. After identifying types of charter school in Oregon, as reported in the next chapter, I re-examined the progression of changes in Oregon's charter school law. These changes can be clustered in four groups.

First, the lawmakers made conversion of single-school districts or small, remote districts into public charter schools easier at least three times, in 2003, 2007, and 2015. Most of Oregon's population resides in and around a few cities in the western part of the state, and the sparsely distributed population elsewhere creates unique problems for

public education. These three changes removed more and more of the barriers to converting a whole district to public charter status, ultimately permitting the school and the sponsoring district to act as a single entity. By converting to charter status, these small districts could access charter school grant funds in many cases. They could also fill part of their staffing needs with teachers who could not be hired for a traditional public school. Of the 65 public charter schools I studied in this project, 24 were converted from traditional public schools in small school districts.

Second, changes in 2005, 2009, and 2011 introduced and facilitated virtual public charter schools in Oregon. The largest public charter schools in the state in 2019 were all virtual schools (Appendix A), so this form of education met a demand. As discussed above, this change also increased the potential for influence of for-profit organizations on public charter schools in the state. Virtual charter schools have been controversial because national studies call into question the quality of education they deliver (CREDO, 2015). Yet virtual public charter schools also seem to have advantaged some small school districts by increasing their student population significantly (Appendix A).

Third, the inclusion of public charter schools in the Expanded Options program in 2007 opened a door for public charter schools to offer students early college. In 2019, 23,981 students were enrolled in the 65 schools I studied, and 656 of those students were enrolled in the two Oregon public charter schools that specialized in early college (Appendix A). These were not the only public charter schools that offered early college, however. Expanded Options made early college a possibility through many of Oregon's charter schools. Through Expanded Options in public charter schools, some students have

been able to complete all or most of an Associate degree before they receive a high school diploma.

The fourth group of changes includes the 2003 changes in testing following the federal NCLB legislation and the 2015 changes in testing that came with the Student Assessment Bill of Rights. These changes may have affected the range of public charter schools that school districts were willing to sponsor or that operators considered it worthwhile to open. The 2003 changes might be expected to have the biggest impact on schools that were designed around an innovative curricular or instructional model that was less compatible with the NCLB testing requirements, as this type of school might adapt unique models less easily to the specific universal demands of state tests. Conversely, such schools might be expected to increase in number with the easing of the demands for testing after 2015, if sponsors and operators perceived a renewed opportunity to experiment.

The original purposes and legislative intent for Oregon's public charter schools still stand in the law, just as they were written for the 1999 version. Some of the changes in the law in the following years match well with some of those original purposes. Virtual public charter schools and early college programs, for example, both offer students "choices of learning opportunities" and a promise of "different and innovative learning methods." It may be that conversion of small schools offers an opportunity to "build stronger working relationships" among stakeholders, including community members. The array of public charter schools shaped by these changes may indicate that some purposes are more important than others, however, especially when the array is analyzed by type.

When the array of schools is analyzed by type, the relationship between changes in policies and changes in the array becomes clearer.

CHAPTER V: RESULTS

The steps of ideal-type analysis described in the second chapter resulted in a list of 65 Oregon public charter schools that served grades 9-12 in school year 2018-2019, with case reconstructions for each school. Through familiarity with the details of those case reconstructions, I created provisional type definitions. I classified by types and adjusted types in an iterative process to achieve a set of types comprised of the least possible number of mutually exclusive groups (Stapley et al., 2021). Refined descriptions of types emerged from this process. Independent readers used the type descriptions and optimal cases as guides to sort the types, to demonstrate that the typology could be used effectively. In this chapter, I detail the results of the process at each step, the results of comparisons within and between types, the results of comparison with development of the Oregon charter school law, and the results of analysis of the geographic distribution of types of public charter school.

Phase One: Ideal-Type Analysis

I implemented seven steps of ideal-type analysis in the first phase of the study. These steps began with collecting and examining data. The final product of the analysis was a set of case descriptions, a set of type descriptions, and optimal cases for each type.

Step One: Familiarity with the Data

As I began collecting data about Oregon's public charter schools, I created documents for each school in which I recorded my descriptions of their websites as well as the schools' self-descriptions from websites and other materials. I included mission statements and statements of values, descriptions of photos, and other details that could . be used to characterize each school. From the ODE's list of public charter schools (ODE,

2020), I created a database. I added details from my website notes to the database, Then I added demographic and accountability details from the ODE's At-A-Glance profiles for each school and from Accountability Details documents for schools and school districts from school year 2018-2019 (ODE, 2019). I added additional details from American Community Survey data, reported in the NCES EDGE materials (2018). I added notes to the database about possible types I could see emerging and the characteristics of schools that might justify assignment to one type or another. As I reviewed the information in my database, I periodically revisited websites of the schools to get a fuller picture of the nature of each school.

Step Two: Case Reconstructions

I constructed preliminary case reconstructions from the case documents and database. Case reconstructions are descriptive summaries of the data for each case in a study. The cases in this study are 65 Oregon public charter schools that serve students in 9^{th}-12^{th} grades. These preliminary case reconstructions include more details than I chose for the finalized case reconstructions because at this point in the analysis, I was not yet certain which details were the most relevant for the final form of the typology. As I worked with these case reconstructions, I rechecked details from original source documents. In some cases, I added more information from school websites or state documents.

Later, after I developed type descriptions, I created a second set of case reconstructions. The second set has a standardized set of details and a standardized narrative form. The reconstructions are shorter than the first set, and they are anonymized. This set is appropriate for other readers. As I created it, I established a

pattern that could be used in the future to describe other schools that might be categorized by the typology. An abbreviated form of the final set of case reconstructions appears in Appendix A.

The final case reconstructions included four bullet-point sections and a short list of other facts about the school. The four bullet-point sections provided context, location and demographic information, instructional model, and performance markers. The list at the bottom included additional demographic information about the school district in which the school was located.

Context. Context information derived primarily from the stories schools told about themselves on their websites. Context might include relationships to other schools or community organizations, historical continuities with earlier schools, or information about founders or the founding mission of a school. The age of a school might also be a part of context. Because the study was focused on schools that serve students in 9th to 12th grades, sometimes the nature of an associated K-8 program provided context. This is the case, for example, with school 17B, which has a brick-and-mortar K-8 program with a special curricular focus but a fully virtual program for 9th-12th grades, without a special curricular focus.

Location and Demographics. Location and demographic details help the reader visualize the school community. The bullet-point section for location and demographics includes the NCES category for school locale. The nature of the school's facility appears here, including details about whether the facility houses administrative offices only (as for some virtual public charter schools), has a single campus or more than one, occupies a historic building, includes a dormitory, or is housed at a research site (Appendix A). The

demographic information in this section includes the number of students, the grade levels of students, the percentage of students who qualify for free or reduced lunch, the percentage of students who are classified in state records as English language learners, and the percentage of students who have disabilities, especially when this information distinguishes the school from others. Some of this information is unavailable for some schools.

Instruction. Some public charter schools are sharply distinguished from others by unique curricula. Schools focused on place-based studies, a world language, or the arts have built school identity around a distinct curriculum. Other public charter schools may have courses and curriculum similar to those found at a traditional public school but may use innovative instructional methods, as when a school operates like a workplace where students contract to produce an academic work product. A school that uses primarily project-based learning is another example of innovation in instructional methods. Still other schools may seek the best ways to support the learning of a target group of students – perhaps students with autism, or students who are members of an indigenous people group. The instruction bullet-point section in the case reconstructions provides the kind of information that can help a reader distinguish these schools from others. This section describes anything about the curriculum, instructional method, or target student group that helps to categorize the school.

Performance and Other Information. The last two sections of the case reconstructions present information that would not normally be used to distinguish school type but that might be of interest to someone exploring public charter schools. The section on performance does not provide the means to evaluate the success of a public

charter school against every possible goal, as many measures could be used to evaluate effectiveness. The section does provide a few readily available measures that might be of interest to someone exploring public charter schools. The section includes very limited information about English and math state test scores in the study year, the four-year graduation rate, the percentage of 9th grade students on track to graduate, the attendance rate, and/or the teacher turnover rate at the beginning of the 2018-2019 school year. The last section of the case reconstruction includes the median income of households within the school district and the rate of broadband penetration in the school district. Again, this information would not be used to distinguish types but might be of interest in exploring the types of public charter schools. I omitted the performance and other information from Appendix A for the sake of brevity.

Steps Three, Four, and Five: Ideal Types and Optimal Cases

These threes steps are closely related. In Step Three, I made the preliminary division of ideal types. In Step Four, I selected optimal cases for each type. In Step Five, I wrote descriptions for each type. The process was not purely linear, but iterative. I systematically compared the case reconstructions until I could see ways to group them, the preliminary division of ideal types. When I had preliminary types, I began composing provisional type descriptions and selecting optimal cases. I used the type descriptions and optimal cases to assign all 65 cases again, then refined the descriptions to make the borders between types clearer. Through this iterative process, I developed the types reported below, with descriptions and optimal cases. In this section, I discuss the types defined, the descriptions of type, the optimal cases, and the decision rules I developed.

To construct the ideal types, I used all 65 of the case reconstructions for Oregon public charter schools that served 9th to 12th grades in school year 2018-2019. I used a printed set of cards with case reconstructions so that I could physically move the cases into groups and compare the features of several schools at once. Three broad types emerged; one type has three subtypes. Descriptions, optimal cases, decision rules, and a flow chart make the typology useful for future use by other readers. Table 3 (next page) displays the types, with brief descriptions and criteria for assigning schools to these types.

Type One: Innovations in Instruction. Since the first proposals for public charter schools, one purpose for these schools has been to be laboratories for innovation (Wohlstetter, et al., 2013). In the 2011 program evaluation for Oregon's public charter schools, 61% were classified as "progressive," a category that included a wide variety of innovative models (ODE, 2011). Some of the schools that would have been classified as progressive in 2011 have been placed in other categories in the present typology. Still, schools characterized by innovations in curriculum, instruction, or target student population are a large part of the Oregon public charter school landscape. Of the 65 Oregon public charter schools that serve students in 9th grade and above, 18 are of this type.

Definition of the Type. The schools in this type are built on alternative visions of public education. They use either curriculum or methods sharply different from a typical public school program or they target a special group of students. The visions vary but all can be described as innovations in instruction.

Table 3. Types of Public Charter Schools Serving Secondary Students in Oregon

School Type	Description and Guidelines
Innovations in Instruction	These schools are formed with alternative visions of education, with innovative courses of study, methods of instruction, or target student groups. To place a school in this type, determine the unusual curriculum, innovative instructional method, or target student group. The school must be a brick-and-mortar school where students attend most days, in a district where students have other school options.
Heritage Conversions	These schools are historic traditional schools that have been converted to charter governance, in small, rural school districts. To place a school in this type, determine that it is the only school (or the only secondary school) in a small, remote district. The school must be a brick-and-mortar school where students attend most days. The school may preserve facilities, methods, mascots, or other features of the pre-conversion school.
Facilitated Instruction: Homeschool Support	These schools delegate most core instruction to the family. The school may also delegate many decisions about curriculum to the family. The school may employ teachers who meet with students and families periodically. The school may offer some optional onsite activities. To place a school in this type, determine that families are responsible for supervising students' learning and for important academic decisions. The school may offer some optional virtual curriculum among other choices but is not a virtual school. Information about the school emphasizes the family's role.
Facilitated Instruction: Virtual Schools	Students of these schools receive most instruction from online programs. The school may employ teachers who meet with students and families periodically. The school may offer some optional in-person activities. To place a school in this type, determine that core instruction is delivered through online programs to students who are at home or in some environment other than the school's facility.
Facilitated Instruction: Early College	Students of these schools receive most instruction from college instructors. The school may employ counselors or other personnel who facilitate students' engagement with college work. To place a school in this type, determine that core academic work is delivered through college courses, in a brick-and-mortar setting. Schools of other types may offer early college options, but the Early College type offers only or primarily college classes.

Some of the schools in this group experiment with curriculum. For example, a school may infuse study of a language and culture through the curriculum, as in a Japanese or Spanish immersion school or in a school structured to honor and inculcate the culture of an indigenous people. Some schools define their curriculum as place-based and pay close attention to local history, local culture, local community organizations, and local environment. Some schools identify their curriculum as classical and build their programs on Latin language study and a sequence of history and literature studies. Some of Oregon's public charter schools have an engineering focus; they offer some unique classes, and the content of more common classes is shaped by the goal of building engineering skills. Still other schools have built their programs on a back-to-basics curriculum. The 2011 program evaluation (ODE, 2011) would have placed some of these schools in the progressive category, and some (such as those that implement a back-to-basics curriculum) in a category called "traditional" schools. Both progressive and traditional schools under the Carpenter rubric used in 2011 distinguish themselves from regular district public schools by their methods of curriculum and instruction.

For some schools in the Innovations in Instruction category, the alternative vision concerns instructional method more than curriculum. A military school, for example, may use curriculum in most classes very similar to that used at a neighboring district school, but the instruction is shaped by school routines, structures, and relationships derived from military tradition. A school committed to project-based learning innovates with a method of delivering content rather than with the content itself.

Some of the schools in this type have innovated in response to the needs of a particular student group. Some, for example, target the needs of students with disabilities.

The curriculum and instructional methods may be adapted to meet those students' needs, but the curricular and instructional adaptations are instrumental, while the fundamental goal is to serve a target group of students. Other schools target students who have not succeeded in other schools or are otherwise at risk.

Class meetings in a physical location are an important part of the model for schools of this type. These schools may use a different schedule than a typical school, or they may use some online curriculum, or offer options such as early college or credit recovery. But these options will serve the purpose of the school's unique experimental model. The options are subordinate to the school's primary purpose. A school where most students study primarily online (outside of their brick-and-mortar school facility), primarily at home, or primarily in a community college would not fit this type.

Decision Criteria. To assign a school to this category, I considered these questions:

- From the school's history, self-description, values, curriculum, or demographics, does the school seem to offer an alternative curriculum?
- From the same sources, does the school seem to employ alternative methods of instruction?
- From the same sources, does the school seem to commit to better service to a target group of students as its primary goal?
- Is the innovation fundamental to the school's identity, as displayed in self-descriptions?
- Does the school primarily deliver core curriculum to students in a brick-and-mortar setting where students attend most days?

- Do students have other choices for attending a brick-and-mortar school within a reasonable distance?
- Are online classes, early college, or credit recovery subordinate to the school's primary innovation in curriculum, instructional method, or target group?

A school belongs to this type if it primarily offers an innovation in curriculum or instructional method, or it is designed to innovate in the education of a target group of students. A school that has some innovations in curriculum or instruction but is primarily an online school, a school seeking to preserve the structure and methods of a pre-existing small and rural school, or a school that primarily delegates education to another entity does not qualify for assignment to this type.

Optimal Case. The school I selected as the optimal case for the Innovations in Instruction type has operated in a midsize city for about two decades. It was formed by a coalition of community organizations. The organizations each had provided after-school and extracurricular programs and summer camps in prior years, primarily for younger children. The organizations had in common that their educational programs were experiential and made use of the environment of the community. The separate organizations offered, for example, nature programs, a cooking school, and art instruction using recycled materials. The groups saw an opportunity at the advent of the charter school law to meet the needs of high school students. I selected this school because its innovations in instruction bridge the three kinds of innovation I identified across this type of school: innovations in curriculum, innovations in instructional methodology, and innovations in efforts to reach a target group of students.

I interviewed a leader of the school who had been familiar with the school for several years before he became an employee. The leader described a school that has capacity for flexibility. This flexibility allows for constant change to meet the needs of the students who are present in any given year. We first discussed the kinds of students who find and stay with this school. The leader described several kinds of students. One subset consists of students from families who want an alternative to the traditional path for their children as soon as they begin high school. These students may have been homeschooled or may have attended schools for earlier grades that also employ unusual methods of instruction. Another subset includes students who have begun in regular high schools and found them overwhelming or unwelcoming. Some of these students may have been bullied. In this subset the leader included many young people who identify as LGBTQ+ and who have found a more welcoming environment at this school. In a third subset are students who have struggled and failed at one or more other schools and arrive at this one with few or no high school credits. In any one year, the school may have a different mix of students from these subsets, and the flexibility to meet their needs is essential to the school's identity.

To meet the needs of these varied student groups, the school has found ways to adapt programs to fit the unique needs of the students served. Most classes are multidisciplinary, and in that way core academic content can be embedded in outdoor classes, cooking classes, exercise classes, music classes, or game-based classes. Teachers are prepared to change course content to fit a group of students. The leader gave the example of an English class that was going to prepare a play until students expressed more interest in issue debates and the teacher changed the program. Classes are also

experiential and relevant to the students' lives. Teachers are trained in project-based learning and student-directed projects are used throughout the school. All students use the city bus system to travel to the school's main facility and to other class locations in the community, and teachers frequently take whole classes on the bus to events at other sites. The school has a well-developed culinary arts program, and the students prepare breakfast and lunch for all students every day. An onsite psychologist supports students, as well. Throughout the school's program, flexibility of curriculum and instructional method meet the varied needs of students who are in many ways at risk. The school bridges innovations in curriculum and instruction to meet a target student body in innovative ways.

The school seems to have a strong relationship with the sponsoring district. In this urban environment, at-risk students have choices of programs within the district's schools as well as several choices outside the district schools. This school has had a long and successful relationship with the district, supporting many students who are hard to place. The leader expressed the feeling that the district recognizes the value of having this school as an option for students.

Teachers at this school seem to value the distinctly different opportunity of working in this environment. The teacher turnover rate in the year of the study was 6%. The school leader I interviewed said that the teachers in this school often do not want to work in a more typical classroom environment. They enjoy the relationships with students, and they enjoy the multidisciplinary study and flexible workspaces. Because the charter school law permits the school to have teachers who are registered rather than fully certified, the school can hire teachers who have a skill set students value, such as the

skills taught in the culinary arts program. Then the school can support these teachers in their professional development, so that some do become fully certified while they are working for this school.

In the year of this study, the school's results on the state's accountability measures were weak. Fewer than one in three students graduated in four years and fewer than one in three students attended school regularly. The school scored in the lowest categories on state tests. The school leader told me that few of the school's graduates go on to a four-year college, but that many do continue education in a community college. In fact, the school helps students take some community college classes while they are still in high school to help make the link between high school and community college stronger. As we discussed the school's test scores, the leader pointed out that many students come to the school already having had poor experiences in other schools and many arrive with few credits earned. Moreover, while the leader said the school has especially struggled to raise students' math skills, the leader felt that the state's expectations for math were also inappropriate for many students. The school's staff has worked to make math functional, relevant, and interesting to students rather than pushing students to master many higher-level math concepts.

As an optimal case for the Innovations in Instruction type, this school illustrates the following characteristics of the type:

- Some schools in this type innovate in curriculum as a primary goal. This school has chosen to make curriculum as relevant as possible to the lives and interests of students, rather than dependent on textbooks or traditional course structures.

- Some schools in this type innovate in instructional methodologies. This school has infused project-based learning throughout the program. Teachers employ experiential methods across the curriculum, such as teaching science in the context of fishing together or teaching math through gameplay.
- Some schools in this type innovate through targeting the needs of a specific student group. While this school does not have a primary mission of serving at-risk students, many of the students attracted to the program can be described as at-risk, and the school adapts to meet the needs of the students it serves.
- For schools of this type, the innovation is fundamental to the school's identity. For this school, its innovative approach is included in its name and in the name of the coalition of organizations that operates it.
- Operation in a physical location is fundamental for schools of this type. For this optimal case school, the school's building is central to all activities of the school, even though students may travel to several other locations for classes.

Measures of Success. How can the success of a school of this type be measured? In my analysis, possible measures of success fall in four general categories: measures used to judge success of all Oregon schools, measures set by law for public charter schools, measures used by the schools themselves, and measures related to the original purposes of public charter schools in Oregon law. Like other public charter schools, schools of the Innovations in Instruction type can be evaluated by the accountability criteria established by the state for all schools: test scores, graduation rates, attendance rates, and 9th-grade on-track rates. By these measures, the optimum-case school is

performing poorly. Yet the sponsoring district continues to renew the charter. As the school leader told me, the district values this school as a placement for students who are difficult to reach. The standard accountability measures do not seem likely to recognize what this school does well. This may be true for other Innovation schools, too, if the innovative curriculum, innovative method, or target student group is not well-aligned to the state's accountability measures. Like the optimum-case school, Innovation schools may be providing a much-needed educational service even when their value is not easily measured by state tests and graduation rates.

These schools can also be evaluated by accountability measures established by state law specifically for public charter schools: financial stability and accountability, for example. Researchers could expand the use of measures of financial accountability, as well, to evaluate the degree to which schools of different types fulfill state goals in cost-efficient ways. Schools could be compared within the type or against schools with a similar target student group to assess effective use of resources. Following Dobbie & Fryer (2016), the financial impact of schools on districts and communities could be assessed.

Schools, on the other hand, might measure their own success in other terms, based on the unique educational vision of each school. An academically accelerated program, for example, might measure success through college admissions. A program created to serve at-risk students might measure success through the number of students who make more progress toward a diploma after joining the program than they made before joining the program. Programs focused on a language or culture might measure success through

evidence of preservation of a language or through measures of the strength of the students' self-awareness or confidence.

Finally, the success of the school could be measured in terms of Oregon's original purposes for public charter schools: increasing learning, increasing choice in learning opportunities, meeting student needs and interests, developing relationship with community, developing relationships with families, testing educational innovations, providing new opportunities for teachers, and pioneering forms and measures for accountability. Schools that aim to test innovations and provide new kinds of choices for teachers and students could be measured by their success in meeting those aims. Typology can help researchers identify appropriate measures to assess the success of charter school policy.

Type Two: Heritage Conversions. Oregon's population is concentrated in or near cities in the western part of the state. Counties in other areas are sparsely populated. As a result, about one-quarter of Oregon's school districts support a single school. Oregon's original charter school law made provision for conversion of single schools in these small districts into charter schools. Changes in the law in 2003, 2007, and 2015 made those conversions easier. At this point, more than half of single-school districts that serve 9^{th}-12^{th} grades have converted to charter schools. In addition, a few districts that have more than one school (e.g., one elementary school and one secondary school) have converted their schools to charter schools for reasons similar to those of the single-school districts. In all, 24 of the 65 Oregon public charter schools that serve students in 9^{th}-12^{th} grades belong to this type.

Definition of the Type. Heritage schools have been converted from pre-existing schools, typically in small districts in rural areas. They often use historic school buildings or campuses. They usually preserve many characteristics of traditional public schools that are less common among charter schools, such as athletic programs, cafeterias, long-standing mascots, and school buses. These schools often do not emphasize their charter status in their self-descriptions. Their primary purpose is to maintain a school where a traditional public school might not be viable.

Sometimes Heritage Conversion schools also modify curriculum and instructional methods in the process of conversion to charter status. This has been true especially when schools have applied for charter school grants that required a unique educational model. The Heritage Conversion school leader with whom I spoke described a requirement at the time of that school's conversion for schools to have a unique model; the school had responded by developing an environmental science emphasis throughout its curriculum. But the change in curriculum was a means to achieve the conversion, not the reason for the conversion. For schools of this type, changes in curriculum and methods are subordinate to the primary purpose of conversion: maintaining a historic school. These schools may also employ some virtual courses or early college programs, but the traditional brick-and-mortar facility is central to the school's purpose and these options are subordinate to the main purpose. For these schools, self-descriptions and website functions resemble those of traditional public schools. The stability of the institution is essential so that the school can continue to provide opportunity for students in its historic constituency.

Decision Criteria. The key factors for identifying a Historic Conversion school are a brick-and-mortar facility and a small sponsoring school district. Identifying those two characteristics first makes assignment more reliable. In assigning schools to this type, the most difficult cases are those that have introduced educational innovation when they transitioned to charter schools; those that employ a good deal of virtual programming within the brick-and-mortar school; and those that are maintaining a traditional school in a historic school building in a somewhat larger or less remote district. These are questions I considered in making these assignments:

- Is the school in a small, rural community?
- Is the district small enough to qualify to convert all its schools to charters?
- Does the school operate in a brick-and-mortar school?
- If virtual curriculum is used, is it used in the context of a brick-and-mortar classroom rather than primarily at home?
- Does the school retain a historic building, a historic mascot, and a long-standing name?
- Does the school have class schedules, building spaces (such as a library or cafeteria), bus service, and athletic programs that resemble those of a traditional public school of similar size?

A school that offers some online programming, innovations in instruction, early college options, or credit recovery options belongs in this category if these elements are subordinate to maintaining the heritage community school. On the other hand, a school that was designed for the purpose of a curricular innovation and happens to use a historic school building after the community school has moved to another site or long after it has

closed would not belong to this group. Schools can be assigned to this group even when they do not meet every criterion perfectly, if the school seems to exist mainly to preserve a historic school in a small community.

Optimal Case. The school I chose as the optimal case for this type is a K-12 school that converted to charter governance more than ten years ago. It is located next to a river in a community surrounded by ranches and farms. The school has two historic buildings, one that houses younger students, and another about a half mile away for 9th-12th grades. I selected this school because it was in a small community distant from urban centers, more remote than some Historic Conversion schools and less remote than others. When I examined its self-descriptions, I saw evidence of the school's efforts to maintain its historic characteristics, including athletic teams, mascots, food service, and classroom characteristics. I also saw an emphasis on the connection to the local community.

The school leader I interviewed has been an employee of the school since the second year of charter governance. The leader described the history of the school's conversion as a business decision that has had beneficial effects not only on the financial health of the district but also on the educational opportunities for students. At the time the conversion was made, the community was aging, and the price of its properties was beginning to rise, making it more difficult for young families to move into the immediate area. The leader believes that if the school had not made the shift to charter governance, it might have continued as a much smaller K-8 school and sent its 9th-12th grade students to another district's school. Continuing as a K-12 school was becoming unsustainable. The transition to charter governance brought an initial grant that helped shore up the school's

facilities and programs. Charter status also allowed the school to increase student numbers by recruiting students from neighboring school districts.

After the transition to charter status, the school began sending buses to five or more neighboring school districts daily to bring students to the school. Charter governance allowed more flexibility in instructional hours, and the school moved to a four-day schedule, which was also helpful for students traveling long distances to school. The plan to recruit students from neighboring districts has been successful. The school now has a student population about twice as large as before the move to charter governance. In the past, the school has had to join forces with other schools to field sports teams, but now can field some teams alone. If a purpose of charter school conversions is to stabilize rural schools and preserve for families the choice of a neighborhood school, the conversion of this school seems to meet that purpose. Typology allows identification of different purposes for different kinds of schools.

The leader with whom I spoke described three factors that attract families from outside the district. First, small class size makes it possible for students to get more individual attention. The leader told me stories of students who had been failing or alienated at other schools who thrived in this school, as they felt individually seen and known. Second, the leader said that the school had had a long history of successful academic programs before charter governance and that families still want to send their students for higher quality education than they believe is available in their own districts. Third, the leader observed that students who transfer from outside the district have a higher likelihood of requiring special education services. The leader believes the school is providing for students with special academic needs more effectively than at least some of

the neighboring districts. As the leader described the school's programs, a commitment to meeting the individual needs of every student seemed to be a key value of the school. Meeting "student needs and interests" is one purpose for charter schools, under Oregon's law. Typology allows study of different ways that different types of schools are able to meet that goal.

Another strength of this optimum-case school, as the leader described it, is strong relationships with the community. In a remote rural area, a school is a hub for information, services, and activities. Businesses and community organizations are very involved in partnerships with this school. These partnerships include effective life skills and work skills training for young people with disabilities in local businesses, outdoor recreation and science activities with local experts, and many college scholarships sponsored by individuals, businesses, and community organizations. The school was even the site for community adult vaccination programs during the COVID pandemic.

The school has built on its success in attracting students and community support by engaging the help of researchers who study rural school success. They have developed programs designed to use the school's capacity for individual attention to cultivate character development and school engagement for students. The school's adults have participated in extensive, coordinated professional development to enable them to act as a team to promote the same values and objectives. The school has also engaged an agency that helps it maximize its use of data to address individual student needs. According to the school leader, these efforts would have been impossible without the conversion to charter governance.

The school leader moved to this rural community for a job at the school, and described that as a path for other teachers, too. Teachers seem to like teaching at the school for several reasons. Teacher turnover is low, according to the leader, because teachers like teaching small classes with a close-knit group of colleagues, and because they like living and working in an area known for its natural beauty. Teachers also like the four-day schedule, which gives them two Fridays a month of a full day of paid professional development and planning time as well as two more Fridays off work.

The school does not employ substitute teachers. On the day that I spoke with the school leader, administrators had filled in for an absent bus driver, a cafeteria worker, and a teacher's aide. The leader said that in a time when many schools have lost teachers who feel exhausted and alienated, the staff of this school feels supported and valued by administrators and colleagues, and students have connections with more staff members. Teachers value the opportunity to work at this school so much that they are willing to commute long distances. Because property values are rising, teachers who have joined the staff more recently often cannot afford to live very close to the school, and some travel up to an hour each day to get to the school. For teachers, the school is a tight-knit, supportive community, and they seem to be willing to make sacrifices for this unique teaching opportunity.

The school has also taken advantage of the flexibility of charter status to hire registered teachers for some positions instead of regularly certified teachers. In some cases, the school has hired registered teachers and then supported those teachers' progress toward regular certification. In at least one other case, the school has hired a teacher because of the teacher's high level of expertise in a field and kept that teacher as a

registered charter teacher because of the teacher's effectiveness in the classroom. The school's ability to treat teachers as well as students as individuals seems to contribute to teachers' satisfaction.

In the year of the study, state accountability reports showed slightly higher graduation rates for this school than for the state as a whole. Performance on state assessments for 11th-grade students was similar to the state average. The rate of 9th-grade students on track to graduate was lower than the state's average, as was the rate of attendance (ODE, At-a-Glance, 2019). According to the school leader, this was the point at which the school engaged the assistance of an agency to help it maximize its use of data to help raise students' engagement and performance.

As an optimal case for the Heritage Conversions type, this school illustrates the following characteristics of the type:

- Schools of this type are typically located in rural areas at some distance from urban areas. This school is in a small community in rural area rated by the NCES as a rural community distant from urbanized areas (School Locale 42).
- Schools of this type are typically the only school in a district. This K-12 school is the only school of any kind in its district. The practical alternatives for residents of the district would be other small public schools some distance away in neighboring districts or a virtual school.
- Schools of this type seek to preserve features of the pre-conversion schools. This school uses the historic elementary school and high school buildings of the community. The community values the school's preservation of local school traditions. The school provides bus transportation, food service, and

athletics. The school's website includes the same kinds of information expected on the websites of other small, rural schools.

- Operation in a physical location, usually a historic school building, is fundamental for schools of this type. They are not primarily virtual schools. This school does not rely on virtual curriculum. Students pursue full-time academic programs with teachers in its two historic buildings.
- When these schools use instructional innovations or virtual curriculum, they do so in service of maintaining a traditional local school. This school has introduced curricular innovations, but those innovations served the purpose of permitting the shift to charter governance in order to change the school's business model.
- The health of the local community is often perceived to be tied to the health of the school for schools of this type. This school relies heavily on partnerships with local individuals, businesses, and community organizations. In turn, the community relies on the school as a shelter for emergencies, a site for some kinds of health care, and a distributor of important local information.

Measures of Success. Heritage schools can be assessed by the same accountability measures the state uses for all other schools. The number of students in any grade level or disaggregated group is often small, however, making these measures less useful for assessing the effectiveness of a school, compared to larger schools that yield larger sample sizes. Financial accountability requirements for charter schools might be useful, although these schools are now often a single entity with the sponsoring district in a way that other charter schools are not. These schools also have different kinds of

expenses than other public charter schools, as they are more likely to spend a lot of their resources on transportation or even on dormitories. A school in this category might judge its own success in terms of the stability of staff and program, the graduation rate and post-secondary placement of students, satisfaction of stakeholders, or markers of engagement with the community.

Can these schools' success be measured against the purposes for public charter schools in Oregon's law? Most of the state's original goals related to innovations in education or new opportunities for teachers and students. These goals do not seem as relevant for schools whose primary mission is to maintain the viability of a historic school. Perhaps success of Heritage Conversion schools should be measured by the actions made newly possible by charter status. School success in serving students could be measured against the alternatives, such as consolidated school districts or closed schools. Teacher opportunities could be measured not in terms of novelty but in terms of the desirability of the teaching positions or the length of teacher tenure. Perhaps Heritage Conversion schools should be compared to the similarly remote schools that have not converted to charter governance to determine what the full impact of conversion has been. Typology allows evaluators to isolate this type of school, with its unique aims, to better measure the success of a school.

Type Three: Facilitated Instruction. The third type of charter school consists of programs that delegate much of the responsibility for instruction to other entities. These schools may hire teachers to supervise progress, but students spend little time with teachers. Students enrolled in public charter schools of this type may study at home with their parents' guidance, or in fully virtual classes at home, or in college classrooms. The

Facilitated Instruction type includes three distinct sub-types: Homeschool Support programs, Virtual Schools, and Early College programs.

Facilitated Instruction schools differ most from all other charter schools in the primary location where education takes place. Schools of other types may use some of the methods of the Facilitated Instruction types, but they do so in programs primarily centered in brick-and-mortar facilities with teachers who are present with students most of the time when students are studying. Schools of the Facilitated Instruction subtypes may offer some brick-and-mortar classes, but such classes are ancillary to the primary program. Teachers in Facilitated subtypes may know and plan for students individually, but teachers are not present with students most of the time that students are working on the educational program.

First Subtype: Homeschool Support. Public charter school programs designed to engage and support homeschooling families have been part of Oregon's charter school landscape at least since 2004 (Appendix A). Carpenter's typology included programs designed to support homeschooling in the category of alternative schools (2006). A fundamental feature of public charter schools that support homeschooling compared to other alternative schools, though, is that Homeschool Support programs delegate to families most instruction, as well as many decisions about curriculum. Homeschool Support programs may offer virtual classes as well as traditional textbooks and optional in-person classes, but parental choice and responsibility for instruction is fundamental. It should be noted that once enrolled in a public charter school, these students are legally public charter school students, not homeschooled students. Still, their families may

consider them to be homeschooled, and parents take a major share of the responsibility for planning and implementing education.

Public charter schools of this type advise parents in planning, selecting materials, and providing instruction for students the families may consider to be homeschooled. The schools pay for curriculum, online courses, and equipment selected by the family. Schools may also pay for private lessons or community-based classes. Schools may organize optional field trips and in-person classes in which parents choose to have their children participate. Teachers meet periodically with families to assist with instruction and evaluation and to ensure students are making progress. Fundamentally, though, parents direct their children's education.

How can schools of this type be distinguished? The most difficult cases to assign to this subtype fall into two categories. One kind of difficult case is a program where education takes place in the home but where families have less responsibility and less choice. Virtual public charter schools are examples of this case. The other kind of difficult case is a program where families have a great deal of choice and may choose to have their children's education include many online classes or in-person events with other instructors. This second difficult case would still be assigned to the Homeschool Support subtype because of the degree of parental choice and direction. Homeschool Support schools intentionally give families a great deal of choice and responsibility for core instruction and offer choices other than virtual curriculum for core academic subjects. Often the choices of curriculum include books recommended by homeschooling groups. In assigning schools to this category, I considered these questions:

- Does the school refer to homeschooling in its self-descriptions, or does it emphasize parental choice or parents as teachers in its self-descriptions?
- Do families choose instructional materials?
- Does core instruction take place primarily at home for most students?
- If online courses or in-person classes are offered, are they a choice parents can make rather than the main method of instruction for the school?

As the optimal case for this subtype, I selected a suburban school that has operated for more than a decade. I interviewed a school leader who has been involved with the school almost since its inception and is now an administrator for the school. Prior to chartering this school, its sponsoring district had created a resource program to engage and support homeschooling families. Parents and district personnel who had been involved with that program collaborated to open this charter school, according to the school leader I interviewed.

This K-12 school has always described itself as a homeschool support program. The school leader believes that most families with students in grades K-8 perceive themselves as homeschooling families. Families with students in grades 9-12, however, are more likely to think of their students as charter school students in a school with flexible hours, rather than as homeschooled students. According to the leader, families that see themselves as homeschooling are more likely to conduct most core academic work at home, with curriculum chosen by the parent and funded by the school, while using the school for electives or perhaps one core class. Families that do not see themselves as homeschooling are more likely to have their students attend all core

academic classes at the school's brick-and-mortar site while perhaps completing an elective or a course like physical education at home.

All students meet with an advisory teacher for an hour once a week, regardless of whether they study mainly at home or mainly at school. Advisory teachers monitor educational progress and help parents select materials for home study from a wide variety of available curricula, including curricula commonly used by homeschooling families. They also help students prepare for state exams and college entrance exams. When students are in grades 9-12, advisory teachers help them with college and career planning and college applications. They work with students and local community colleges to create a smooth transition for students who wish to attend community college, and they help other students find trade school programs or apply for jobs.

In addition to advisory teachers, the school employs classroom teachers. Onsite classes for grades 9-12 include both core academics and electives. Classes are scheduled for two 90-minute meetings a week, Monday through Thursday. Fridays have no classes for students and flexible time for teachers to plan, train, or take days off. In the early years of the school, many classes had included students from all grades, such as a guitar class that was open to grades K-12. In recent years, however, high school students are in onsite classes only with other high school students.

Classroom teachers for high school classes select their own curriculum and plan their own classes, with some coordination with other teachers and in alignment with state standards. Classes are small, compared to neighboring schools. Both classroom teachers and advisory teachers have low turnover. According to the school leader I interviewed, teachers like the close relationships they develop with students and families, the small

class size, the flexibility in schedules, and the range of interesting classes they can create. For researchers, identifying schools of this type through a typology allows goals like new opportunities for teachers to be measured in terms of the desirability of teaching positions in different kinds of schools.

Families similarly value the close relationships and small class sizes, according to the school leader. The families who are attracted to the school include a mix of traditionally homeschooling families and families whose children have had difficulty in other schools. When I asked for success stories, the leader told me stories of students with disabilities who had been able to adjust to and feel happy in this school. In this suburban location, families have many choices of traditional district schools and other charter schools, and some families choose this school after several experiences with other schools. On the other hand, the students who have more trouble in this school, according to the leader, are those whose families do not have time to support them in work done at home. In grades 9-12, however, parents who do not have the time or interest in homeschooling can have students complete their full program onsite, so a lack of parent engagement is less problematic for high school students than for younger students at this school.

The sponsoring school district has been very supportive of this school, perhaps because district administrators were deeply involved in founding the school, as the school evolved from a district resource program. The school has some special education expertise within its own staff, but the district provides evaluations, speech therapy, and services for students with more complex needs, so that students with disabilities can be fully served within the school's programs. Over time, according to the leader, the

district's expectations have gradually increased, but in ways that have generally proved beneficial for the school and its students.

How does this school exemplify the characteristics of the Homeschool Support subtype?

- Homeschool Support schools are designed for homeschooling families. This school was founded explicitly as support for homeschooling families. School materials still describe it as a program for homeschooling families. At least some of the families consider themselves to be homeschooling. At least some families complete most academic work at home.
- Homeschool Support schools permit parents to make choices about curriculum and other aspects of students' education. At this school, parents select from classes the school offers and decide how much work will be completed at home. They choose from a wide variety of curricula (more than a dozen different math programs, for example).
- Homeschool Support students often complete core academic work at home. If they take classes at the school's site, these classes are a choice. This school makes it possible for students to complete any part of the academic program at home, although an increasing number of 9^{th}-12^{th} grade students complete their core academic work at the school, by choice. Families can choose to have students complete all academic work at home, under parents' supervision and direction.

What measures of success are appropriate for Homeschool Support programs? Homeschool Support programs bring homeschooled children into the state's testing

program and other reported measures of educational progress. If a goal of Homeschool Support programs is to increase supervision of homeschooling, the quality of oversight by public charter schools could be a measure of success, regardless of the students' levels of performance. Since Homeschool Support schools are included like other public charter schools in the state's accountability system, measured as other schools are, the standard accountability measures can also be used to determine the degree to which the school is providing the education required by the state by contributing to students' academic growth.

Homeschool Support programs are also accountable to the state under the same financial and transparency rules as other public charter schools. Just as researchers can measure the financial impact of other public charter schools on districts and communities, the financial impact of these schools can also be evaluated. Families are stakeholders in all schools, but even more so in the Homeschool Support charter schools. Perhaps measures of family satisfaction with their public charter schools might be appropriate measures of success. Family satisfaction could be tracked through surveys, but also through measures such as continued enrollment or graduation rates. The use of a typology to group schools by type can help researchers select appropriate measures for evaluation.

How well do these possible measures address the purposes of this subtype of public charter school? Since changes in Oregon's laws permitted parents to opt out of state testing for their children, participation rates at these schools have been low (ODE, At-a-Glance, 2019) and the scores for students who do participate in testing are also lower than for the state as a whole (ODE, At-a-Glance, 2019). If the state is most concerned about monitoring the standard outcomes of state-funded education, it might be

valuable to study these schools as a group, or to examine differences within the group. Perhaps some Homeschool Support programs are contributing more effectively to students' academic growth, and practices of those schools could be transferred to other Homeschool Support programs.

Under the original purposes for public charter schools in Oregon's law, the second and fourth goals seem relevant, so success for these programs could be measured by the degree to which they increase choice in learning opportunities and by the degree to which they create stronger working relationships between families and school personnel, instead of by the standard outcome measures. By bringing homeschooling families into a public charter school, Homeschool Support programs bring some degree of oversight of the education and welfare of homeschooled children. The number of families who enter the public system in this way might in itself be a measure of success, if a major purpose for these schools is to increase oversight of homeschooling.

Second Subtype: Virtual Schools. The definition of Virtual School used in this study is similar to the definition of *virtual public charter schools* used in Oregon law. Oregon law defines a virtual public charter school as a public charter school that offers online classes, but the law distinguishes between virtual classes students take for their core academic program and at home from virtual classes that are ancillary to the main academic program or that are completed in the facility of the brick-and-mortar school. A tool for identifying virtual public charter schools, published by the ODE in 2014, clarified that if a public charter school serves students primarily in a physical location, it is not a virtual public charter school (ODE, Virtual Public Charter School Determination

Tool, 2014). The ODE specified that a school was not virtual if it met any one of these three conditions:

- More than 50% of core courses were offered at the school's physical location and not in an online course.
- More than 50% of students received instruction at the school's physical location and not in an online course.
- More than 50% of the required instructional hours were offered at the physical location and not in an online course.

Facilitated Instruction schools delegate core instruction to another entity: a family, a virtual instruction program, or a college. Virtual Schools deliver core instruction primarily through online classes. For the purposes of this study, if students primarily receive instruction through online courses but in their school's physical location under the supervision of a physically present teacher, that is not a virtual school. That is, I have not used the 50% criteria; rather, the key points for determination are whether instruction is delegated to an entity other than a brick-and-mortar school and whether core academic instruction normally takes place in a place other than a brick-and-mortar school.

Virtual Schools deliver core instruction through online classes. My examination of the virtual public charter schools in Oregon shows variation in the way this is done. The classes may be developed locally or at a broader level, by not-for-profit or for-profit entities. Classes may be synchronous or asynchronous. Programs may also provide optional local classes, field trips, or early college enrollment, but core academics are delivered by the online program. Schools may provide a local supervising teacher to meet

with students or families periodically, but the teacher does not deliver most core instruction.

How can schools of this type be distinguished? In assigning schools to this subtype, I considered these questions:

- Are core academics delivered through an online program?
- Do students study primarily at a location other than the school's facility?
- If local supervising teachers work with students, do they primarily track the students' engagement with the online program rather than delivering core academic instruction?

I selected as optimal case for this subtype a virtual public charter school that has existed for more than a decade and that has used two quite different approaches over that time. In the school's early years, it used a national system from a for-profit national company. In recent years, the school ended its contract with that national system and now uses several online programs from which teachers select in response to students' needs, progress, and demonstrated understanding, according to the school leader I interviewed. This is one of the largest schools in the state, with more than ten times as many students as the average student population of Oregon public charter schools. Because of the school's experience with administering different types of virtual education, it offers insights applicable across the spectrum of Virtual Schools.

The school leader I interviewed has been employed by the school through most of its history. Part of our interview dealt with the school's experience with a national program. Under the national program, this school had Oregon-licensed, Oregon-resident teachers who were assigned to supervise students' progress. These teachers were

responsible for periodic meetings with students to establish connections and promote student and family engagement. Beyond those meetings, teachers spent much of their time reviewing spreadsheets of student progress and "pushing buttons," as the leader described teacher activity. The national company created and managed the curriculum and changes could only be made by national personnel. The school leader described instances of errors in the program, such as references to a "$30 bill," and said that it was difficult to get the national company to fix such errors. The leader described late or inadequate provision of equipment and materials for students as well as disagreements over the national company's fees. The student's activities were preset by the national company for every day of the school year and did not change in response to student assessments. The national company, however, had made it relatively easy to start a virtual school by taking responsibility for most parts of school management. Moreover, it appears that the national company attracted students because of its recognized name and advertising.

Eventually, the school collaborated with its sponsoring district to adopt a different model of virtual education. Under the new model, the school's employees begin with state standards and design interactive programs or select from many already-developed online programs to create libraries of online classes for different subjects and grades. Teachers select from available resources to provide paths for students to meet state standards. Teachers can adapt the resources to meet individual student needs. Teachers also organize periodic synchronous online meetings for groups of students. Clearly, the school's new program is more like an in-person class in some respects, but the basic idea

is still that the core of student's education will happen through interaction with a pre-written, automated, asynchronous online program.

Teachers at high school level in this school are responsible for a number of students that is similar to or fewer than the number of students teachers encounter in a typical traditional high school day, between 100 and 150. Teaching at the school is a full-time job just as in a traditional school but offers more flexibility for teachers to work in places they choose and with varied schedules. According to the school leader, some teachers also make this choice because they have found they like working online with one or a few students at a time rather than managing a full classroom all day. In that sense, this school does offer new opportunities for teachers to develop and use their skill as teachers in an environment they prefer.

Families choose this virtual public charter school for many reasons, according to the school leader. Some students choose virtual schooling to accommodate busy sports, theater, or music performance schedules. Other students are not comfortable in the intensely social environment of a typical school and are able to work more comfortably alone. Some of the most challenging students for this school to serve are those that the leader described as "juniors or seniors with one credit earned." Such students arrive "having practiced a lot with not succeeding." Students who transfer late in high school with little credit earned can reflect badly on the school's graduation rates and state test scores. But the school leader felt that if a virtual school can make one strong connection with such a student, it can be the best educational environment for that student, because of the flexibility of the program. Students who struggle in school, however, also often do

not do well in a virtual public charter school and account for part of the high rate of students transferring out, according to the leader.

This school seems to have an extraordinarily strong bond with its sponsoring district. The bond is visible in the district's administration and the district's budget. Over the lifetime of the school, key leaders of the charter school have moved from the school into district leadership. Because this virtual public charter school is one of the largest schools in the state, its student population is larger than the district's total local brick-and-mortar school student population. In fact, examination of the district's budget shows that the amount of state funds the district retains from state ADM for the charter school could likely cover most district expenses. As a virtual public charter school that can recruit students from every part of the state, this school has become a dominant force in its school district, one from which the district arguably could not disentangle itself if it wished to do so.

In the year of this study, the school's four-year graduation rate was below 60% and most students did not see themselves as college bound. The school leader I interviewed explained these low rates as the result of the many students who had not succeeded at other schools and had come to this school as a sort of last resort. Test scores were low or moderately low for every indicator across nearly every student group (ODE, At-a-Glance, 2019). The school leader I interviewed, however, believes that the new approach the school has taken will cause improvements in performance and retention of students. Researchers who examine public charter schools by type could evaluate whether more adaptive virtual programming does in fact have this effect, when Virtual Schools are compared to one another.

As an optimal case, this school illustrates the following features of the Virtual School subtype of Facilitated Instruction public charter schools:

- The core of students' education is guided by pre-set computer programs. Some activities may take place offline. Some activities may be live, synchronous online activities. The school may offer field trips and other live, in-person activities. But the core academic program will be online and pre-programmed. This school's core academic work, under both its old system and its new system, is through asynchronous online programs.
- Virtual Schools may be part of large national programs, which may be for-profit companies or nonprofit organizations that control most elements of school operation, or virtual schools may have more local control in selecting students' programs from varied online education providers or designing programs to fit local needs. This school began as part of a large national program and more recently has developed a system that draws on multiple online education providers to adapt to students' needs.
- This school employs teachers to plan for students' success, to monitor progress, and to address misunderstandings or barriers to learning, but not primarily to deliver academic content. Teachers choose to work in virtual public charter schools for varied reasons, including flexibility.
- Families choose virtual public charter schools to meet varied needs, including family preferences, student engagement in demanding extracurricular activity, student discomfort in social settings, dissatisfaction with a local school, or failure to progress in other schools.

- Virtual Schools may have much larger student populations than other schools. This can change the relationship between the school and the sponsoring district.

How can the success of Virtual Schools be measured? Most of the schools that I have classified as Virtual Schools offer programs from national providers. Findings of national studies of virtual public charter schools using virtual control records and standardized test scores could be used to aid understanding about how virtual public charter schools function in Oregon, especially for schools that use programs from national providers (CREDO, 2015). CREDO's national study of virtual public charter schools used standard state test outcomes to compare students at virtual schools to virtual control records assembled from comparable students who did not attend virtual schools. Standard state accountability measures could also be used to evaluate how much Virtual Schools add to a student's performance, especially if students' performance varied from trajectories established before entry into the Virtual School. Comparison within the Virtual Schools subtype might reveal different levels of contribution for Virtual Schools that approach education in different ways.

Virtual Schools could also be compared to each other on measures that reflect the state's other purposes for charter schools. For example, if Virtual Schools increase the choice of learning opportunities and meet student needs and interests, that success should be reflected in surveys of family satisfaction and in retention rates. If Virtual Schools offer new opportunities for teachers, that success should be reflected in teacher satisfaction and retention rates. Finally, because Virtual Schools in Oregon are often sponsored by smaller school districts and can recruit across the state, they can be vehicles

for redistribution of school funds from one area of the state to another. An examination of effects of that redistribution could be a way to measure the effect of Virtual Schools. Such a study could include the use of resources by the Virtual School, the effect on the sponsoring school district of the redistribution of school funds, the financial impact on other school districts, and the financial impact on the community of the sponsoring school district.

Third Subtype: Early College. Since Oregon law authorized the Expanded Options program in 2007, many public charter schools have included early college options in their programs. The two schools I assigned to this subtype, however, differ from other public charter schools in that college courses form the core of their program. In one case, the public charter school acts primarily as a supportive agent connecting students to free community college classes; in the other case, the school moves students more gradually from community college classes offered on its own campus to full-time college programs at a neighboring community college campus. Neither school employs high school teachers to teach classes; teaching is delegated to community college instructors.

Schools of the Early College subtype facilitate high school students taking community college classes. The charter schools pay for community college tuition and fees as well as some amount for books and materials. The program may have some classes at their own facilities to help students transition to college or may have school counselors who track students' progress in community college classes. In either case, the school's staff does not teach classes. Early college charter schools offer the opportunity

for students to graduate with professional certificates or Associate degrees as well as high school diplomas, paid for by K-12 school funds.

How can these schools be distinguished from others? These schools can be identified by excluding schools that offer core academic programs in ways other than early college. If the entire program is composed of supports for early college, the charter school belongs to this subtype.

The Early College subtype in Oregon currently has only two schools. To select an optimal case, I considered the relationship between these two early college public charter schools and other kinds of charter schools in Oregon. Both have close organizational relationships with other public charter schools. One of the two schools emerged early in the history of charter schools in Oregon (see Appendix A). This school developed its model well before Oregon initiated the Expanded Options program. It is part of a cluster of public charter schools in the same district that employ diverse innovative models. For this school, early college was an innovation in educational model, but one that delegated instruction to a neighboring community college. I have seen no evidence that other schools have been organized on the same plan in the two decades since this school was chartered. If I had to move this school to a different type, I would classify it with the Innovations in Instruction.

The second school in this subtype was divided from a virtual public charter school soon after the Expanded Options program debuted. Many Virtual Schools and Homeschool Support charter schools in Oregon also offer early college options (as do some Innovations in Instruction and Heritage Conversion schools). The difference for this Early College public charter school and its Virtual School parent is that the Early College

school separated from the Virtual School so that it could be registered as a brick-and-mortar school and operate with less stringent state requirements than a virtual public charter school. This Early College charter school serves more students than most Oregon public charter schools, and its parent virtual public charter school is one of the largest in the state. If I had to move this school to a different type, I would place it in one of the other two Facilitated Instruction subtypes.

As the two schools in the subtype are quite different, it may seem difficult to say that the second school is an optimal case in the sense of representing the subtype. On the other hand, because the second school and its parent virtual public charter school are large and influential programs in the state, if more separate Early College schools were chartered, they would more likely resemble the second school rather than the first school. For this reason, I have selected the second school as the optimal case for this subtype.

During the year of the study, this optimal-case school served more than 300 students in grades 10-12. The school does not employ any teachers. It does employ trained and licensed school counselors and these counselors are assigned to track students and contact them at least once every two weeks. The counselors advise students and connect them to 14 community colleges across Oregon. The school pays for up to 12 college credits per term and provides a book allowance. The students earn college credit and as they do, the counselors also log that work for high school credit and for progress toward high school graduation. Some students are able to complete an Associate degree at no cost at the same time as they earn a high school diploma.

The school leader with whom I spoke told me that the counselors have caseloads that are larger than a typical public school teacher's caseload, but smaller than the

caseload of a guidance counselor in a typical public school. The leader believes that counselors find it rewarding to work with individual students in creating and carrying out plans for early college education. The counselors also appreciate the flexibility of work with schedules and locations different from a traditional public school.

Families choose this school for varied reasons, according to the school leader. Many parents value the opportunity for their students to get part of their college education at no cost. These parents may also press for efficient progress toward the Associate degree. Other families are looking for a change of environment or a chance for their students to explore and are happy to have students take courses that may not lead directly to a degree or certificate. Many of the students have been homeschooled or have attended a Homeschool Support charter school or a Virtual School.

Students typically transfer to this Early College charter school in 11th or 12th grade, though some arrive in 10th grade. Even if students are close to meeting high school graduation requirements when they arrive, some students delay high school graduation to the fifth year in order to take more college classes at no charge. Like other public charter schools, this school attracts some students who have struggled in other schools, including students who have not accumulated much credit. It is possible for students to earn high school credit faster through this program than through a typical high school, but according to the school leader, these students often have as much or more trouble succeeding in this school as they have had in others. The students who do best at this school, according to the leader, are those who are already interested in going to college and confident in their basic academic skills.

During the year used for this study, the sponsoring school district for this optimal-case school included seven district schools and two charter schools. The two charter schools were this school and the Virtual School that was this school's parent. Together, this school and its Virtual School parent enrolled more than 57% of the students for whom the district was responsible. Because both this school and its parent school recruit from across the state, they have increased the size of the district and the amount of state funding the district receives. In addition, students at this school are already getting their education in college classes, so it is not surprising that this school's 11th-grade test scores and graduation rates are high. The school leader expressed a belief that the district saw its charter schools as a great benefit, chiefly financial, but in the case of this Early College school, also in terms of accountability measures for which the district can take credit. In the years following the study year, this district has added more charter schools, including another virtual public charter school, further evidence of the value the district places on charter schools (ODE At-a-Glance, 2021).

As an optimal case, this school illustrates the following features of the Early College subtype of Facilitated Instruction public charter schools:

- It belongs to the Facilitated Instruction type because this school does not employ teachers to deliver core instruction to students.
- Students of this school receive all instruction through community college classes.
- Public charter school personnel provide administrative support and counsel to students, to increase their success in community college classes.

- The school passes through K-12 education funds to pay for community college credits and materials.
- Students earn high school credits as well as college credits for their community college work. They can simultaneously work toward a high school diploma through the public charter school and an Associate degree through the community college.

How can the success of such programs best be measured? Early college options are available to Oregon high school students because of changes made to Oregon education law in 2005 (2005 ORS 340). The Expanded Options program opened the door for districts to pay for community college for students who qualify for free or reduced-price lunch or for any students the districts deemed "at-risk." The purpose was to create a "seamless education system" to help at-risk students complete high school and continue with a post-secondary program. The Expanded Options program is especially for students who are age 16 or older, although districts can open it to any students they choose to allow.

Because of this restricted target audience, the typical state accountability measures cannot be very useful for evaluating the effectiveness of a public charter school of the Early College subtype. Only 11th graders would participate in state testing, and very little of their educational attainment would be impacted by their tenure in this kind of charter school. Measures of 9th-grade achievement would be irrelevant because the program is not designed for 9th-grade students. Attendance, if not an irrelevant measure, certainly is one that cannot be easily compared to other schools when students are taking community college classes (in-person, synchronous online, or asynchronous online) on an

intermittent college schedule, accountable to college faculty rather than directly to the charter school, and with a lot of academic work done independently. Even four-year and five-year graduation rates are a less valuable measure, because Early College public charter school students may postpone completion of high school diploma requirements until the program's age limit to maximize the community college credits covered by state funding, according to the school leader with whom I spoke.

Schools of the Early College subtype could be evaluated in terms of the purposes of the Expanded Options program. Does the school in fact provide new opportunities for at-risk students? How do the public charter school and its sponsoring district define *at-risk* for the purpose of participating in the Expanded Options program? Does this option avert students from dropping out? For what types of at-risk students is this opportunity most advantageous? What percentage of students eventually do earn a high school diploma, and what percentage of students continue to complete a college degree? Are students who attend this sub-type of public charter school more likely to complete a college degree than students in other types of public charter school?

The Expanded Options program was not created only for public charter schools. Traditional public schools use it also. Another measure of success for Early College public charter schools might be measurement of the success of Early College public charter school students in achieving high school diplomas and college credit compared to students in traditional public schools who access the Expanded Options program. Are traditional public schools making full use of the Expanded Options program? If so, does access to Expanded Options through a public charter school improve the opportunity for students, and if so, how? Typology can be used to identify target study groups in order to

achieve more precise answers to these questions and others about the interaction of public charter school policies and the Expanded Options program.

Summary of Ideal Types. Through examination of qualitative data from school self-descriptions and publicly available data about schools, districts, and communities, I delineated three main types of public charter schools serving 9^{th}-12^{th} grade students in Oregon. One type includes schools designed to test innovations in curriculum or instructional methods, or to search for better ways to educate a target student group. The second type includes long-standing schools that have converted to charter governance under the sponsorship of small, rural school districts, often with little observable change in the operation of the school itself. The third type includes schools that facilitate education but delegate most instruction to others: to families, virtual curriculum providers, or community colleges. Some schools have characteristics of more than one type. But using the decision criteria that are part of the type definitions, each of the public charter schools serving Oregon high school students in the year of the study can be assigned to one type.

Step Six: Credibility Checks

Stapley et al. identified credibility checks as the engagement of an independent researcher "who attempts to regroup the cases into the ideal types, using the ideal-type descriptions formed during the previous stage of the analysis" (2021). The purpose of the credibility check, according to Stapley et al., is not to prove the typology right or wrong; rather, it is to "assess the clarity" of the type descriptions. I used credibility checks at two points in the development of the typology.

When I had written case reconstructions for all cases and had determined the types, I wrote draft descriptions of the types. I made cards with the case reconstructions. I asked two graduate students with an interest in qualitative methodology to sort the cards into the groups based on the descriptions. Then I debriefed with each one. I used the understanding I gained from the debriefing to make some changes in the way I presented the case reconstructions and in the type descriptions. Both independent readers had placed some cases differently than I had, and the patterns of placement were similar. Both had placed several more schools in the Heritage Conversions category than I had. In discussion with the independent readers, I learned that both had focused on mention of a historic school building or site and used that to sort schools into the Heritage Conversions category. The first reader also assigned one school to the Innovations in Instruction category that I had placed in the Heritage Conversions category. After this credibility check, I made the following changes:

- I re-evaluated the school which the first reader had assigned to Innovations in Instruction. Although the school fits in the Heritage Conversions category in other ways, it had radically transformed its curriculum when it converted to a public charter school. I decided that the independent reader was correct and reassigned that school.
- I revised the case reconstructions. Rather than one continuous paragraph of description, I divided each into four bullet-pointed, labeled sections: the context of the school, the location and demographics of the school, distinguishing characteristics of instruction at the school, and details from accountability data about the performance of the school. These sections help

readers isolate factors associated with the types. This is essentially the version of case reconstructions reflected in Appendix A.

- I revised the type descriptions. I made them more concise and easier to distinguish, and I added decision rules. This is the version of the type descriptions reflected in Table 3.

After I made these changes, I asked two more independent readers to sort the case reconstruction cards by type. This time I asked one reader who is involved in the community but not in schools, and one school administrator to sort the schools. I want the typology to be usable for both academic and non-academic stakeholders, so it seemed important to me to test its utility with a variety of readers. The school administrator sorted the schools as I had, but the community member did not. In debriefing the community member reader, I found that the complexity of the type descriptions and case reconstructions was still a barrier to utility, so I added a flow chart for sorting schools (Figure 2, next page). The community member reader reviewed this flow chart and indicated that the flow chart clarified the task.

Phase Two B: Comparison of Types

The last step in ideal-type analysis is to compare the types. The aim of this stage of research is to go beyond the distilled type descriptions and optimal cases to demonstrate clearly why particular cases have been assigned to a type while also displaying the variation within the type (Stapley et al., 2021). To explore similarities and differences between the types, I did a series of comparisons. In the first comparison, I examined the similarities and differences regarding the features that led to decision rules. Second, I examined the patterns in emergence of schools of each type in relation to

Typology Sort Flow Chart

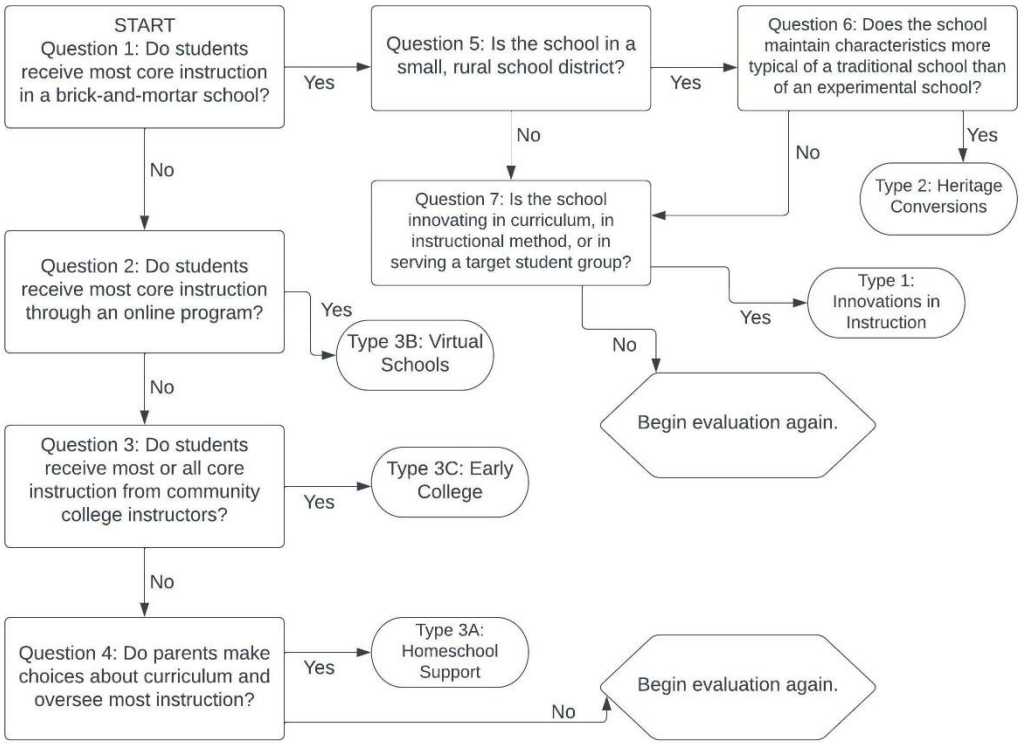


Figure 2. The flow chart aids in sorting the types by isolating the most salient characteristics of each type. Some schools will fall close to the borders between types and may require decisions about which features are most relevant for the individual school.

the changes in charter school law. Third, I examined patterns of similarity and difference in school locations and demographics.

Characteristics Leading to Decision Rules

Within each type and subtype, I compared all the schools I used in the study to clarify the boundaries between types and display the featured characteristics of the types. These salient characteristics, especially as they appear at the boundaries of types, led to the decision rules for assigning schools to types.

Similarities and Differences Among Innovations. I assigned 18 schools to the Innovations in Instruction type. These schools all present most core instruction in a physical facility. All of them were designed to serve students and families who want or

need a type of education that is not available in their local neighborhood schools. Some of them were converted from earlier alternative schools or earlier outreach programs, but none were conversions from a traditional public school to a charter school preserving the form and program of the heritage school. The schools of this type are in varied locales, from urban to rural, but these schools are very unlikely to be the only school in a small, rural school district. Some use some virtual classes as part of their programs, but all center those programs in their physical facilities. Virtual classes may be a part of the program but not the primary element.

The Innovations in Instruction type includes schools that are innovating in curriculum, instructional methods, and target student population, so it is reasonable to expect that these schools would also differ from one another in important ways. Of the 18 schools in this type, six primarily target students who are considered at-risk. All the schools that primarily target at-risk students are relatively small, ranging from about 40 to about 120 students. In order to engage at-risk students, four of the six schools emphasize outdoor programs, three offer music programs, three offer culinary programs, and all offer some form of credit recovery and/or GED preparation. Four of these six schools report the rate of students who qualify for free-or-reduced-price lunch, and three of these four have more than 75% of students qualifying. In the year of this study, four of these schools had regular attendance rates under 40% and five of the six had four-year graduation rates under 40%.

The remaining schools in Innovations in Instruction type have been assigned to this type based on the schools' commitment to alternate curriculum and/or methods of instruction. Frequently the vision of one of these schools is for a curriculum and

instructional method that work together differently from those commonly seen in a traditional public school. One school, for example, takes inspiration from military academies. In this school, the curriculum includes courses of study that support students' preparation for military careers as well as a structure for the school day that follows military traditions. The school uses military language for elements of the school, students wear military-style uniforms, and the students are organized and led by student and adult leaders who have military titles. Curriculum and instruction work together as aspects of an alternative vision of education.

Among the schools innovating in curriculum and instruction, three schools are similar in that they center their programs on teaching a language and a culture. For all three, direct instruction in the target language is a part of the curriculum and all three also integrate the use of the language and information about the culture into the other events of the school day. The language and culture programs are the core of identity for these schools. All three of the language-focused schools are located in towns distant from urban areas.

The three language-focused schools differ in important ways, however. One school teaches the language and culture of an indigenous people of the local area while the other two use a dual-immersion approach to teach languages most commonly spoken in countries other than the United States. The three schools have different structures. The school that teaches indigenous language is only for 9^{th}-12^{th} grades. It developed from a community program that taught language and culture in extracurricular settings. Of the two dual-immersion schools, one serves 88 students in grades 4-12 with a dual-immersion curriculum. This school, unlike the other two language programs, developed

from a publicly funded alternative school that existed before the charter school law passed. The other dual-immersion school only offers the dual-immersion program to grades K-8. High school students, however, have a strong program in the target language, while other academic courses are not conducted in the target language. The latter school is much larger, with 320 students in grades K-12. It has a very high rate of students who qualify for free-or-reduced-price lunch and 45% of the students are or have been English language learners. The three schools belong in the Innovations in Instruction category because the curricular innovation is the reason for each school's existence.

Two other schools are similar to the language-focused schools in that the specialized curriculum is at the heart of school identity. One of these schools has a curriculum focused on the arts. Before the charter school law, this school was a magnet program co-located with a traditional public school. The school integrates arts into all academic disciplines as well as offering a rich variety of arts-based extracurricular activities. This school serves 282 students in 9^{th}-12^{th} grades, in a suburb of a large city. The four-year graduation rate is high, 91%. The second school has a curriculum that follows a model described as classical. In this specialized curriculum, all students study Latin, and coursework emphasizes communication skills at high school level. The high school cohorts are small, generally fewer than five per grade. The four-year graduation rate is 100%.

Two more schools share curricular innovations through which students earn high school credit by demonstrating proficiency. The two programs present quite differently, however, despite this similarity. One school describes itself as influenced by advocates of early college programs. It differs from Early College programs, however, in that it does

not delegate instruction to community colleges. This school offers high school classes on a college-like schedule, with credit awarded when students show they have met a proficiency standard. The curriculum includes a nationally recognized capstone achievement program. Students are encouraged to take community college courses in addition to their selection of onsite high school classes. This school serves 862 students in grades 6-12 in a town distant from urban areas and 91% of students graduate in four years.

The second of these two schools is similar only in an instructional method through which students earn credit by proficiency. This school offers individual programs and collaborative group work, with ways to earn credit faster than in a traditional program. The school emphasizes that it is not an *alternative* school but a specialized small school environment. It has its own building but shares a campus with a much larger high school, an elementary school, a preschool, and a district office. The school serves 48 students in a rural area at the fringe of an urban area.

Whereas the first of these two schools appears to use a proficiency approach to serve students who want to accelerate to achieve more in high school or graduate earlier, the second school seems to serve more students who have struggled in a larger school and want to accelerate in order to make up for lost credits. At the second school, the four-year graduation rate is 50%. The proficiency-based innovation in instruction that drives both schools serves student populations that differ.

The remaining four schools in the Innovations in Instruction type have in common a focus on career preparation, especially for careers that require skill with technology. The first of these four operates in partnerships with a community college and local

industry. Unlike most public charter schools in Oregon, this school has a rigorous application process. Students who are admitted have access to engineering courses, community college industrial certifications, and internships. All aspects of the program are shaped by the relationship to manufacturing industries. The school serves 168 students in grades 8-12 in a suburb of a large city and 84% of students graduate in four years.

The second career-preparation school developed its program with a grant from the Bill and Melinda Gates Foundation. It uses project-based instructional approaches and a curriculum that includes professional certifications in high-technology skills. The school serves 185 students in grades 9-12 in a town remote from urban areas. This school graduates 84% of students in four years.

The third career-preparation school was converted from a pre-existing alternative school soon after the charter school law passed. Its innovation in instruction is a school that is a simulated workplace where students are hired and then evaluated and re-hired (or released and sent back to a traditional school) every quarter. The curriculum at this school includes required credits in work experience and career education. The school serves 48 students in grades 9-12 in a town distant from urban areas. The third school is smaller than the first two and does not have the same high-technology focus, but it does share with them a focus on career preparation in a physical school facility. The four-year graduation rate is lower at 52%.

The final school in this career-preparation subset was developed to leverage community organizations, and it has a curriculum built on community-based service learning and internships. The school's self-descriptions demonstrate that it values helping

students prepare for meaningful work with the help of the businesses of the community. This school serves 177 students in grades 9-12 in a suburb of a large city, and the four-year graduation rate is 47%.

Some of the schools that target at-risk students also have a career-focused curriculum; the difference is that those schools seem to target at-risk students as their primary purpose, while the schools in this subgroup target career preparation as their primary purpose. The overlap in the groups demonstrates that within the Innovations in Instruction type, schools may have innovations that are not strictly divided into curriculum, instruction, and target population, even though one of these elements may be dominant.

These career-focused Innovations illustrate a value of typology for determining the most effective ways to measure school success. If students in these schools develop skills that enable successful career placement, that might be a more relevant measure of success than, for example, 9th-grade on-track percentages. The success of an Innovations school might be measured in the degree to which it succeeds in offering learning opportunities that meet student needs and interests corresponding to its innovative model. The positive social impacts would be measurable and yet might be obscured by the use of measures that do not distinguish schools by type.

Similarities and Differences Among Heritage Schools. Twenty-four of the Oregon public charter schools serving grades 9-12 fit the criteria for Heritage Conversion schools. All of them are brick-and-mortar schools, although some use online instruction in various ways. All of them have been converted from district schools, or in one instance, reopened a closed district school that was important to a small community. All

have prioritized maintaining the characteristics of the traditional public school, although some have invested in new equipment and new strategies for education.

Most Heritage Conversion schools are in areas that are distant from urban areas. Of the 24 schools, nine are in areas with NCES School Locale 42, rural areas distant from urbanized areas. Twelve are in areas with NCES School Locale 43, remote rural areas. Two more are in towns distant from or remote from urban areas (NCES School Locales 32 and 33). These are schools transitioned to charter governance under the provisions of the charter school law that permitted small school districts to convert their schools, discussed in the prior chapter.

One school differs from the others in that it is located in a suburb of a small city. This school was a difficult case to classify. Like many other Heritage Conversion schools, this school is a K-12 school in the historic school building of a small town. The town's one school had been annexed to a larger neighboring school district. Eventually, the district closed the school. Nine years later, a coalition of community organizations reopened the school. As a result, this school is not a "conversion," nor is it located in a single-school district. But like the other schools in this category, this school used charter governance to preserve a school important to a small community. It is not built on a vision of innovation in instruction, nor does it delegate instruction to another entity. At the heart of the identity of this school is the desire to preserve the traditional education that was offered at a small school in a more isolated area, and so it fits best in the Heritage Conversion type.

Of the 24 schools, 18 are the only school in their sponsoring districts. The other six include the school discussed in the prior paragraph, two schools that have chartered

their elementary school and secondary school programs separately, and three schools that have chartered a distance learning program separately. Of the 24 schools, 22 serve grades K-12, one serves grades 7-12, and one serves only grades 9-12. The broad grade span is a feature frequently observed in Heritage Conversion schools.

The schools in this category generally have a small number of students per grade (see Appendix A). The mean number of students served at Heritage Conversion schools in the study year was 231.25. The median was 209.25. Except for two outliers, one small and one large, each school in this group served a number of students between 95 and 355.

The smallest school in the category served 50 students in grades 9-12 in the year of the study. This small school has a dormitory and a research ranch. The students complete core academics online at the school facility and the remainder of the curriculum makes use of the research ranch. The largest school in the category served 748 students in the year of the study. But the sponsoring district's total population was 701 and the public charter school includes both a brick-and-mortar school and a virtual school, operating separately but chartered as the same school. The student population of the brick-and-mortar school is likely within the same general range as other Heritage Conversion schools.

Few of the Heritage Conversion public charter schools claim unique curriculum or instructional methods. Like other Oregon schools, many offer some Expanded Options access to early college credit, and some use virtual curriculum for part of their program. But the core academic work for grades 9-12 at all these schools takes place in the brick-and-mortar school facility. Consistent with the rural locations of most of these schools, eight of the schools list programs in agriculture or natural resources in their offerings. A

quarter of these schools claim educational programs connected to local history, collaboration with the community, or other place-based work, indicators of the value of schools like this to small communities. Ten schools emphasize their athletic teams on their websites. One school does claim a distinctive, technology-focused curriculum, in a facility remodeled under a grant for high-technology small schools. Four schools have dormitories, an unusual characteristic related to the remote locations of these small school districts.

The self-descriptions of Heritage Conversion schools in state accountability documents and on their own websites show schools that have in common generally remote locations with low population density. They are brick-and-mortar schools. They have been converted because communities found it valuable to keep a local school and the charter school law gave them more flexibility to do so. They vary to some degree in size, and their curricula are often related to location, which would have been true before conversion as well. On the whole, the schools in this category are easy to identify because of their similarities.

Similarities and Differences Among Facilitating Programs. In this typology, the Facilitated Instruction schools are divided into three subgroups based on the entities to which the schools delegate key elements of instruction. Homeschool Support programs entrust most instruction to families; early college programs delegate most instruction to community colleges; virtual schools provide most instruction through pre-programmed online courses. Facilitated Instruction charter schools employ qualified teachers or school counselors to supervise students' programs, and the level of interaction between teachers and students varies.

Homeschool Support Programs. Six of the schools in this study are Homeschool Support programs. All six schools serve students in grades K-12. All six expect families to be involved in decisions about education and in actual delivery of instruction. In their self-descriptions and histories, all six schools reference support for homeschooling. The balance between instruction delivered in the home and instruction delivered elsewhere varies across the group.

All six programs require some time spent with a school-employed teacher. Four schools require a meeting of the teacher and the family once a week, in teleconferences or in-person meetings. Three of the four schools offer some optional in-person classes, such as science labs. The teachers at these four schools are each responsible for a number of students comparable to a traditional public school class, but unlike a traditional school, one teacher's students do not form a same-age cohort; rather, all the children of one family usually have the same teacher assigned. One school does divide students into age-based cohorts, and the cohorts meet with the teacher for one three-hour block per week. The sixth school differs from the others in important ways. This school has two distinct programs. One program serves homeschooling families in a similar way to the first four schools, with teachers meeting periodically with families to offer assistance and evaluate progress. The second program meets half-time in person at a brick-and-mortar facility. Then students work with the materials provided by the school for the other half of the week. This last school might be considered a hybrid of Homeschool Support and Innovation in Instruction. It was, however, founded to support homeschoolers through both programs. All six schools in this subtype provide some time with teachers, but the amount of time varies.

Schools classified as Homeschool Support programs provide textbooks, materials, and often computers for their students. Some programs pay for community-based instruction (such as martial arts classes or music lessons). Most of these schools permit parents to choose among a wide variety of options to build their students' programs. The half-time program at the hybrid school described above is an exception; while parents are expected to guide students in the at-home half of their school week, the programs are mandated by the school. Five out of six Homeschool Support schools offer some type of early college option, and one school offers extracurricular teams and activities.

The schools in this group vary in size. The smallest of the six schools serves 78 students and the largest serves 975, making it one of the larger public charter schools in Oregon. One school that serves 387 students is in a district with 889 students, illustrating that Homeschool Support programs can be a way for small school districts to expand their student base and consequent income. Unlike Heritage Conversion schools, the Homeschool Support programs are not primarily located in rural districts. One is in a small city; two are located in suburbs; and the other three are located in towns distant or remote from urban areas.

The only school in this group that was difficult to classify was the hybrid school described above. The other five declare themselves Homeschool Support programs in their self-descriptions. The hybrid school has a Homeschool Support program similar to other such schools for some students but a half-time program that could be classified as an Innovation in Instruction for other students. Both programs, however, emphasize parental involvement and learning in the home. Those who sorted the schools in the

credibility check phase consistently placed this school in the Homeschool Support category. The preponderance of features points in this direction.

Virtual Schools. Fifteen schools were classified as Virtual Schools. The Oregon definition of a virtual public charter school is a school that delivers 50% or more of core instruction online, while students are not required to be present in a physical school facility (ODE, 2014). Most of the schools the state identifies as virtual public charter schools were also identified as Virtual Schools in this typology. Virtual schools in this typology are a subtype of Facilitated Instruction schools, the subtype that delegates most instruction to pre-programmed online courses.

Virtual Schools differ in the curricula on which they rely. The majority of Virtual Schools in the year of the study belonged to national networks. Each of these Virtual Schools relied on the single curriculum provided by their national program. The national companies may be for-profit. In addition to providing curriculum, the national companies also often provide marketing and much of the work of organizing and managing the school. Other virtual schools offer choices from several national curricula, from which either the families or the school's designated teachers select a program for each child. The school I selected as ideal case for this type is also developing some curriculum in house. Some schools offer early college options, GED programs, and credit recovery courses as well. The spectrum of curriculum thus ranges at the extremes from schools that largely delegate the greater part of managing a school to a single for-profit national company to those that use local teachers and curriculum developers to create, administer, and individualize their programs.

Like Homeschool Support programs, Virtual Schools vary in the amount of contact between teachers and students. Two of the 15 schools require weekly, hour-long meetings. One requires meetings every two weeks. One requires teachers to have daily email contact with students as well as periodic meetings of unspecified frequency. Two indicate that meetings with teachers are optional. Other schools do not describe teacher contact in their self-descriptions. Seven of the schools offer some kind of face-to-face events, including labs, enrichment classes, field trips, tutoring, or a computer lab.

Most of Oregon's virtual public charter schools serve students in grades K-12, but this is not universal. One serves grades 1-12. One serves grades 7-12 but also has a sister school that serves grades K-8. Two more serve only high school students; of these, one serves grades 9-12 and the other was serving grades 9-11 in the year of the study. Finally, one school was included in this type because all high school students (grades 9-10) receive a fully online, at-home education, even though the school's K-8 students have a program that would better be described as an Innovation in Instruction.

School districts sponsor Virtual Schools in diverse parts of the state. Two Virtual Schools have headquarters in suburbs of a large city, and others are found near mid-size cities, at the fringes of cities, in towns distant or remote from cities, and in rural areas that are fringe, distant, or remote from urban areas. The student population of these schools ranges from 84 to 4463. The largest Virtual Schools are chartered by districts in areas distant from cities.

Early College Programs. Two public charter schools fit this subtype. The main similarity between them is that all or nearly all instruction is delegated to community colleges. The first school was founded before Oregon's Expanded Options law. It takes

students through a sequence that includes college credit classes taught at the charter school by instructors from an adjacent community college, followed by a supervised transition to the community college. In the third stage, students continue their work at the community college education with less direct supervision. This school was formed at the same time as several other charter schools of different types in one school district, before the Expanded Options program was approved.

The second school in the subtype formed differently. The second school branched off from a Virtual School. By separating from the Virtual School, this school could follow state rules for brick-and-mortar schools instead of the more stringent rules that apply to Virtual Schools. This school employs counselors who advise students who are enrolled at 14 community colleges across the state, so it can recruit students from any region of the state. Counselors help students make decisions and track their progress toward both high school diploma and college degree. This school and its Virtual School parent each are responsible for about 300 students. Comparison of the outcomes of the first and second Early College schools, with their sharply different models, might produce important information about the effects of early college education programs.

Charter School Types Compared to Changes in Oregon Law

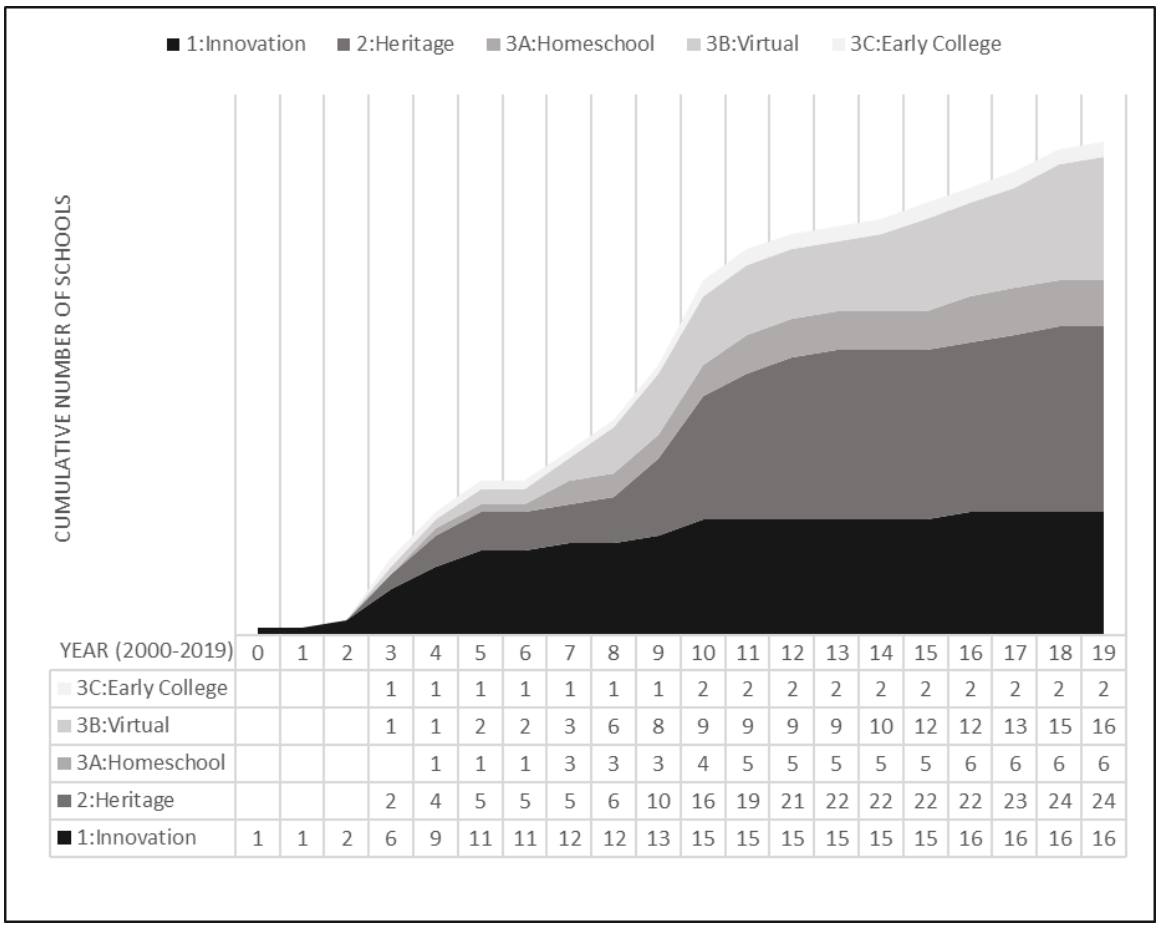
In analysis of changes in Oregon's law, I identified four groups of changes that may have affected the array of public charter schools in the state. The first group of changes facilitated the conversion of small, rural schools to charter governance. The second group of changes established guidelines for virtual public charter schools. The third group of changes enabled public charter schools as well as other public schools to pay for students' enrollment in community college classes. Finally, a fourth group of

changes reframed the testing programs that have been at the heart of public charter schools' exchange of autonomy for accountability.

The first type of public charter school in the present typology is the Innovations in Instruction. Founders of these schools may have a vision for a different curriculum or instructional method, or a belief that they can find better ways to teach a target student group. Schools of this type fit well with the original purposes for Oregon's charter schools, as those goals targeted innovation, choice, flexibility, appeals to student interests, engagement of the community, and new opportunities for educators. Eighteen public charter schools that serve grades 9-12 belong in this category. The oldest of the 65 schools studied falls into this category and was chartered in 2000. Half of the Innovations in Instruction schools operating in school year 2018-2019 had been opened in 2003, 2004, or 2005, and the median year of charter for this type was 2004-2005. Only one school of this type has been opened in the last twelve years (2016). Figure 3 (next page) shows a comparison of charter dates for the types of public charter schools. The infrequency of new charters for Innovations schools after 2005 is clear in the flattening of the curve for Innovations schools in Figure 3. After early growth in the Innovations sector, interest in developing this type of charter school seems to have fallen off as the charter school law was changed to enable other kinds of public charter schools, and perhaps as testing requirements changed after the advent of NCLB.

Single-school districts were permitted to convert their sole schools to public charter schools from the very beginning, under Oregon's 1999 charter school law. Changes in 2003, though, made it clear that despite the law's requirement that a public

Comparison of Types of School Opened Over Time



YEAR (2000-2019)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
3C:Early College				1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2
3B:Virtual				1	1	2	2	3	6	8	9	9	9	9	10	12	12	13	15	16
3A:Homeschool					1	1	1	3	3	3	4	5	5	5	5	5	6	6	6	6
2:Heritage				2	4	5	5	5	6	10	16	19	21	22	22	22	22	23	24	24
1:Innovation	1	1	2	6	9	11	11	12	12	13	15	15	15	15	15	15	16	16	16	16

Figure 3. Comparison of types of school opened over time shows early increase of Innovations in Instruction, three periods of increase of Heritage Conversions, slow increases in Homeschool Support, later increase in Virtual Schools, and a small number of Early College public charter schools. Chart includes only schools still open in 2019.

charter school operator must be a nonprofit organization, a small school district did not have to file as a nonprofit organization in order to operate its school as a public charter school. Of the 24 schools in the Heritage category, two were chartered in 2003, two in 2004, and one in 2005. Two more were chartered in 2007 and 2008, after the 2005 change in the law but before the next change in the law affecting especially this type of school. In 2009, the law clarified that a small school district could have separate elementary and secondary schools and still convert entirely to charter schools, and another wave of

conversions followed this change. The sharp inflection in the curve for Heritage schools in 2009 is visible in Figure 3. Four schools were converted to public charter schools in 2009, five in 2010, three in 2011, two in 2012, and one in 2013. A third change in the law, in 2015, permitted sponsoring districts to be their own charter school operators, rather than creating a separate operating organization. Two more conversions occurred in the wake of that change, one in 2017 and one in 2018. As changes in the law appeared to encourage such conversions, more small, rural districts converted their schools to charter status.

Virtual public charter schools were part of Oregon's charter school landscape at least as early as 2003, as one existing school in the Virtual School subtype was first chartered in 2003. Changes in the charter school law to set rules for virtual public charter schools appeared in 2005, 2009, and 2011. One of the existing Virtual Schools was chartered in 2005, and seven more between 2007 and 2010. Six other virtual public charter schools opened in 2008 and 2009 but closed in 2010 with the collapse of a network of virtual public charter schools (Oregonian, 2010). After that collapse, the proliferation of virtual schools paused, but six more opened between 2014 and 2019 (a third of the Virtual Schools operating in the year of the study). In sum, Virtual Schools grew quickly in Oregon just before the the time of the changes in law that clarified their status and requirements, then slowed after a crisis, and then began to grow steadily again more recently. It seems likely that the legislature's actions in 2009 to rewrite Virtual Charter School rules and form a task force on virtual education may have been influenced by the proliferation in virtual schools. As a group, Virtual Schools enrolled more students

in the year of the study than all other types combined. Based on enrollment, Virtual Schools are now arguably the dominant model of public charter schools in Oregon.

The remaining two groups of changes to the law do not seem to be related to the array of types of public charter schools. Since the Expanded Options program included public charter schools in 2007 (2007 ORS 340), many charter schools of all types have accepted the opportunity to offer community college classes to their students. But only two Oregon public charter schools are devoted solely to the idea of early college, and one of those opened before the Expanded Options program emerged. The fourth group of changes, those which affected testing, might be expected to affect the array or practices of public charter schools, but the effect is harder to pinpoint. It is possible that the rigorous testing requirements that Oregon established in 2003 following the advent of federal NCLB policies may have discouraged some types of schools and encouraged others. The increased ease of opting out of state tests since 2015 might ultimately change the types of charter schools districts are willing to sponsor as well. But no such effect is clearly visible in the array of schools yet.

Changes in Oregon's laws affecting charter schools, then, seem to have encouraged the conversion of the schools of small, remote school districts to charter governance and the growing importance of virtual public charter schools. Schools of the Innovations in Instruction type appear to have become less important in Oregon's array over time. Growth in the other two subtypes of Facilitated Instruction schools (Homeschool Support and Early College public charter schools) does not seem related to changes in the law.

In sum, changes in Oregon's charter school law may have enabled or encouraged a shift in the types of schools that are being chartered. As stakeholders evaluate the impact of Oregon's charter school law, changes in state priorities as reflected in these changes in the law should be considered. Typology can assist in interpreting these effects, as changes in the law have been associated with growing numbers of schools of specific types. If outcomes from schools vary by type, those outcomes can be traced to changes in law that made one type of public charter school or another more likely to grow.

Charter School Types Compared to Geographic Features

Figure 4 (next page) is a map displaying the array of secondary-level Oregon public charter schools by type against a background of NCES school locales. It is clear from the map that Innovations in Instruction schools are largely, though not exclusively, found in the Willamette Valley, especially in suburban areas near large and midsize cities. Those that are outside the Willamette valley are still in relatively high-population locations. On the other hand, Heritage Conversion schools are found largely, though not exclusively, outside the heavily populated Willamette Valley.

Facilitated Instruction schools have three subtypes. The smallest subtype, Early College schools, includes two schools. One school works only with a neighboring community college, but the other school works with 14 community colleges across the state. The second Early College school has in common with Homeschool Support schools and Virtual schools that all can recruit students from around the state. The earliest schools of these subtypes were primarily located in suburban areas, but the most recent charters have been written in more remote, small school districts.

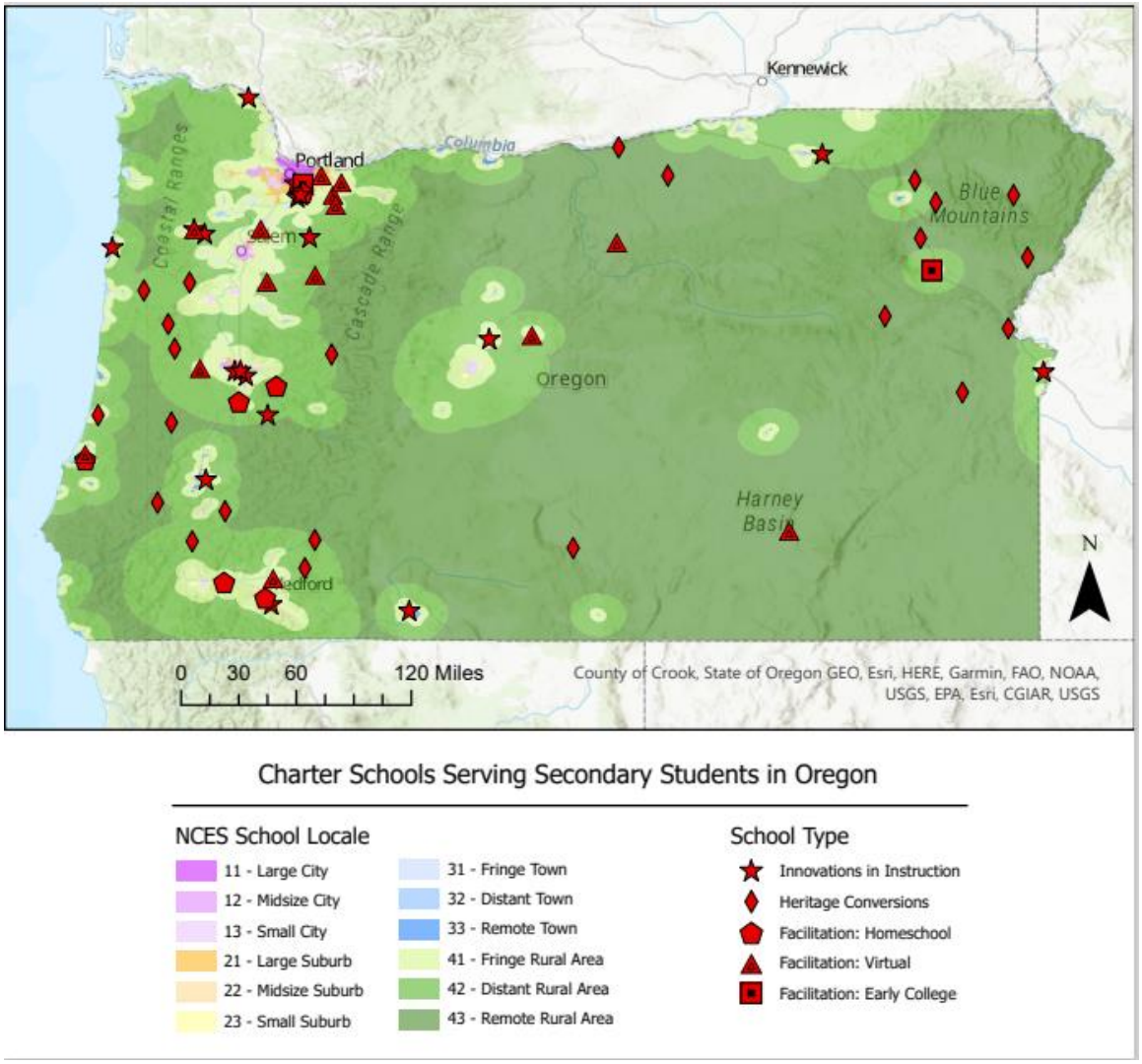


Figure 4. Charter schools serving secondary students in Oregon are displayed by type, with a background of NCES school locales. Patterns in placement of types of school appear, including concentration of Innovations in Instruction in suburbs and midsize cities, Heritage Conversions in rural areas, and schools that can recruit students from across the state also in rural areas.

By permitting a school chartered in a remote, low-density area to recruit students from more densely populated areas, the charter school law has allowed small districts to use these subtypes of charter school to expand their student base and the resulting state funding they receive. When the patterns of increase by type from Figure 3 are compared to the distribution of types on the map, it is clear that the growth of public charter schools

in Oregon in the last decade has been largely a phenomenon of rural school districts either converting their single schools to Heritage Conversion schools or opening Virtual Schools, Homeschool Support schools and one Early College school that can recruit students from more heavily populated school districts.

Summary of Results

Through ideal-type analysis, I used school self-descriptions and publicly available data about Oregon's public charter schools to identify 65 charter schools that enrolled 9th-12th graders in school year 2018-2019. As I compared the available information for these schools, I identified characteristics that differentiated schools from one another. I then developed case reconstructions for each school. By comparing these cases, I identified three ideal types: Innovations in Instruction, Heritage Conversions, and Facilitated Instruction programs. The Facilitated Instruction type is comprised of three subtypes based on the entities to which the schools delegate much instruction: Homeschool Support, Virtual School, and Early College programs.

At this point, I identified an optimal case for each type and subtype and conducted interviews, to add depth to the data. I developed ideal type descriptions and optimal case descriptions for each type and subtype. Two independent readers performed credibility checks by sorting the schools, using the ideal type descriptions and case reconstructions. After discussion with these readers, I revised some of the descriptions. Then two more readers performed credibility checks. When case reconstructions are written with the information I have specified, schools can be reliably sorted to these ideal types.

After credibility checks, I worked again with the case reconstructions to compare schools within the types. I explored the similarities and differences, to help define the

boundaries of types as well as to clarify the characteristics essential to a type. I compared the schools of each type to the sequence of changes in Oregon's laws affecting charter schools, described in the prior chapter. I also mapped the schools of each type to compare the geographic locations for each type.

From these comparisons I described patterns of change in the array of types of charter schools since the 1999 passage of Oregon's charter school law. While at least one school of each type and subtype appeared in the first few years of charter school development in Oregon, Innovations in Instruction occupied a larger place in the early charter school landscape in the state. As Oregon's laws changed to facilitate development of Heritage Conversion schools and Virtual Schools, these school models increased in surges that corresponded to those changes in the law. The flexibility and financial advantages that accrued from Heritage Conversions and Facilitated Instruction programs seem to have been valued especially by remote school districts. A growing number of families across the state seems to be interested in Facilitated Instruction programs, which now enroll more than half of public charter school students. These patterns of change may have implications for policy makers as well as for researchers who are interested in measuring the success of Oregon's public charter school policy changes. When schools are sorted by typology, relationships appear that can aid in evaluation of the effects of charter school policy.

CHAPTER VI: DISCUSSION

The present study has produced a new typology for public charter schools, drawing on the array of public charter schools that enrolled 9th-12th grade students in Oregon in school year 2018-2019. In this discussion of the research, I will review the research questions and the process employed. I will identify some advantages and limitations of the method for this exploration, and I will consider some implications for future research.

Research Questions

Two research questions motivated this study:

1. How can Oregon public charter schools be classified in ways that enable productive comparison?
2. What factors in Oregon public charter school legislation have enabled the emergence of the array of types of public charter schools observed?

First Research Question

The present typology classifies Oregon's public charter schools serving 9th-12th grade students. Within that group of schools, the typology divides three types of schools, with clear boundaries between types and a reasonably even distribution among types. These three types are clearly different not only in the key characteristics identified in ideal-type descriptions but also in patterns of emergence across time and space.

How might these types enable additional productive comparison? First, these types can be used to compare schools within a type to identify features or practices that result in desirable outcomes. For example, Heritage Conversion schools can be compared with one another to identify those that are helping students achieve most or those that are

making innovative use of the flexibility that charter governance permits. Alternatively, Heritage Conversion schools could be matched with other small schools in similar districts that have not converted to charter governance to determine the impacts of the change in governance structure on Oregon's rural schools and communities. Innovations in Instruction vary widely in their curriculum and teaching strategies, so comparison within the type could isolate the effects of practices, perhaps allowing these schools to function better as the laboratories for instructional practice that early charter advocates envisioned. As illustrated by the story of the optimal case of the Virtual School subtype, virtual public charter schools do differ in practices. Some rely fully on national programs while others are developing a mix of programs tailored to local needs. Comparisons within the type could help determine whether these are differences that make a difference.

It is likely that these types could be applied to Oregon's public charter schools for younger grades, as well. Many of Oregon's charter schools, especially those in the Heritage Conversion and Facilitated Instruction types, serve students in grades K-12. The balance between types would likely be different but the separation of types would be useful for the same reasons that the types can serve study of public charter schools for the upper grades. Application outside Oregon would depend on the policies of a state, as Oregon's array of types has emerged from specific policy that differs from the policies of other states.

Second Research Question

How have Oregon's charter school policy and changes to it influenced the array of types? First, Oregon's charter school law in 1999 specified nine purposes. These purposes

suggested that charter schools would primarily be Innovations in Instruction. The purposes, again, were increased student learning; increased choice in learning opportunities; meeting students' needs and interests; building stronger relationships with families and communities; innovation in learning methods; flexibility in instructional methods; new professional opportunities for teachers; and new forms of accountability. Innovation, flexibility, and choice were themes across these goals, themes consistent with the vision of public charter schools as laboratories for innovation.

Federal NCLB legislation motivated changes in Oregon's law in 2003, affecting all K-12 schools, including public charter schools. These changes may have influenced shifts in the array of schools chartered in the following years, but I was not able to find clear indicators of a relationship between this shift and the changes.

Oregon legislators approved changes to the law in 2003, 2009, and 2015 that facilitated conversion of single-school school districts to charter governance. Conversions increased after these changes. Heritage Conversions are now the dominant model of public charter school in the state in terms of number of schools. Often the aim of a Heritage Conversion seems to be to maintain as much as possible of the school's character and program rather than to innovate, so these schools seem less an expression of the original nine purposes and more an expression of a purpose that emerged later.

The status of virtual public charter schools was clarified in Oregon's law in 2005, 2009, and 2011. Schools of the Virtual Schools subtype proliferated in those years, then slowed after a scandal that involved six such schools in 2010. Schools of the Virtual Schools subtype began to emerge again in 2014 and now dominate the charter school landscape in the number of students enrolled statewide. These schools present a kind of

innovation in instruction and opportunities for family and student choice. National studies have raised questions about the effectiveness of online schools (CREDO, 2013, 2015) and those questions should be considered in comparisons among Oregon Virtual Schools.

Other characteristics of the array of public charter schools in Oregon do not seem to have been shaped by changes in Oregon charter school law. Alongside the Virtual Schools subtype of Facilitated Instruction schools, the Homeschool Support and Early College subtypes have also provided ways for schools in one location to reach out for students across the state, offering students and families a variety of opportunities. The Facilitated Instruction schools may offer some opportunities for studying innovations. The recent pandemic has demonstrated the need for a better understanding of how to educate children when school buildings are unavailable, for example, and these programs might provide insights. The geographic distribution of these school types also invites study of the purposes for these schools and the impact they have in redistribution of education funding.

Ideal-Type Analysis

Ideal-type analysis proved to be a practical process for developing this typology. Ideal-type analysis can use a mix of qualitative and quantitative data to organize individual cases into categories. It employs a series of well-defined steps.

The first step in ideal-type analysis is familiarization with the data. This step invites a deep examination of many kinds of data without preconceived ideas about typology. Before beginning this project, I had been collecting information about Oregon's public charter schools for several years and the familiarization step was an extension of a task already begun. I assembled data in detailed descriptions, quotations from materials,

and a database of quantitative and qualitative information. I worked through this material many times, in many ways, until I felt confident that I could start to form some standardized descriptions. The invitation to deep exploration that ideal-type analysis afforded was useful for grounding later work. It also helped me define the boundaries for the study.

While I was engaged in this step of familiarization with data, I also analyzed Oregon's law regarding public charter schools and the changes that had been made in it between 1999 and 2019. As I isolated and described the characteristics of the law and the changes to it, I began to see ways that these changing features of the law may have influenced the characteristics of schools I was seeing as I read about Oregon's charter schools.

The second step of ideal-type analysis, after familiarization with data, was to take all the data I had collected for each school and use it to write case reconstructions in a standardized format. The tangible product of this step was a set of descriptions necessary for all the following steps, but an intangible product was a stronger global understanding of the array as a whole. Comparing, sorting, and re-sorting these case reconstructions led to identification of a set of types, the third step in the process. The specifications for a useful set of types found in the work of Stapley et al. (2016) guided me in this process. I searched for types that could be clearly distinguished from one another and which would be relatively balanced in number of members. The fourth step was to identify one case that could serve as an optimal exemplar for each type, and the fifth step was to write a detailed description of each type. Steps three, four, and five occurred in an iterative

process in which I continued comparing the case reconstructions to identify the features necessary in both the optimal cases and the type descriptions.

At that point I engaged two readers for the first of two rounds of credibility checks, the sixth step in the ideal-type analysis process. After the two readers independently sorted the schools by my type descriptions, I discussed with them the choices they made. Then I made minor revisions to the standardized format of case reconstructions and the wording of the criteria on the type descriptions. After these revisions, I engaged two more readers for a second round of credibility checks. I found the input from other readers useful for understanding how future users might see the types, and the close correspondence between the choices made by these independent readers reinforced my belief that the typology could be useful.

In the final step of the analysis, I conducted another series of comparisons. I compared the case reconstructions within types to define more sharply the divisions between types by examination of cases that fell close to the borders. Then I compared the array of charter schools to the changes in law that I had described. This helped me to understand the sequence in which public charter schools of each type had emerged. Finally, I produced a map that displayed the physical locations of the 65 schools in the study and the NCES school local codes of each one. Together, the types, the sequence in which the schools emerged, and the places in which they emerged displayed a progression in the purposes and effects of secondary-level public charter schools in Oregon over a period of twenty years since such schools were first authorized.

Ideal-type analysis allowed the integration of a rich variety of kinds of data. As I worked with each school, I examined the schools' websites, including materials such as

mission and vision statements, descriptions of school programs, photographs, calendars, testimonials, and minutes of meetings. I examined schools' self-descriptions in the Oregon Department of Education's At-A-Glance Profiles and Accountability Details documents, as well as attendance, demographics, test scores and ratings, graduation rates, college-bound rates, 9th-grade on-track rates, teacher-student ratios, and teacher turnover. I used the ODE's At-A-Glance Profiles and Accountability Details for districts to examine the population size and demographics of districts and how the charter schools they sponsored might affect those districts. I examined information about the communities in which schools were located through use of the NCES Education Demographic and Geographic Estimates, which included information about population size, income, housing, broadband penetration, and type of locale. This wide variety of kinds of data allowed me to develop a rich understanding of each school in its context, an understanding that I believe was vital to developing an appropriate typology.

I hope that this work will be useful to a variety of stakeholders. As I worked, I envisioned researchers who would want to study Oregon's schools or develop ways to study the array of schools in other states, but I also pictured state officials who need a way to answer questions about the performance of Oregon's charter schools. I also imagined educators, community members, and parents who might want to understand what charter schools are doing in their communities and how education at a charter school might work for young people. For that reason, I have tried to write a typology that would be accessible to readers with different purposes and levels of experience. I believe the ideal-type analysis process has resulted in that kind of comprehensible information.

Advantages and Limitations

The use of qualitative data and methods makes this study materially different from a quantitative study. The analysis has been done from a standpoint, written by one researcher with interest and experience in public charter schools. I have been reflective in my practice throughout the work, watching for ways to incorporate wider perspectives. I have included as rich a variety of data as I could, including the self-descriptions published by schools and input from four independent readers. This approach has advantages in producing multi-faceted descriptions but is limited in that no claim can be made to objectivity. The research has produced suggestions of associations between phenomena, such as the associations between changes in law and the emergence of schools of given types, but this kind of research cannot produce definitive claims of causality or quantifiable relationships.

This project has also been limited to the study of public charter schools that enroll students in 9th-12th grades in one state. This has the advantage of a focus on the results of charter school policies in one state, as charter school policies vary widely from state to state and may produce very different results. By focusing on just the state of Oregon, this typology has clarified characteristics that may be related to specific policy choices the state has made. The choice to limit the work to schools that serve 9th-12th grades was made after an initial survey of the state's charter schools suggested that schools that only served students in 8th grade and below seemed to have different characteristics from schools that served either all grades or 9th-12th grades. The elementary schools also require study but including them would have created a much more complex landscape.

The restriction to schools that serve upper grades has resulted in a smaller group of schools to study, too small for many kinds of quantitative research. On the other hand, while including K-8 schools might have doubled the number of schools studied, the group would still have been too small for most kinds of quantitative study. The results of this study are as a result primarily useful for studying schools that include older students. Nonetheless, the typology might yet prove useful for studying a broader range of schools, as many of the schools do include grades K-12 and the types seem to be related to features in Oregon's law that also would affect grades K-8.

This study was also limited to study of schools as they were operating in school year 2018-2019. This year was chosen as the most recent year that was not affected by conditions of the COVID-19 pandemic. The descriptions of schools in 2018-2019 could be considered in the context of earlier years. The pandemic brought remote schooling to nearly all parts of Oregon, an event that may have lasting impacts on the array of Oregon public charter schools. As I worked through schools' websites, I saw that the pandemic also contributed to the the closure of some public charter schools, and other schools may have had to make decisions in response to business considerations that did not affect traditional public schools. A limitation of the study, then, is that an assumption cannot be made that the description of the public charter school landscape of 2018-2019 will still describe the landscape following the pandemic.

Considerations for Future Study

A study of how to extend this typology to include all Oregon public charter schools would increase the typology's utility.

A study restricted to Oregon's Heritage Conversion charter schools would be useful. A superficial examination of outcomes at these schools indicated that commonly studied outcomes such as test scores vary widely among these schools. A study that identified factors that are associated with stronger performance could provide needed guidance for supporting Oregon's rural schools.

Another way to study Heritage Conversion schools would be to examine the financial impact on schools and communities of changing to charter governance. How do schools use the flexibility gained by making this change? Does the cost for educating students change with the change in governance?

The difficulties inherent in comparison of public charter schools to traditional charter schools have been discussed. Heritage Conversion schools, however, might offer an opportunity to compare public charter schools of this type to similarly placed public schools that have not converted to charter governance.

A study of the Facilitated Instruction schools that recruit from other regions of the state would be useful. Comparisons of the practices among schools of this type might help identify the relevant practices of schools that are more effective in delivering instruction, or that are making more effective use of state education funds. Another study of Facilitated Instruction schools might be useful for describing how distribution of school funds is changed by the proliferation of such schools and how communities are impacted by the redistribution.

The present typology allows schools to be sorted in ways that will yield more effective research. *Charter schools* is not a single, simple construct. By making comparisons within and among types, researchers can identify effective practices and

those for which the utility is less clear. Moreover, this typology offers a way to evaluate the effects of state policy by associating policy changes with the effects produced in and by the types of schools enabled.

A need exists for study of public charter schools, a growing part of Oregon's public school sector. Methods that depend on many schools, or on many oversubscribed schools, or on large networks of similar schools are generally inappropriate for use in Oregon. Yet ways to study Oregon's public charter schools exist. Now that more than 20 years have passed since Oregon first authorized charter schools, we need to know which differences make a difference.

APPENDIX A: ANONYMIZED CASE RECONSTRUCTIONS (BRIEF)

Number and Type	Instructional Model	Location and Population	Context
School 1, Type 1	Most work is done in collaborative groups. Credit can be earned more quickly than in other schools. School values a small and welcoming environment, safety, cooperation, and individualization.	The school serves 48 students in a physical facility, in a rural area at the fringe of urbanized areas. 50% of students qualify for lunch. 63% attend regularly.	This school shares a campus with a preschool, elementary school, and secondary school which together serve 500 students. The campus resulted from consolidation of small schools 50 years ago.
School 2, Type 1	Courses include event planning, urban ecology, performing arts, and culinary skills. Classes are held at school, at sites in the community, and online. The school values a sense of community in the school, student voice, safety, arts, and sustainability.	The school serves 114 students in grades 7-12 in a physical facility in a mid-size city. Most students qualify for lunch. 22% receive special education services. 28% attend regularly.	One of the longest-tenured charter schools in the state, the school had a prior history as an educational resource network before the charter school was passed.
School 3, Type 1	Standard coursework is embedded in study of natural environment, community service, team development, and conservation work. Program includes outdoor expeditions.	The school serves 39 students in grades 8-12 in a physical facility in a mid-size city. 41% of students receive special education services. 67% attend regularly.	This school is related to a larger organization that serves at-risk youth.

Number and Type	Instructional Model	Location and Population	Context
School 4, Type 1	The curriculum is built on service learning and internships in community businesses and organizations. Values include meaningful work, small classes, and local history and culture. The school also offers credit recovery and early college.	The school serves 177 students in grades 9-12 in a physical facility in a suburb of a large city. 46% of students qualify for lunch. 23% receive special education services. 7% are or have been English language learners. 26% of students attend regularly.	This school was developed to leverage relationships with community organizations
School 5, Type 1	The curriculum integrates the arts into all academic classes. The school also offers a wide variety of arts-based extracurricular activities.	The school serves 282 students in grades 9-12 in a physical facility in a suburb of a large city. 34% of students qualify for lunch. 16% receive special education services. 5% are or have been English language learners.	Before the charter school law passed, the school had a history as a program of choice co-located with a traditional public school.
School 6, Type 1	The school describes itself as offering an innovative approach in a manufacturing context. Courses include internships, college-level industrial certifications, and engineering classes.	The school serves 168 students in grades 8-12 in a physical location in a suburb of a large city. 21% of students qualify for lunch. 14% receive special education services. 64% attend regularly.	The school operates in partnerships with a community college and industrial businesses. It has a rigorous application process and behavior contracts.

Number and Type	Instructional Model	Location and Population	Context
School 7, Type 1	This school values career preparation, diversity, and support for students with disabilities. Credit can be earned through short-term credit recovery courses, GED preparation, and courses focused on specific career goals.	The school serves 86 students in grades 9-12 in a physical facility in a suburb of a midsize city. 74% of students qualify for lunch. 20% receive special education services. 29% of students attend regularly.	This is one of the longest-tenured charter schools in the state.
School 8, Type 1	This school has a military-based structure and curriculum. The school values include respect, leadership, teamwork, and physical fitness.	The school serves 306 students in grades 6-12 in a physical facility in a suburb of a midsize city. 70% of students qualify for lunch. 24% receive special education services. 5% are or have been English language learners. 69% regularly attend.	Before the charter school law was passed, this school had a pre-existing form with the same curriculum and methodology.
School 9, Type 1	The school uses a specialized, alternative curriculum. The school's values include mastery of factual knowledge, historically valued studies, and communication skill.	This school serves 95 students in grades 4-12 in a physical facility in a town at the fringe of an urban area. 12% of the students are or have been English language learners. 73% attend regularly.	High school cohorts are small, generally fewer than five students.

Number and Type	Instructional Model	Location and Population	Context
School 10, Type 1	The school is a simulated workplace. Students are hired, evaluated, and re-hired one quarter at a time. Work experience and career education are required.	The school serves 48 students in grades 9-12 in a physical facility in a town distant from urban areas. Almost all students qualify for lunch. 45% attend regularly.	One of the longest-tenured charter schools in the state, this school was converted from a pre-existing alternative school. Admission requires testing and recommendations.
School 11, Type 1	At K-8, this school is a dual-immersion language program. At 9-12, it is not immersion, but has a strong language program as well as early college options.	The school serves 320 students in grades K-12 in a physical facility in a town distant from urban areas. Almost all students qualify for lunch. 9% receive special education services. 45% are or have been English language learners.	This school is unusual in that it is sponsored by an agency other than a local school district.
School 12, Type 1	This is a dual-immersion language school. It includes a dual-immersion rotation of history, science, and literature themes as well as direct instruction for acquisition of the target language.	The school serves 88 students in grades 4-12 in a physical facility in a town distant from urbanized areas. 36% of students qualify for lunch. 88% attend regularly.	The school evolved from a public alternative school that existed before the charter school law was passed.

Number and Type	Instructional Model	Location and Population	Context
School 13, Type 1	This school designs personalized programs with a lot of student choice. The program includes music groups, project-based learning, outdoor activity, culinary education, and a school-within-a-school for students with disabilities.	The school serves 57 students in grades 5-12 in a historic school building in a town distant from urbanized areas. 44% of students qualify for lunch. 65% attend regularly.	This school evolved from earlier alternative programs. The sponsoring district has several traditional schools and more than one charter school.
School 14, Type 1	The school's curriculum centers on teaching the language and culture of an underserved student group. The school's values are derived from the values of that group.	This school serves 74 students in grades 9-12 in a physical facility in a town distant from urbanized areas. 77% of students qualify for lunch. 26% receive special education services. 54% attend regularly.	The school developed from a community agency that taught the language and culture of the target group in afterschool and weekend programs before the school was founded.
School 15, Type 1	Classes are offered on a college-like schedule. Credit is granted by proficiency. The curriculum includes a nationally recognized advanced academic program. Students are encouraged to take community college classes.	The school serves 862 students in grades 6-12 in a physical facility in a town distant from urban areas. 40% of students qualify for lunch. 11% receive special education services. 55% attend regularly.	The school opened at a time when early college was widely encouraged by the state and by philanthropists.

Number and Type	Instructional Model	Location and Population	Context
School 16, Type 1	The curriculum is personalized and self-paced. Work is completed at school. Classes include project-based learning, natural resources, agriculture, technology, music, GED preparation, and community college courses.	The school serves 178 students in grades 8-12 in a physical facility in a town remote from urban areas. 62% of students qualify for lunch. 17% receive special education services. 24% attend regularly.	All students have breakfast and lunch at school. The school takes its name from a story about rebirth. Students have service trips and summer camps as part of their program.
School 17, Type 1	This school uses a project-based curriculum. Courses include certifications in technology skills. School values include relevance, relationships, and rigorous attention to skill development.	The school serves 185 students in grades 9-12 in a physical facility in a town remote from urban areas. 58% of students qualify for lunch. 24% receive special education services. 73% attend regularly.	The school received a grant from the Bill and Melinda Gates Foundation to offer innovative technology education in a small school environment. The school places a high value on its well-equipped campus.
School 18, Type 1	This school specifically targets students who have struggled in other schools. The program includes testing, evaluation, intervention, action plans and individual attention.	This school serves 40 students in grades 1-12 in a physical facility in a rural area remote from urban areas. 28% of students receive special education services. 33% attend regularly.	The school's program is highly individualized. The school is more than 15 years old.

Number and Type	Instructional Model	Location and Population	Context
School 19, Type 2	This school includes some project-based learning, advanced academic programs, credit recovery, and connections to community history.	This school serves 196 students in grades K-12 in a suburb of a small city. 29% of students qualify for lunch. 15% receive special education services. 65% of students attend regularly.	Nine years after the community's historic school closed, a community coalition formed to reopen it as a charter school. 92% graduate in four years.
School 20, Type 2	The school does not identify unusual curriculum or methods in its self-descriptions. Values include tradition, achievement, and athletic participation.	This school serves 194 students in grades K-12 in a town distant from urban areas. 95% of students qualify for lunch. 10% receive special education services. 68% of students attend regularly.	This school uses the name, athletic emblem, and building of a historic school. 100% of students graduate in four years.
School 21, Type 2	Charter status gives flexibility in hiring teachers for electives. School values include athletics program and services for students.	The school serves 303 students in grades 7-12 in a town remote from urban areas. More than 95% of students qualify for lunch. 29% receive special education services.	The school is located in a former district school building. It serves half of all the K-12 students in the district.

Number and Type	Instructional Model	Location and Population	Context
School 22, Type 2	The curriculum includes natural resource management. Other values include citizenship and community.	The school serves 197 students in grades K-12 in a rural area distant from urban areas. 71% of students qualify for lunch. 15% receive special education services. 70% attend regularly.	This is the only school in the district. 81% of students graduate in four years.
School 23, Type 2	The school does not identify unusual curriculum or methods in self-descriptions. Values include community and career preparation.	The school serves 287 students in grades K-12 in a rural area distant from urban areas. 36% of students qualify for lunch. 15% receive special education services.	This is the only school in the district. 100% of students graduate in four years.
School 24, Type 2	The school program includes environmental studies. Values include community and athletic programs.	The school serves 244 students in grades K-12 in a rural area distant from urban areas. 9% of students qualify for lunch. 11% receive special education services.	This is the only school in the district. Students are divided between two historic buildings (elementary and secondary campuses). 85% graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 25, Type 2	The school program includes agriculture classes. Values include providing field trips and athletics.	The school serves 213 students in grades K-12 in a rural area distant from urban areas. More than 95% of students qualify for lunch. 14% receive special education services.	This is the only school in the district. 70% graduate in four years.
School 26, Type 2	The school program includes natural resources management. Other values include collaboration and extracurricular activities.	The school serves 227 students in grades K-12 in a rural area distant from urban areas. 57% of students qualify for lunch. 25% receive special education services.	This is the only school in the district. 69% of students graduate in four years.
School 27, Type 2	The school program includes natural resource management and project-based learning. Other values include community service and restoration of athletic programs.	The school serves 225 students in grades K-12 in a rural area distant from urban areas. More than 95% of students qualify for lunch. 26% receive special education services. 70% attend regularly.	This is the only school in the district. 75% of students graduate in four years. The school also provides an early college option through this school, with transportation.

Number and Type	Instructional Model	Location and Population	Context
School 28, Type 2	The school program includes shop, agriculture, and natural resources classes. The school also offers athletic programs and field trips.	The school serves 96 students in grades 9-12 in a rural area distant from urban areas. More than 95% qualify for lunch. 20% receive special education services. 60% attend regularly.	The sponsoring district has two schools: this school and a K-8 school. 65% graduate in four years.
School 29, Type 2	The school does not identify unusual curriculum or methods in its self-descriptions. It offers field trips and athletics, and values the local community.	The school serves 355 students in grades K-12 in a rural area distant from urban areas. 63% of students qualify for lunch. 15% receive special education services. 67% attend regularly.	This is the only school in the district. It operates in a historic school building. 50% of students graduate in four years.
School 30, Type 2	The school program includes local place-based studies. Values include the local community.	The school serves 208 students in grades K-12 in a rural area distant from urban areas. More than 95% of students qualify for lunch. 16% receive special education services. 75% attend regularly.	This is the only school in the district. It operates in a historic school building. 67% of students graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 31, Type 2	The school does not identify unusual curriculum or methods in its self-description. Values include parental voice and local community. Some students are exchange students.	The school serves 210 students in a remote rural area.70 of those students are secondary level. 28% of students qualify for lunch. 11% receive special education services.	This is the only school in the district. Grades 9-12 are served in a historic school building, and the school also has a dormitory. Grades K-8 are served by an online program. 92% of students graduate in four years.
School 32, Type 2	The school's program includes small class sizes, collaboration among teachers, and individualization.	The school serves 207 students in grades K-12 in a remote rural area. 57% of students qualify for lunch. 18% receive special education services. 90% attend regularly.	This is the only school in the district. It operates in a historic school building. 71% of students graduate in four years.
School 33, Type 2	The school's program includes internships and a full athletic program.	The school serves 185 students in grades K-12 in a remote rural area. 46% of students qualify for lunch. 21% receive special education services. 19% are or have been English language learners. 72% attend regularly.	This is the only school in the district. The building is recently updated. 87% of students graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 34, Type 2	Although the state describes the school as a single charter school, the district describes it as an in-person high school, in-person grade school, and a distance learning program contracted to a private company.	The three parts of the school together serve 748 students in grades K-12 in a remote rural area. 25% of students qualify for lunch. 7% of students receive special education services. 76% attend regularly.	The small local high school and grade school seem to be supported in part by the distance-learning program. Together they form the only school in the district. The distance-learning program enrolls students from all parts of the state. The total population of the resident district is 701.
School 35, Type 2	The school does not identify any unusual curriculum or methods in its self-descriptions. The values include athletics and small class size.	The school serves 292 students in grades K-12 in a remote rural area. 29% of students qualify for lunch.	This is the only school in the district. 69% of students graduate in four years.
School 36, Type 2	The school has a Farm to school food program and an athletic program. Values include students' long-term success.	The school serves 278 students in grades K-12 in a remote rural area. 60% of students qualify for lunch. 16% receive special education services. 9% are or have been English language learners.	This is the only school in the district. 91% of students graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 37, Type 2	All high school students are served in the main school in the district. A small number of K-8 students are served in a school that serves indigenous students. The main school includes agriculture classes, service learning, and some individual studies.	The school serves 257 students in grades K-12 in a remote rural area. 52% of students qualify for lunch. 12% receive special education services. 89% attend regularly.	This is the only school in the district. 93% of students graduate in four years.
School 38, Type 2	This is not primarily an online school but does include both in-person classes and a distance-learning program. The school's values include local history and supporting community business.	The school serves 209 students in grades K-12 in a remote rural area. 56% of students qualify for lunch. 15% receive special education services.	This is the only school in the district. 92% of students graduate in four years.
School 39, Type 2	The school has an in-person school with a dormitory and nothing unusual about its curriculum. It also has a distance learning program.	The school serves 107 students in grades K-12 in a remote rural area. More than 95% of students qualify for lunch. 12% receive special education services.	This is the only school in a very small district with a total population of 381. The in-person students are served in the district's historic school. 100% of students graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 40, Type 2	The school is located on a research ranch with a dormitory. High school students complete core academics at school with an online program. Other high school classes are place-based natural-resource studies.	This school serves 50 students in grades K-12 in a remote rural area. 26% of students qualify for lunch. 20% receive special education services.	This is the only school in a district with a total population of 415. 71% of students graduate in four years. The school has a fully online option prior to high school, but not for high school.
School 41, Type 2	The school identifies no unusual curriculum or methods. It has a technologically sophisticated facility and a dormitory.	The school serves 95 students in grades K-12 in a remote rural area. More than 95% of students qualify for lunch.	This is the only school in a district with a total population of 479. 100% of students graduate in four years.
School 42, Type 2	The school offers some professional certifications and dual-credit college courses on its own campus. Values include employability and college transition.	The school serves 167 students in grades K-12 in a remote rural area. More than 95% of students qualify for lunch. 15% receive special education services.	This is the only school in the district. 67% of students graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 43, Type 3A	Full time teachers support 24 students each and must meet with each student one hour per week. Parents select plans and materials from resources through or outside the school. The school has some optional in-person classes and early college options.	The school serves 975 students in grades K-12 from a headquarters facility in a small city. 18% of students qualify for lunch. 10% receive special education services.	The school was founded as a homeschool support program. 93% of students graduate in four years. The school also provides extracurricular teams and activities.
School 44, Type 3A	Teachers meet with students one hour a week. Students earn credit through independent study, large and small in-person classes, home instruction, proficiency, internships, online classes, community activities, and college classes.	The school serves 389 students in grades K-12 from a headquarters facility in a suburb of a large city. 69% of students qualify for lunch. 16% receive special education services.	This school was founded to support homeschooling families.
School 45, Type 3A	Teachers meet with students one hour a week. High school students have courses chosen by parents, arts and fitness programs from community providers, online classes, and optional onsite classes such as science labs.	The school serves 175 students in grades K-12 from a headquarters facility in a suburb of a small city. The school has a second facility for grades K-2 only. 54% qualify for lunch. 16% receive special education services.	This school was founded to support homeschooling families and continues to add new elements to the choices families can make. 59% of students graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 46, Type 3A	The high school program is hybrid, with most students in classrooms about half time and half working at home (not online). Other students have a partial program that provides materials and some supports for students whose families consider them completely homeschooled. Values include uniforms and character development.	This school serves 105 students in grades K-12 from a facility in a town distant from urban areas. 16% of students qualify for lunch.	The school was founded to serve homeschooling families who wanted students to have some experience of traditional school activities and classes directed by teachers. 100% of students graduate in four years. Parents do not choose content in regular program, but parental guidance in academics is considered essential.
School 47, Type 3A	This school provides resources for individualized learning. It may have some classes and places for study as well as core and supplementary curriculum. High school students work independently from books, projects, and online materials, and meet with a teacher one hour each week.	The school serves 78 students in grades K-12 from a headquarters facility in a town remote from urban areas. More than 95% of students qualify for lunch. 15% receive special education services.	This school was designed to serve homeschooling families. 43% of students graduate in four years. Coming into the year of the study, the school had no teacher turnover.

Number and Type	Instructional Model	Location and Population	Context
School 48, Type 3A	This school provides high school students with textbooks designed for homeschooling, online courses, early college options, a three-hour weekly cohort meeting, and coaching for parents on how to teach.	The school serves 387 students in grades K-12 from a headquarters in a rural area distant from urbanized areas and a second service center in another part of the state. 20% of students qualify for lunch. 6% receive special education services.	This school was designed to serve homeschooling families. The sponsoring district serves a total of 889 students.
School 49, Type 3B	This school offers a three-level program. At the first level, students take college courses from community college instructors on the charter school campus. At second and third level, they take classes at the community college, with more and less supervision. Students earn both high school and college credit for college classes.	The school serves 290 students in grades 9-12 on its own campus and the campus of an affiliated community college in a suburb of a large city. 32% of students qualify for lunch. 8% receive special education services. 38% are or have been English language learners.	The school pre-dates the state's "Expanded Options" law. The school has a small faculty and few extracurricular or support programs, relying on the community college. Admission requires application and testing. 96% of students graduate in four years, and 40% of those students graduate with 90+ college credits.

Number and Type	Instructional Model	Location and Population	Context
School 50, Type 3B	This school pays for up to 12 credits of community college plus books. Students earn both high school and college credits for college classes. The school also offers online high school courses for students who need basic work. All student-contact employees are counselors, not teachers. Contact with a counselor is required twice a month.	The school serves 336 students in grades 10-12 with early college through 14 Oregon community colleges. The headquarters facility is in a town remote from urban areas. 22% of students qualify for lunch.	The school was separated from an online school with which it shares a charter school board and organization. The effect of separation was to allow this school to be identified as a brick-and-mortar school, which allows more flexibility in hiring and funding. 96% of students graduate in four years.
School 51, Type 3C	This school primarily offers online classes, as well as some optional tutoring, science labs, and enrichment classes. Six different web-based curricula are available. Teachers meet one hour a week with students. High school students have early college options.	The school serves 470 students in grades 1—12 from a headquarters facility in a suburb of a large city. 23% of students qualify for lunch. 11% receive special education services. 22% are or have been English language learners.	The school is part of a network of charter schools offering different forms of education. Early college options are offered through two community colleges, both distant from the headquarters. 66% of students graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 52, Type 3C	This online school offers standard high school courses, GED preparation, and credit recovery asynchronous classes for its own students and students at other schools. Teachers send daily emails and have periodic in-person meetings. High school students have an early college option.	The school serves 575 students in grades K-12 from a headquarters facility in a suburb of a large city. 60% of students qualify for lunch. 9% receive special education services. 16% are English language learners.	This school was designed for homeschooled students, homebound students, and students who have left school without graduating. 46% of students graduate in four years.
School 53, Type 3C	This school provides online courses for all students, with some optional onsite and community-based classes. The school values individuals and customer service.	The school serves 269 students in grades K-12 from a headquarters facility in a suburb of a midsize city. 54% of students qualify for lunch. 15% receive special education services.	This school converted from a heritage small district school, but to a virtual school rather than brick-and-mortar. 81% of students graduate in four years.
School 54, Type 3C	This is an online school, connected to a national charter school program in the year of the study. The school offers some optional in-person classes and weekly teacher meetings.	The school serves 1078 students in grades K-12 from two physical locations. The headquarters facility is in a town on the fringe of an urban area. 10% qualify for lunch. Fewer than 5% receive special education services. 8% are or have been English language learners.	This is one of the largest charter schools in the state. 94% of students graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 55, Type 3C	The high school level of this school is entirely online, using a national program. The primary and middle school programs operate separately as a brick-and-mortar school with a specialized, academically advanced curriculum.	The school serves 271 students in grades K-10 from a facility in a town on the fringe of an urban area. 14% of students qualify for lunch. 5% receive special education services.	Because the online high school program stops at 10th grade, the school does not post a graduation rate. State test scores and 9th-grade on-track percentages are generally very high.
School 56, Type 3C	This is an online school with a curriculum that includes both synchronous and asynchronous academic work.	The school serves 351 students from a headquarters facility in a town on the fringe of an urban area. 47% of students qualify for lunch. 17% receive special education services.	At the time of the study, the school was expanding toward K-12, but had so far reached grade 11. It was planning to open a second building in another part of the state. State test scores and 9th-grade on track percentages were low and teacher turnover was high.
School 57, Type 3C	The core curriculum of this school is fully online. It also offers support for homeschooling and an early college program. Teachers check in with students weekly and meet less often.	The school serves 152 students in grades K-12 from a headquarters in a town distant from urban areas. 16% of students qualify for lunch. 7% receive special education services.	This school is the sole remaining school of a one-time statewide network of online schools. 45% of students graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 58, Type 3C	This online school delivers a national program. It is part of a network of online schools sponsored by the same district, including a K-8 school and a career academy.	The school serves 394 students in grades 7-12 from a headquarters in a town distant from urban areas. 48% of students qualify for lunch. 16% receive special education services.	The district in which the school is sponsored has 311 resident students. From this online charter school, 20% of students graduate in four years.
School 59, Type 3C	This school provides all core work online with a national program. The school offers two ways to combine this work with college classes. Teachers meet face-to-face with students generally every two weeks, subject to parents' wishes.	The school serves 1827 students in grades K-12 from a headquarters in a town remote from urban areas and from six regional service offices. 47% of students qualify for lunch. 13% of students receive special education services.	This is one of the largest charter schools in the state. It is closely affiliated with an early college charter school sponsored by the same district. 63% of students graduate in four years.
School 60, Type 3C	This school offers a national online program. It also has an early college option.	The school serves 2011 students in grades K-12 from a headquarters facility in a town remote from urban areas. 65% of students qualify for lunch. 16% receive special education services.	This is one of the largest schools in the state. 33% of students graduate in four years.

Number and Type	Instructional Model	Location and Population	Context
School 61, Type 3C	This school is an online school for all students. The school offers an optional computer lab staffed by teachers for students who wish to use it.	The school serves 113 students in grades 9-12 from a facility in a rural area at the fringe of an urban area. 52% of students qualify for lunch. 26% receive special education services.	This school was converted from a prior alternative school. 10% of students graduate in four years. 58% of students engage with the school regularly.
School 62, Type 3C	This school offers a national online program.	The school serves 4463 students in grades K-12 from a headquarters in a rural area distant from urban areas. 40% of students qualify for lunch. 17% receive special education services.	This is the largest charter school in the state. 57% of students graduate in four years.
School 63, Type 3C	This school offers all academic core classes online for all students. The school offers optional field trips, science labs, and other face-to-face meetings. Teachers offer face-to-face meetings close to students' homes, but these are optional. High school students have an early college option.	The school serves 443 students in grades K-12 from a headquarters facility in a remote rural area. The school also has six regional offices in other parts of the state. 5% of students qualify for lunch. 8% of students receive special education services.	The sponsoring school district has a total population of 1314. 66 students attend the district's brick-and-mortar school. 100% of students graduated in four years in the year of the study.

Number and Type	Instructional Model	Location and Population	Context
School 64, Type 3C	This online school provides a national program. Teachers provide "class connects," but no frequency information is provided on the website. No in-person events appear on the school calendar.	The school serves 84 students in grades 9-11 with two teachers from a headquarters facility in a remote rural area. 51% of students qualify for lunch. 14% receive special education services.	This is a relatively new school. The total population of the sponsoring district is 377. Regular attendance, as reported by parents, is 62%.
School 65, Type 3C	This online school provides a national program. The school offers some optional in-person classes at two facilities, each more than 150 miles from the school district's administrative office.	The school serves 298 students in grades K-12. Its sponsoring district is in a remote rural area. 12% of students receive special education services.	The school is relatively new. It has no brick-and-mortar facility inside the boundaries of the sponsoring district. The sponsoring district has a total population of 637.

APPENDIX B: QUESTIONS FOR SCHOOL LEADER INTERVIEWS

1. Tell me about your school. What do you think are its distinctive characteristics?
2. What is the school's history? How did it come to take the form it has now?
3. Describe your school's approach to curriculum and instruction. What is different about academic work here compared to other schools?
4. Tell me about your students. Why do your families choose this school? What are their alternatives?
5. Can you tell me some stories of students who exemplify the value of this school? Their stories will not appear in any recognizable form in my paper but hearing those stories will help me understand your school.
6. What are some common paths your students take after they leave your school?
7. Why do your teachers choose to work at this school?
8. In what ways does your community support or engage with your school and your students?
9. How does your school district support your school?
10. What else would you like me to know about your school?

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