IT Efficiency and Online Learning Study

Prepared for the Chalkboard Project and the Yamhill County Districts

- Amity School District
- Dayton School District
- McMinnville School District
- Newberg School District
- Sheridan School District
- Willamina School District
- Yamhill-Carlton School District

ECONorthwest ECONOMICS · FINANCE · PLANNING

222 SW Columbia Street Suite 1600 Portland, Oregon July 2011 Final

Study Outline:

Chapter 1 - Project Overview, Goals and Study Process

Chapter 3 – Info Tech Section - Findings

Chapter 4 – Online Section - Findings

Chapter 5 – Info Tech Section - Recommendations

 $Chapter\ 6-Online\ Section-Recommendations$

Attachment 1: Short Survey Template

PROJECT OVERVIEW

In spring of 2011 The Chalkboard Project ("Chalkboard") and the Yamhill County Districts (Figure 1) engaged ECONorthwest to conduct a study of two distinct areas:

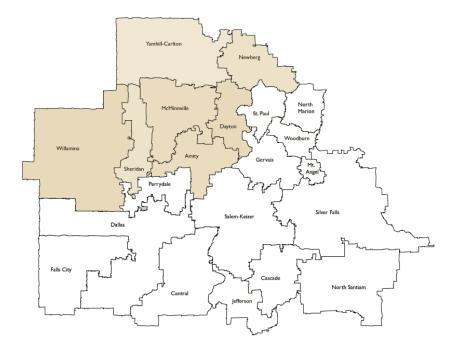
IT efficiencies and collaboration potential—Specifically,

ECONorthwest was asked to consider the overall cost efficiency of IT and identify any cost savings potential through collaboration. In addition, the districts asked ECONorthwest to look at the best way to handle web services—both hosting and content production.

Online learning capacities and opportunities to expand services to home school families—Specifically, to examine the possibilities around either expanding existing online programs within the districts—as a collaboration among districts—or via an external entity like a charter school.

The goal of the analysis is to provide guidance to the Yamhill Superintendents, as they make choices around pooling resources to maximize efficiency and enhance revenue. The Chalkboard Project may also look to the study as an example of an analytic approach that could be applied to other groups of districts considering similar issues.

Figure 1: 7 Yamhill County District Study Area



Baseline for the Study

Yamhill County encompasses seven school districts, including mid-sized towns and rural areas. The districts range in size from 770 students (Amity) to approximately 6,200 students (McMinnville). The seven Yamhill County superintendents have formed a collaborative peer group that meets regularly to share knowledge and to find opportunities to work together for mutual benefit. Additionally, the districts' IT staff meet with their counterparts in other districts served by the Willamette ESD, focusing on district-ESD coordination rather than district-to-district collaboration.

All of the districts offer some online course material for credit recovery and to meet special needs. Two districts provide full online programs (both K-12): Yamhill-Carlton has built a single-teacher district-based program targeting the home school population within the district, while Sheridan operates a larger two-teacher program that was formerly part of the troubled AllPrep Charter Network. The Sheridan program currently serves students across a larger area than Yamhill County.

Study Process

Our first step was to meet with over thirty individuals involved in IT, Budget Management and Online programs across the seven districts. An ECONorthwest associate traveled to each school district to interview key staff and collect initial information in mid-March 2011. These interviews created a baseline of existing practices about IT issues, IT costs, and Online Learning systems and programs. Also discussed were more general issues regarding home school populations, district enrollment trends and the potential for collaboration among districts.

Following these stakeholder interviews, ECONorthwest looked at the most recent five years' of ODE expenditure data to identify the districts' IT costs (Function code 2660) and reviewed district IT costs during 2009 and 2010 for all districts in the state. Combined with additional data provided by the study districts, we conducted a comparative analysis of efficiency ratios. We made a limited review of recent budget detail and conducted follow-up inquiries with business management staff to identify possible issues where we uncovered cost anomalies.

To better understand the online program possibilities, we conducted additional interviews and discussions with a few key individuals across the seven districts. ECONorthwest also reviewed the local market for online education and recent legislation for relevant laws and bills that might inform district development of online programs. Finally, a brief survey of current online home schooling families was conducted to better understand their motivations and needs. We present the results of this effort in subsequent chapters, including recommendations for IT and Online programs.

IT EFFICIENCY: FINDINGS

In reviewing the expenditure data, we discovered little inefficiency, and most of the districts had IT costs that were similar to or below statewide peers. Some districts could improve efficiency through collaboration, but the districts would likely realize relatively minor savings from the associated adjustments. Additionally, some anomalies noted below should receive further exploration.

Figure 2 gives a sense of the respective size of the districts as well as the counts of computer workstations reported to be receiving IT support in each district. The total student count across seven districts is almost 16,000.

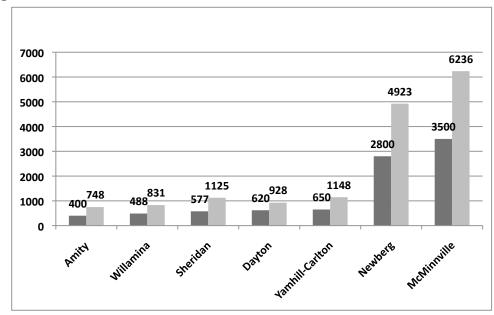


Figure 2: Relative district size and station counts 2010

Workstation counts per ADM (Average Daily Membership) seem typical and in a similar range for all districts. A previous ECONorthwest study of Oregon districts found clear differences in IT cost efficiencies associated with district scale. In Oregon IT tends to cost more per student in districts smaller than 2,000 ADM and also for those few that are larger than 12,500 ADM. So the anticipated pattern in this group of districts would be that the two largest districts, Newberg and McMinnville, would have the best IT efficiency.

 $^{^{\}scriptscriptstyle 1}$ "Efficiency Study for High Desert ESD", ECONorthwest, May 2010

A quick measure of IT cost levels is the percentage of overall district budget dedicated to IT (Figure 3). As would be expected, the largest districts in the study spend a smaller share of total expenditures on IT. Of note however, Sheridan, Willamina and Dayton also spend less than is typical within the state. The average for "medium sized" districts, those ranging from 500 to 10K students, 1.41% is depicted for comparison.²

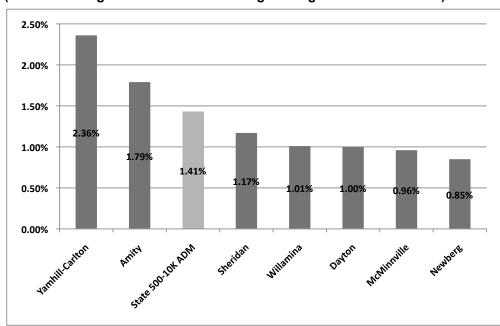


Figure 3: Relative District IT spending (As a Percentage of Overall District Budget using 2009 and 2010 data)

Yamhill-Carlton's (Y-C) IT spending seems high as a percentage of district spending, as does Amity's. Amity's small size likely explains the district's relatively large IT expenditures. IT cost coding in Y-C likely explains some of the district's deviation from average—a closer look at 2010 costs for that district showed that some "IT costs" could more accurately be coded as "instructional costs." Another possible explanation for Y-C costs may be related to supporting its newly created online program, which includes computer and printer purchase for families if needed.

Figure 4 and Figure 5 show IT cost per ADM for the Yamhill districts for the most recent five years that data was available. Note that the ratios do not reflect resolution funds or any cost coverage from the ESD.

² Data was from 2009 and 2010 IT (Func 2660) spending as reported by ODE, districts with zero IT spending are removed from the dataset. The range of 500 to 10,000 is chosen to remove the distortion of the state average that happens when the 60 smallest and 12 largest districts are included. The smallest 60 districts spend on average 2.19% of budget on IT and the largest 12 spend 1.55%.

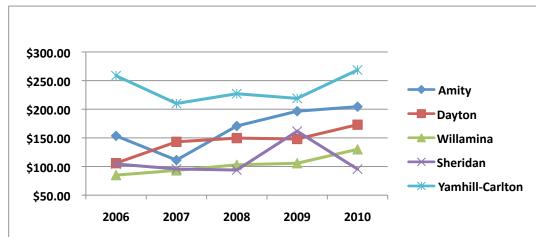


Figure 4: IT Cost/ADM Smaller Districts

Willamina and Sheridan have surprisingly low IT/ADM cost ratios given their size. Most likely, these districts have very lean operations and do not have the dollars to spend on more IT. Amity and Dayton have more typical cost ratios, and could potentially realize cost savings through collaboration. The largest of the small districts, Y-C, again shows unusually high IT costs per student compared to peers in all years. This is at least in part due to the different handling of resolution services funds from the Willamette ESD, which are offsetting IT costs in the other smaller districts but are in limited use at Y-C.

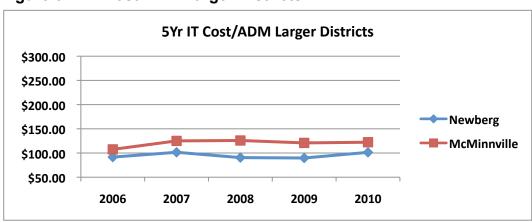


Figure 5: IT Cost/ADM Larger Districts

Newberg appears extremely cost efficient, a pattern which repeats in all cost efficiency measures we examined. Not surprisingly, the two largest districts also have the most stable cost ratios.

None of the Yamhill districts deviate markedly from typical statewide performance. Figure 7 illustrates this, showing all districts in Oregon for which ODE provides IT cost data. We identify the Yamhill County districts with the first initial of the district name. None appears atypical.

1,400
1,200
1,000
800
400
200
10.00
1,000.00
10,000.00

Figure 7: All Oregon Districts 2009/2010 Average IT Spending Per ADM³

Differences in district reporting practices could affect the efficiency measures reported on thus far. Another simple measure, the number of workstations supported per IT employee, does not. Figure 8 depicts the number of workstations supported by the districts divided by the IT employee count for each district.

³ It should be noted that the ODE 2660 data may be inconsistent across districts. For example, the data typically does not include use of ESD provided resolution services funds for IT, which vary by district and ESD. Also, each district may choose to record some IT expenditures to instruction, to specific grant funds or to other support services, thus reducing the apparent IT costs for that district.

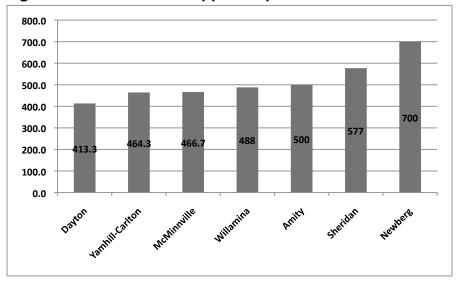


Figure 8: Workstations supported per central IT staff

All districts studied demonstrate that IT employees have a full plate – the numbers of workstations supported per person are high across the board. Newberg again demonstrates the greatest efficiency, but the order changes for the other districts. Unfortunately, we do not have comparable data for other districts in the state.

We examine spending per workstation as a final, related measure of efficiency. Figure 9 shows IT spending per workstation for the Yamhill districts, and displays a pattern consistent with other results presented thus far. Again, both Y-C and Amity should look closely at IT spending and expense coding to understand why they fall at the upper end of the efficiency distribution for this measure.

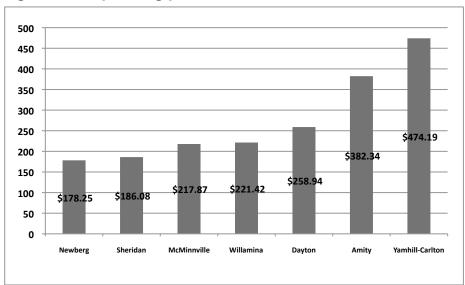


Figure 9: IT spending per workstation

The onsite interviews revealed a number of opportunities for district collaboration. IT staff were asked about software used by the district, IT services purchased, and current collaboration practices. In general, the district IT staff do not collaborate very much, though even our brief interviews revealed that many of them confront identical issues with identical products, services and suppliers.

Table 1 below summarizes the responses from IT staff regarding services and software. Clearly there are common elements that suggest collaboration and joint-purchasing approaches might benefit the districts.

Table 1: District IT profiles

District/ ADM	IT Staff	Web Service / ISP	Systems and Software
Amity 748	.8 FTE (share with Perrydale district)	Web: WESD hosting (also email) ISP: WESD (10Mb)	FIS: CSA
Dayton 928	1.5 FTE	Web: local host ISP:WESD	FIS: Pentamation hosted at WESD
McMinnville 6236	7.5FTE (1 mgr, and school techs) .25 person for web content	Web: school sites local hosted main site via OVSD ISP: Online NW	FIS: Pentamation (Direct not via WESD) SIS: Pentamation eSchool
Newberg 4923	4 FTE	Web: local host ISP: Clackamas ESD	FIS: Pentamation (for 2011) SIS: Pentamation StudentPlus
Sheridan 1125	1 FTE	Web: teacherweb.com ISP: WESD ISP	FIS: Pentamation SIS: Schoolmaster
Willamina 831	1 FTE	Web: Google Sites ISP: WESD (10Mb)	FIS: Infinite Visions SIS: Pentamation StudentPlus
Yamhill- Carlton 1148	1.4 FTE (.8 Mgr +.6 staff)	ISP and Web: Clackamas ESD	FIS: Enterprise Infinite Visions SIS: Schoolmaster Going to Live@edu

The districts each approach web hosting in slightly different ways, and only one of the districts is employing a web content person (McMinnville at .25 FTE). There are also varying levels of satisfaction with ISP services and many of the districts are considering switching, or recently did switch ISPs. There are some commonalities in systems software, but no two districts use identical software for all systems.

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ONLINE LEARNING: FINDINGS

For this component of the study, we investigated the extent to which the subject districts should or could serve more of the home-schooled students living in their community with a district-run online program. While two districts already have programs, the superintendents believe expanding program offerings and increasing collaboration among the districts could allow districts to serve a larger share of the market. Our findings support this hypothesis and suggest an approach that can reduce program overlap and allow the districts to enhance revenue while building their capacity to serve community families.

Background and Baseline for Yambill County Districts

Homeschooling families are required to register with the ESD. ESD staff track the home-schooling population within each district and work with home-school families to address student-specific needs. When a home-schooling student joins an online school and takes core classes like math and English, they will be removed from the list of home school families. The Willamette ESD reports that the number of registered students for April of 2011 across the seven subject districts was 803 students. According to the ESD homeschool enrollment has remained mostly flat in the last year. It is likely that some families have adopted online and other programs, while additional families continue to turn to homeschooling.

When a family joins an online school the home district may get a percentage of the ADM funding, usually ranging from 5% to 20%, but the home district will lose the balance of that state-sourced revenue, a significant loss of potential revenues over time. Of course the online programs also have costs, so the small percentage of ADM may be attractive to districts that do not wish to build online programs.

Of course the migration of students to out-of-district online providers reduces the enrollment needed to support online or traditional programs within the district. In part to address this, in 2005 the Oregon Legislature enacted SB 1071, part of which became ORS 338.125, stating "if a public charter school offers any online courses as part of the curriculum of the school, then 50 percent or more of the students who attend the public charter school must reside in the school district in which the public charter school is located." Legislative activity around this topic is ongoing with multiple bills in the current session that specifically support in-district online program growth. ⁴

⁴ See 76th Oregon Legislative Session Bills HB2301 and SB927

McMinnville, Newberg Amity, Dayton, and Willamina do not currently offer online programs that are targeted toward home school students. They do have online course software or arrangements with other providers and these are used for credit recovery, alternative education, summer programs, advanced placement and other special needs. Table 2 summarizes district online offerings.

Table 2: Online course software

District/ADM	LMS/Curriculum	Current Online Program
Amity 748	Odysseyware (18 seats)	Credit recovery, scheduling issues
Dayton 928	Buy 20 slots of SK online (hire extra duty teacher to run)	Credit recovery
McMinnville 6238	Novel/Stars – Early customer so hold open fixed cost license, 38 teachers using	Credit recovery, alt ed, summer school
Newberg 4923	Odysseyware (36 seats)	Credit recovery
Sheridan 1125	Odysseyware (30 seats)	71 students in Allprep Academy (Charter) from broad geography
Willamina 831	Odysseyware	16 students known to be with Oregon Connections Academy
Yamhill- Carlton 1148	Odysseyware (20 seats) Calvert (up to 3 rd grader)	24 students with YC Alliance Academy

Existing Online Programs in Yambill County

Sheridan and Y-C have existing online programs. Both programs offer a hybrid of online classes, text materials and direct teacher contact. Both programs have dedicated teaching staff that are open to considerable onsite travel and have good technical skills. Both programs emphasized the need to have teachers "local" to the students to facilitate frequent face-to-face contact.

Sheridan houses an online charter school, formerly part of the AllPrep network. The charter has approximately 50 K-8 Students and 21 high school level students from across the state, and two teachers located near the students providing at least one home visit per month for each student.

The charter receives 80% of the state ADM funding for the student, and has a contract with the district to provide some administrative services. Approximately 15-20% of the charter's budget is used to purchase services from the district. Other major costs include teacher compensation, program administration, and courseware. Currently the school uses Odysseyware but for multiple reasons including costs and product flexibility they are considering other courseware options.

Yamhill-Carlton has recently launched a single teacher program, called *Alliance Academy* that now has 24 students, including 21 K-8 students. The program has been built within the district and serves mostly in-district home school students. A few out-of-district students also attend. Their home districts receive a transfer payment based on a net of the costs to operate the *Alliance Academy* program. The program had positive net revenue in its first year of operation, and has an extremely satisfied group of home school families.

The Yamhill-Carlton program uses a mix of online and paper-based curriculum. Younger students in K-2 use the Calvert School home school curriculum, and the older students use Odysseyware. The district provides families a computer, printer and wireless router as needed. The program's teacher regularly provides face-to-face contact with students and families.

Learning Systems Platforms and Curriculum Sources

While many of the districts have Odysseyware, the market for course content remains fragmented generally, with over 50 potential courseware providers competing for market share. An interesting recent phenomenon is that the larger national online schools have begun buying firms that produce curriculum content.

The costs reported by the districts of using the Odysseyware platform range from \$800 to \$1000 per seat per year. Seats are based on concurrent users, not total users. Districts typically buy licenses equal to 30-60% of their expected enrollments. Nonetheless, the system represents a significant cost on a per student basis for an online program.⁵

Online schools may need different platforms and content sources for differing grade levels (K-2, 3-5, 6-8, 9-12). McMinnville was an early customer of EdOptions Novel/Stars, which focused on grades 6-12, and thus has a low cost license that the district could leverage for a middle or high school online program.

Home Schooling Families Survey Results

A brief four-question survey was sent to both Sheridan and Yamhill-Carlton online teachers to forward to their home school families. Unfortunately, only Yamhill-Carlton families responded. A total of seven families provided feedback as follows:

- Satisfaction? 100% were "very satisfied" with the school (7 of 7).
- What are the main reasons your family prefers to home school? Responses included: didn't want kids to grow up fast, wanted to be closer to kids, some cited child behavioral problems.

⁵ Other major curriculum sources include the Oregon Virtual School District, Florida Virtual, Apex, Aventa and Jason.org.

- What do you like most about the school? Responses included: Love the teacher, free curriculum available, provides structure for home-based learning; don't have to re-invent the wheel.
- What do you like the least, or wish the school could offer that it does not now? These responses were essentially an additional course content wish list (music, art, etc.), more meeting time with teacher, and more social time for their kids.

None of the respondents hinted that faith was a driver for home schooling. A follow on discussion with teachers and the ESD staff suggests that while there are strong faith communities in these districts, the families had other reasons for home schooling. The teachers mentioned that skepticism about the "school system" was a significant factor, suggesting that online programs need to be sensitive to that concern.

Statewide Online School Activities

In addition to established online programs like the Oregon Connections Academy (homed in the Scio district) and Salem-Keizer Online, the State of Oregon has initiatives underway including the Oregon Virtual School District (OVSD). The OVSD is a repository of course content usable by districts to assemble online programs. The OVSD is not a competing school, but a resource for Oregon public Schools hosted by the state. The Yamhill county districts should become familiar with its growing list of offerings as they pursue new online programs. The state also has a new online school with a limited set of course offerings, called the Oregon Virtual Education Center (ORVED). Finally, several other districts have created online programs. §

The Home School Population in Yamhill County

Figure 11 is a snapshot for the month of April 2011 of currently registered home school students within the county. As expected the more populous districts have a higher number of homeschoolers. Of more interest is the percentage of each district that homeschools, which ranges from 1.9% to 7.7%. Note that, because Y-C already has a program serving home school families those enrolled are likely removed from the list of 88 registered in that district. So this district likely has a home school population that is closer to 10% of its brick and mortar enrollment.

The total registered population of 803 home school students suggests that the potential market for a well-designed online program is quite large compared to existing online enrollments with the districts. If other districts

⁶ In addition to the Scio district program (ORCA), the Baker, Estacada, Gresham-Barlow, and North Bend districts all have existing online programs.

 $^{^{7}}$ The actual rules for removal from the registration list involve the degree to which a student is active and taking core curriculum within a school program.

can enroll 25% of their market, as has Y-C in its first year in operation, they would realize over \$1.2 Million in additional ADM funding in aggregate.⁸

Figure 11: Yamhill County Home School Students by District - April 2011 (total home school population=803)

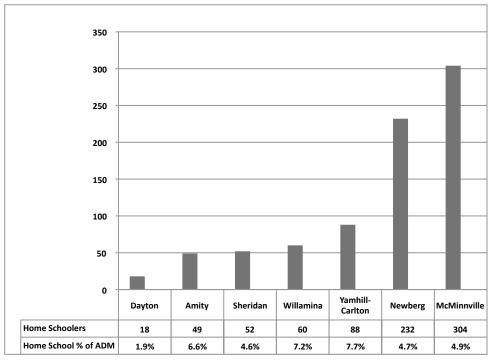


Figure 12 shows how that additional revenue might be sourced by home district. Clearly the largest two districts have a compelling case for building online programs — even if they only focused on the home school families within their districts.

⁸ Assuming 100% of the ADM is allowed and a per ADM funding level of \$6,000

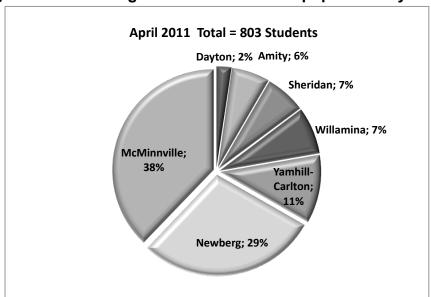


Figure 12: Percentage of the home school population by District

Which Districts Should Build Programs?

While Yamhill County has a healthy number of home school families, they are not evenly distributed. It would not make sense for all seven districts in the county to create online programs. Dayton for example, using a reasonable estimate of 25% market penetration⁹, would capture only 5 students (See Table 4). Instead, the district should participate in a program that another district hosts via an inter-district transfer of some portion of the ADM funding. These districts might also function as satellites of the online program by hosting a part time teacher to support local face-to-face interaction. Naturally, the online programs would fund these teacher positions.

⁹ Throughout the study an estimate of 25% enrollment of home school students into online programs is assumed. The actual percentage of enrollment once programs mature may be higher or lower. The Yamhill Carlton number has ranged in the 20-25% range of its registered list. A 25% rate might be a working target for programs to achieve, but note this will become more difficult over time as more online offerings pursue the same market.

An intuitive threshold for creating a program is that enrollment is large enough to fund at least one full-time teacher position dedicated to localized administration of the program. As an example, Table 4 identifies districts that could meet this threshold using an estimated minimum of 20 students. Under reasonable assumptions, even without any inter-district transfer, three districts could easily launch online programs if they can reach penetration of 25%.

Table 4: Online program potential by district – no transfers

Rate of Enrollment and Student Count per District

	Registered	15%	20%	25%	30%
Dayton	18	3	4	5	5
Amity	49	7	10	12	15
Sheridan	52	8	10	13	16
Willamina	60	9	12	15	18
Y-C	88	13	18	22	26
Newberg	232	35	46	58	70
McMinnville	304	46	61	76	91

Including the possibility of inter-district transfers makes program feasibility appear even more likely. Table 5 assumes that home school families in the districts that *do not* launch programs transfer evenly across the districts that do run programs. Again looking at the 25% enrollment level in this simplified model, we find clear potential for three multiple teacher online programs to coexist.

Table 5: Online program potential by district – with transfers

Rate of Enrollment and student count per district

	Registered	15%	20%	25%	30%
Dayton	18	0	0	0	0
Amity	49	0	0	0	0
Sheridan	52	0	0	0	0
Willamina	60	0	0	0	0
Y-C	88	0	0	37	44
Newberg	232	55	73	73	88
McMinnville	304	66	88	91	109

While the models above suggest program viability, the question of exactly how to "divvy the market" is more difficult to answer. Our interviews with superintendents, district staff and online teachers suggest the following guiding principles to help the districts decide on structure for collaboratively approaching the online market:

- 1) Leverage the online programs and expertise already present
- 2) Limit the degree to which the seven districts compete among themselves
- 3) Establish an adequate hold back of ADM revenue for inter-district transfers so that districts not building online programs are motivated to participate
- 4) Anticipate some draw of brick-and-mortar students as programs grow

There is no single "right" way to structure program offerings, but following the principles above and considering the potential market size can suggest a simple collaborative model as a starting point.

Because programs exist at two districts, Y-C and Sheridan, it makes sense to preserve these, but perhaps modify their focus. Also because the data suggest that Newberg and McMinnville have considerable in-district markets they should launch programs. The other three districts (Amity, Dayton and Willamina) should serve as feeders and eventually satellite teaching locations for the four programs above. These districts would still reap some financial benefit through transfer payments.

Each of the four proposed programs could offer a full K-12 range and likely create revenue for all four districts, but a more efficient, focused, and collaborative strategy would have each district specializing by grade level: one district has an online high school (9-12), one has an online middle school (6-8), and up to two have online K-5 programs. ¹⁰

This more specialized approach should allow the districts to keep costs of the programs down since curriculum and software choices do not have to meet the needs of a broad age range of students. The focused approach would also likely result in more efficient use of teachers' time, though one teacher was quick to point out that she loves her older and younger students.

Table 6 shows enrollment levels in a simplified version of this specialized model. McMinnville should run the high school level program as it has the deepest bench of high school level teachers and the district's current learning management and curriculum software is well tuned to the older age groups. Also, because of evolving diploma requirements, the online high school is likely to be more difficult to execute than the other grade level schools. A single high school will allow for specialization in the unique requirements at

 $^{^{10}}$ The K-5 group is likely to be larger than 6-8 and 9-12 and having two programs divide this should work financially for the districts. It also allows for a more distributed geography, which should help the districts provide high teacher contact for these younger students.

that level. Y-C has found that teaching high school online is difficult with the limited number of students it has, and they would be better off teaching K-8 (they have already considered making this transition). Our model suggests that Y-C consider becoming one of the two focused K-5 programs, with the other 5 districts transferring into Y-C. The selection of K-5 for Sheridan and 6-8 for Newberg is somewhat arbitrary. ¹¹

Clearly this "specialize by grade" model is just one possible model that attempts to meet the principles raised by the districts. Many others are possible and the superintendent and their staff should consider others. That said, time for reflection is limited by the reality of competition from outside the district. Each year the major online schools operating within the state are reaching larger sections of the home school market in Yamhill County.

Table 6: A "specialized by grade level" Sample Model (With transfers, using two K-5 programs, one 6-8th, & one high school)

Using this model, we can develop a simple estimate of potential revenue.

	Registered	15%	20%	25%	30%	
Dayton	18	0	0	0	0	
Amity	49	0	0	0	0	
Sheridan	52	24	32	40	48	K-5
Willamina	60	0	0	0	0	
Y-C	88	24	32	40	48	K-5
Newberg	232	36	48	60	72	6-8th
McMinnville	304	36	48	60	72	9-12th

Table 7 calculates the possible revenue, again working with a 25% enrollment level. The table also selects an initial holdback for inter-district transfers of 10% of the ADM generated.

The estimates are approximations and should be used only to assess the relative scale of these programs. Also we do not predict the *cost* of program operation, which is outside the scope of this study. Some districts in Oregon running online programs feel that the costs of well-run online programs are equal to traditional programs. If true the revenue should be looked at as supporting district operations at larger enrollments but without any excess fungible dollars. Nonetheless, both Y-C and Sheridan online programs appear to be allowing some resources or costs coverage to flow back to their host districts. At over \$1.2 Million of potentially new revenue available across the districts it is clearly a worthwhile pursuit to better understand how revenue might align with costs and potentially benefit the districts.

¹¹ The superintendents should more carefully consider this question of who does which grade segments; they may find strong reasons to divide the market in a different way.

Table 7: Revenue for "specialized model" at 25% of home school enrollment

(Including 10% transfer holdback and full ADM revenue)12

•				•	
	@ 25% Students in program	Transfer revenue	ADM revenue	TOTAL revenue	Program grade levels
Dayton	0	2,700	0	2,700	
Amity	0	7,350	0	7,350	
Sheridan	40	7,800	216,810	224,610	K-5
Willamina	0	9,000	0	9,000	
Y-C	40	13,200	216,810	230,010	K-5
Newberg	60	34,800	325,215	360,015	6-8th
McMinnville	60	45,600	325,215	370,815	9-12th

Total 1,204,500

It is important to note that several things will impact the revenue for the districts, including:

- The specific age and numbers of the home school population each year
- How the market is carved up by grade level
- The percentage rate of hold back
- The rate ADM is paid to online programs from the state¹³

The exact amount to hold back for inter-district transfers is a question falls to district superintendents. The observed range for online programs operating around the country is 5% to 20%. Currently Y-C provides some payment to transferring districts, but the amount is based on net costs rather than a percentage of ADM. Many programs prefer the percentage of ADM approach because it offers transferring districts a clearer incentive for transfer.

To show the impact of increasing the holdback percentage, Table 8 shows a 20% rate of holdback. Note that because all districts transfer students out, the "winners and losers" of higher holdback rates are a bit unexpected. Of course, the holdback rates only shift who gets the dollars so the total revenue for the seven districts remains the same.

 $^{^{12}}$ The simple model here uses the following assumptions: An ADM rate for online students paid at 100% of a \$6,000/ADM rate. An inter-district transfer rate of 10% held back in the student's home district, and a split between grade levels of 40% K-5 and 30% each for 6-8th and high school. The ESD home school registration staff confirmed this working estimate for grade level percentages.

¹³ This is subject to change due to changing legislation regarding online schools

Table 8: Revenue for "specialized model" at 25% of home school enrollment –

(Including 20% transfer holdback and full ADM revenue)

	@ 25% Students in program	Transfer revenue	ADM revenue	TOTAL revenue	Program grade levels
Dayton	0	5,400	0	5,400	
Amity	0	14,700	0	14,700	
Sheridan	40	15,600	192,270	208,320	K-5
Willamina	0	18,000	0	18,000	
Y-C	40	26,400	192,270	219,120	K-5
Newberg	60	69,600	289,080	358,680	6-8th
McMinnville	60	91.200	289,080	380,280	9-12th

Total 1,204,500

A Threat to Brick-and-Mortar Schools?

The Yamhill-Carlton program has noticed increased attention from otherwise "brick-and-mortar" students since their online program began, a phenomenon other districts may observe as online programs expand. The net impact on district finances is unclear but may not be negative. Some shift to online enrollment may reduce need for district capital expansion or alleviate classroom overcrowding. It may also introduce new capacity for blended education models that the districts will want to leverage in the future.

The larger threat to the districts would be to ignore the appeal of these programs and let the external providers take the students away from the districts. While legislation attempts to limit this impact, a proactive approach that involves creating quality online offerings will likely serve the districts with greater certainty.

RECOMMENDATIONS FOR IT

The Yamhill districts appear to operate efficiently in IT. However we find clear opportunities for collaboration and some areas that need further inquiry. Increased collaboration will result either in cost savings or improved quality. We do not recommend full regionalization of IT here, although this may be a logical result of greater collaboration among the 4 smaller districts (Amity, Dayton, Sheridan and Willamina).

Our specific recommendations include:

IT Recommendation #1: Create an IT Coordinators team

Though there are good inter-district relations at the superintendent level, the districts would benefit from greater collaboration and information sharing at the IT staff level. Currently, the district IT staff meet only when hosted by the ESD. Yet even a brief series of interviews revealed that they face common challenges. As an example, three districts independently mentioned bandwidth problems with the same supplier. Districts would likely identify some "low hanging fruit" in terms of common problem solving and opportunities for joint purchasing.

We recommend that one person representing IT meet with district peers at least twice per year, and ideally once per quarter. The meetings should focus on specific topics. An initial meeting could address bandwidth, ISP and web hosting approaches used by each district. Other topics might include:

- IT staff development and training needs
- Open source software used and experiences
- Joint IT purchasing possibilities
- ESD Service Provision (some districts have gone to different ESDs for specific services)

To encourage team building the IT staff should be given a small budget to host meetings and perhaps buy some training jointly.

IT Recommendation #2: Conduct a deeper review of Yamhill-Carlton IT costs and accounting, collaboration with Newberg

Yamhill-Carlton's IT costs appeared unusually high compared to district peers and a statewide comparison. Looking over five years the apparent cost is unlikely the result of one time-costs in given years. The apparent inefficiency likely derives from a mix of accounting practices and actual IT spending. In the 2009-2010 year, for example, the district apparently purchased a number of computers that, if destined for classrooms or online programs, might be better coded as instructional expenses.

Neighboring Newberg has the best IT efficiency across all measures examined in the study. Y-C could benefit from a meeting between Y-C staff and their Newberg counterparts to discuss rules of thumb for coding IT expenses and perhaps to compare costs on bandwidth and networking.

Y-C's IT manager should also look at the cost savings practices used at Newberg. Newberg aggressively uses open source software and they appear quite creative about extending equipment life.

Longer term, Y-C and Newberg should seek greater collaboration and consider joint contracts on common purchases. Y-C will be the primary beneficiary of this collaboration, but Newberg may also find some purchasing advantages.

IT Recommendation #3: Dayton and Amity Should Pair for Collaboration; Sheridan and Willamina Should Too

Dayton and Amity both fund IT at reasonable levels, but could achieve more cost savings through collaboration, specifically in networking, bandwidth and software purchases over time. This increased collaboration is likely to reduce costs somewhat (likely under 10% for these two districts), but should also improve knowledge and capacity for the IT staff in both districts.

Similarly Sheridan and Willamina make a natural pair for IT collaboration, as these districts also share common circumstances and challenges. Given the current funding levels for IT in these districts the effort should not focus on reducing costs, but instead on improving IT services and quality.

Within the next three to five years, as relationships become stronger among these districts, all four districts should consider regionalizing their IT efforts and operating as a single IT service unit. As a combined entity, the districts encompass 3,632 ADM, 2,085 workstations, a team of 4.3 IT staff, and an IT budget of \$512,000. At this scale, the districts can likely operate more efficiently as a single IT unit than as four individual units. The four districts might model the combined unit after Newberg, which is similar in size and staffing.

IT Recommendation #4: Web Services a Minor Cost Item; Content Services Possible through McMinnville (non-urgent)

One question asked by the superintendents was how districts should handle web services. The districts currently use a variety of hosting methods, most of them free or low cost, and six of the seven districts do not have dedicated web content staff. The costs for web hosting services are not high so there is not a clear cost argument for consolidating web hosting or activities.

If a central service provider was created, then McMinnville is the logical choice for web services. They already have part time staff focused on web content. The district has the needed hosting capacity and is geographically central. The primary goal of consolidating service provision would be to



RECOMMENDATIONS FOR ONLINE LEARNING PROGRAMS

The interviews, market and competitive analysis, and simple modeling exercises all suggest that there is a significant opportunity for the seven districts to collaborate toward online school provision to the home school students in their district. The districts have a natural advantage over national scale online providers in that they can rapidly build a "high touch" program with local teachers that understand the wants and needs of families in the community.

The political and regulatory climate in Oregon is also increasingly supportive of districts developing their own online school offerings. In the recent "Report to the 75th Legislature on Online Learning" the Oregon Department of Education call on the legislature:

"Encourage school districts to make comprehensive online options available to their students, preferably from a state-approved pool, and work toward the ultimate goal of any district student having access to a full-time virtual school. Exempt online schools that are strictly for a school district's or educational service district's own students or contracts between districts from the state approval process."

Later in the same document the ODE sets forth a vision that is clearly supportive of the ubiquitous online program availability for multiple purposes:

"The state board envisions a future where students can make up high school credit easily using online tools; where rural students will be no more disadvantaged in their access to courses than students in the largest urban districts; where students can learn at their own pace; and students can access college courses for college credit as needed and desired."

At the same time, state resources like OVSD and considerable competition in the courseware and curriculum marketplaces are also reducing the costs to launch programs. Already-existing course tools at each of the districts can be leveraged as well to reduce costs.

Despite this supportive climate, the landscape for online programs is rapidly changing and home school families have considerable choice already, so the districts must act decisively and wisely.

 $^{^{\}rm 14}$ This report from 2010 is available on the ODE website at www.ode.state.or.us/.../2010-online-learning-report-to-the-legislature-final.pdf

Online Program Recommendation #1—The Yamhill districts should collaborate to build online programs

The Yamhill County market for online learning is large enough and efforts by Y-C and Sheridan suggest that the districts are capable of reaching the market with positive results. In addition to the existing programs, two other districts, Newberg and McMinnville, have the critical mass of home schooling students to justify programs.

Amity, Dayton, Willamina should not grow their own programs but should instead transfer students into the other districts' programs. They can participate with the districts in two ways. First, by receiving some percentage of ADM funding for transferring students (likely to be 10 to 20% of ADM). Second, as the programs grow, these districts can be satellite homes to local teaching and outreach professionals that are paid by the online programs in the other districts.

To simplify program launch the districts should initially focus on students within the seven-district boundary. It is likely that other students will wish to transfer in as online programs grow, but the initial marketing should focus on the immediate community to maximize impact.

Online Program Recommendation #2—The new programs should be built "in-district" rather than as charter schools.

Charter school models offer some advantages for online programs including start-up funding potential and more flexible administrative structures. However, they are also the subject of much debate and changing regulation. Over the past five years more than 40 bills have been introduced in Oregon that attempt to regulate charters. Adding regulatory uncertainty to the already rapidly evolving landscape for online learning will likely slow the launch of successful programs in the Yamhill districts.

Charter schools generally get less funding per ADM, (typically 80% of ADM) where in-district programs get 87.5 to 100% of ADM funding. Charters also face limits on inter-district transfers that might reduce their attractiveness. A final concern is that the charter structure may separate online course material ownership from the traditional brick-and-mortar programs, reducing the opportunity for blended education.

Sheridan operates their online program as a charter K-12. A change in status to an in-district program should be considered if it helps to integrate that program into a larger countywide collaborative online system.

Y-C operates their program as an in-district entity and their experience using this model thus far may be useful for the other districts as they develop programs.

Online Program Recommendation #3—Divide the market into grade level clusters with limited overlap

External online providers already compete for students and the funding that follows them, so adding inter-district competition makes little sense. A model that distributes students by grade among the districts rather than centralizing them all also gives more districts a share of the responsibility and the revenues.

This report describes one possible division by grade level. This approach would reduce costs and simplify the teaching provided by each district. It also has the advantage of allowing the districts to purchase and develop curriculum that is more focused. This focus is especially helpful at the high school level where online programs will require highly qualified teachers.

The districts should consider offering two K-5 programs in the county, both to create choice and to share what is likely to be a large enrollment at that level. Sheridan and Y-C will continue their programs, but could consider focusing on the K-5 level and re-crafting programs to better serve that market.

Online Program Recommendation #4—Create an Online planning group reporting to superintendents group

Each district should participate in a program development team with one or two administrators and/or teachers from each district. The team's charge would be to design and launch the collaborative online offerings across the districts. This group would coordinate closely with budget, IT and ESD staff as they develop their ideas. The group should report to the Superintendents group for ongoing direction and support.

Given the evolving nature of online education generally, the group should stay active well past the creation of new programs, and should stay abreast of statewide policy changes, representing themselves to ODE as a collaborative unit.

Online Program Recommendation #5—Yamhill County Superintendents should craft a simple agreement to govern online collaboration

Equitably structuring the inter-district transfers and the teaching cost coverage associated with online programs is an essential first step for achieving a win-win scenario. The superintendents are best positioned to work out the details. However key elements of the approach should include:

• A simple ADM share model—do not apportion ADM share as a net of program expenses. Instead, use a simple ADM percentage so districts have a proportional stake in the program's success and they know what they get when they transfer a student.

- Local teacher support should be specified in the agreement Localized teachers can provide personal support, frequent contact and connection to the community. The interdistrict agreement should specify how teachers from another district work for an online program.
- All districts should embrace transparent collaboration as they create and operate these programs. Regular program performance evaluation will trigger early corrective review of the terms in the agreement. This will also enhance trust between the district partners.

Online Program Recommendation #6—The outcome of a regionalized online effort must be attractive to home schooling families

By pooling resources the county's districts can compete with the private online schooling market. To do so, the districts must carefully position each program to leverage the unique strengths of seven collaborative districts working together. Specifically:

- Online programs must be high contact—The competitive edge for districts comes from their ability to facilitate family visits, social events, and selective integration into community projects.
- Online programs should be branded as distinct from the physical districts and the "school system"—Mistrust of public school facilities emerged as a driver for home schooling families. Branding the online program as distinct from the districts will be important. Consider reusing the "Alliance Academy" name already in use at Y-C; the name is well chosen and already suggests a collaborative model. Also the program marketing should emphasize more parent time with kids and "letting kids be kids."
- While adequate, the existing home school market clearly has limits, so it is important to design to scale. Expect the home school market to have limits (likely 5-7% of countywide ADM of 16,000), and barring some event that changes attitudes, assume that it will be flat to slightly declining in the region over time.
- Tech savvy, energetic, local teachers will be needed who are comfortable with a mix of online interfacing, parental partnership, technical support and regular site visits.