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Michigan Virtual University® (MVU) is a nonprofit Michigan corporation that was established in 1998 to deliver online education and training opportunities to the citizens of Michigan. It is the parent organization of the Michigan Virtual School® (MVS®) and the Michigan Virtual Learning Research Institute® (MVLR®). MVU is governed by a Board of Directors representing the education and business communities.
A Report to the Legislature
Prepared by Michigan Virtual University

December 1, 2016

This report is submitted in compliance with Section 98 (6) of Public Act 249 of 2016, which requires the Michigan Virtual University (MVU) to provide, not later than December 1 of each fiscal year, a report to the House and Senate Appropriations Subcommittees on State School Aid, the State Budget Director, the House and Senate Fiscal Agencies and the Department of Education that includes specific information related to the Michigan Virtual School (MVS) for the preceding fiscal year.

Background

The Michigan Virtual School and Michigan Virtual Learning Research Institute are the core divisions of MVU, a 501(c)(3) nonprofit organization that works in partnership with K-12 schools to supplement and expand online learning opportunities. For the past 18 years, MVU has provided leadership to accelerate the adoption and use of online learning within Michigan. Working in partnership with hundreds of Michigan schools, MVU offers classes to students and professional development programs for educators through online, web-based services. MVS was created by Public Act 230 of 2000 to serve both traditional and nontraditional students, and since its inception, MVS has recorded over 207,500 course registrations. During the 2015-16 academic year, MVS had 24,448 course registrations. MVS offers a broad range of core academic courses aligned with state standards, college-level equivalent courses, remedial, enrichment and world language courses, and other innovative online experiences.

Funding for MVS is provided through a combination of annual appropriations from the Legislature, reduced course fees charged to enrolling schools, and private grant funds. MVS does not grant course credit or award diplomas independently, but works in partnership with local and intermediate school districts that award credit or diplomas.

In 2016, MVS was awarded a five-year accreditation renewal by AdvancED®. This comprehensive evaluation process recognizes MVS’s commitment to providing high-quality online instructional services.

MVS continues to be recognized as one of the leading and largest virtual schools in the U.S. and works in collaboration with a national network of K-12 online learning organizations to promote the development of high-quality programs and services for students and educators.

In addition to MVS, MVU makes a significant and dedicated effort to serving all educators in Michigan in blended, online, and face-to-face modalities. The professional learning services team is comprised of two formally-known programs, Michigan LearnPort and MyBlend. MVU has strategically hosted and developed online courses, videos, webinars, training modules, hosted conferences and regional events, and developed customized professional development solutions for districts and educational organizations. The new Professional Learning Portal (https://plp.mivu.org/) is the hub of all MVU-hosted or partnered professional development activities. Educators are able to register for both face-to-face, blended, and online events in dozens of professional development areas of need.
Expanding Educational Opportunities in Michigan

For more than 15 years, MVU has played three key roles to support and accelerate the growth and development of online learning in Michigan, including: 1) a change agent role to introduce schools to online and blended learning models; 2) a supplemental provider role for online courses, serving as the state’s model laboratory for virtual instruction to Michigan schools; and 3) a capacity builder role to support school districts as they strive to implement online and blended learning programs, including innovative research. These three roles are advanced through three different units within MVU including, Student Learning Services (Michigan Virtual School), Professional Learning Services (PLS) and Michigan Virtual Learning Research Institute (MVLRI).

Data published by MVU’s Research Institute indicate that the use of online learning in K-12 education has exploded in Michigan during the past five years. The number of students participating in at least one virtually delivered course has grown from a little more 36,000 in 2011, to more than 91,000 students in 2015. During the same time period, the total number of virtual courses Michigan students enrolled in grew from nearly 90,000 to more than 445,000 online courses.

Part of this growth is the result of a major increase in the number of Michigan schools that provide students with access to virtually delivered courses. In 2011, approximately 650 schools had at least one student take a virtual course and by 2015, more than a 1,000 Michigan schools offered virtual enrollments. The growth of online learning is somewhat encouraging; unfortunately the statewide completion rate for all virtual enrollments has gone from 66% in 2011 to approximately 60% in 2015. By comparison, the completion rate for MVS courses is consistently higher than 80%.

Increasingly, online and blended learning will serve as important instructional strategies to personalize learning for all students in the state. However, it appears that a larger percentage of low performing students are being directed to virtual learning options rather than students who enjoy academic success in traditional learning environments. Instead of enabling students to go farther faster, it seems as though online courses have become a popular solution to address growing credit recovery needs for individual students. In response to this major trend, MVU is working with a variety of stakeholders, including school customers to bring a new online course solution to Michigan schools in mid-2017. This customized credit recovery solution will provide options for students to retake an entire course if needed, or capture learning for targeted areas based on individual student needs.

In 2017, MVU will help power a countywide virtual learning program by unbundling its online services, including, teacher training in online instruction, online content, help desk support, learning management systems (LMS) and consulting services. MVU is working to help local and intermediate school districts implement locally developed online and blended learning programs. MVU believes that Michigan’s K-12 education system will need to leverage the power and potential of technology to differentiate instruction, achieve new efficiencies and make learning more relevant for today’s students.

The transition to the future for the K-12 community will likely be fraught with resistance to change. There will be many trials and errors with no clear
road map that guarantees student success and system sustainability. The need for continued leadership, research and capacity building support is essential for the K-12 system, and MVU is uniquely positioned to facilitate system-level changes.

Scope of the Report

The information provided in this report addresses the requirements that are listed in Section 98 (6) of P.A. 249 of 2016. These items include, for the period October 1, 2015 - September 30, 2016, a list of districts served by MVS, a list of online course titles available to districts, course enrollment and completion rate information by course, and the overall completion rate.

Districts Served by MVS

From October 1, 2015 - September 30, 2016, MVS served students enrolled in 388 different Michigan districts (495 entities within those districts). This included 308 Michigan local education agency districts (LEA Districts), 33 public school academy districts (PSA Districts), six intermediate school districts (ISD Districts), and 41 nonpublic schools. According to data available through the Center for Educational Performance and Information website (http://www.cepi.state.mi.us/eem/EntitySearchQuick.aspx), there were 549 open-active LEA Districts, 300 PSA Districts, 56 ISD Districts, and 643 nonpublic schools in October 2016. Using these counts as estimates for the 2015-16 school year, MVS served approximately 56% of LEA Districts, 11% of PSA Districts, 11% of ISD Districts, and 6% of nonpublic schools. A complete list of the Michigan districts served during 2015-16 is included in Exhibit 1.

These Michigan districts accounted for 22,646 MVS course enrollments over the past year. School enrollments in MVS courses over the past year ranged from a single student enrollment to 844 student enrollments. The average number of enrollments per Michigan school using MVS during 2015-16 was 46. In addition, MVS had 1,622 student registrations from 1,051 Michigan home schools during 2015-16.

Figure 2 provides a geographic representation of where MVS enrollments came from for the public, nonpublic, and home schools that enrolled students during the 2015-16 school year. During this period, schools and families in 78 of the state’s 83 counties were supported with MVS online courses and programs.

In addition to serving Michigan schools and students, MVS had 98 enrollments from 10 schools outside of Michigan and 82 enrollments from 47 home schools outside of Michigan.

In total, the 24,448 enrollment with MVS came from 14,555 students. This was an average of 1.7 enrollments per student. Fifty-three percent of students took only one course during 2015-16.
MVS Online Courses Available to Michigan Districts

Exhibit 2 provides a listing of the online courses offered by MVS to Michigan districts and students during the period October 1, 2015 - September 30, 2016. These online courses include titles listed in the MVS course catalog for the corresponding fall, spring, and summer semesters, as well as three trimesters during the fall and spring. The list includes 225 possible courses, representing core academic courses specifically aligned with the Michigan Merit Curriculum (MMC) and the Common Core, Advanced Placement® (AP®) courses, credit recovery courses, and summer enrichment experiences for students. These online courses include those developed by MVS and courses and content licensed from nationally-recognized providers. A majority of MVS courses (81%) were offered at the high school level, though 42 online courses were available for middle school students during 2015-16.

MVS Online Course Completion and Pass Rates

Earlier this year, MVU, through the Michigan Virtual Learning Research Institute, published the third annual Michigan’s K-12 Virtual Learning Effectiveness Report (available from http://media.mivu.org/institute/pdf/er_2015.pdf). This publication used data reported to the state by Michigan public schools to examine all K-12 virtual enrollments in Michigan for the 2014-15 school year.

To assist with comparisons between the statewide data presented in the Effectiveness Report and the data published in this report, MVS course enrollments were classified according to state-recognized completion statuses. When schools report enrollment information to the state, one of the data components submitted is for a completion status field. For the 2015-16 school year, schools had to select from among 11 different completion statuses for an enrollment. (See page 483 of the Michigan Student Data System (MSDS) Collection Details Manual Version 1.2. Available from http://www.michigan.gov/documents/cepi/Collection_Details_SY1516_v1.0_486132_7.pdf). A few examples of completion statuses include: Audited, Completed/Passed, Completed/Failed, and Withdrawn/Exited.

Using this established framework for reporting on all enrollments, a few important issues are evident. First, enrollments with a completion status of “Audited” exist where the student enrolls in the course without expecting or receiving credit. Because there is no performance expectation for such instances, MVU has removed any audited enrollments from MVS performance calculations. To remind readers of this removal, the phrase “credit- or grade-attempted enrollments” is used in performance calculations to indicate that audited enrollments have been excluded.

Second, a course “completion” is not synonymous with “passing” a course. As noted, schools differentiate when reporting to the state those enrollments that were completed but failed (Completed/Failed) from those that were completed and passed (Completed/Passed). Thus, “completion” as it is traditionally used by schools when reporting data to the state conveys the meaning of “finished” or “remained enrolled” throughout the course timeframe and does not signify whether the student earned a passing grade in the course for which credit would be granted.

To better align with this convention, this report uses the term “completion rate” to refer to the percentage of credit- or grade-attempted enrollments where the student finished or remained in the course through the last day of the academic term. A new calculation – “pass rate” – is used in this report to refer to the percentage of credit- or grade-attempted enrollments where the student earned 60% or more of the total course points (an indication of passing).

To allow for easier comparisons with data collected by the state, data in this report are grouped using the National Center for Education Statistics (NCES) Subject Areas. (See page 469 of the Michigan Student Data System (MSDS) Collection Details Manual Version 1.2. Available from http://www.michigan.gov/documents/cepi/Collection_Details_SY1516_v1.0_486132_7.pdf). The NCES subject areas also correspond to the way courses are organized within Michigan’s Online Course Catalog (https://micourses.org), the website publicizing Section 21f online courses in the state.
Passed" status. That means of the 409,011 enrollments with completion statuses similar to MVS, 16.3% had a "withdrawn" status, 18.8% had a "Completed/Failed" status and 64.9% had a "Completed/Passed" status. For the purpose of this comparison, 11,453 "Audited," 23,848 "Incomplete," 46 "Testing Out," and 1,574 "Ongoing Enrolled/Special Ed" enrollments were omitted from the calculations. Their inclusion would only lower the statewide pass rate.

Though this comparison data is from the prior year, it suggests the MVS pass rate was considerably higher than the state average for virtual courses. In fact, even if all 23,848 incomplete enrollments excluded from the above calculation eventually turned into "Completed/Passed," the statewide average would only rise to 66.8% — more than 18 percentage points below the MVS pass rate.

To put the MVS pass rate statistics into perspective, consider what rates were for all K-12 virtual courses in the previous school year. Using the data from Table 21 of the Effectiveness Report (p. 18), 66,503 K-12 virtual enrollments fell into one of the three withdrawn categories, 77,062 had completion statuses of “Completed/Failed,” and 265,446 had “Completed/Passed” status. That means of the 409,011 enrollments with completion statuses similar to MVS, 16.3% had a “withdrawn” status, 18.8% had a “Completed/Failed” status and 64.9% had a “Completed/Passed” status. For the purpose of this comparison, 11,453 “Audited,” 23,848 “Incomplete,” 46 “Testing Out,” and 1,574 “Ongoing Enrolled/Special Ed” enrollments were omitted from the calculations. Their inclusion would only lower the statewide pass rate.

Several factors impact the MVS pass rate. The reason a student enrolls in an MVS course is one worthy
of highlighting. Figure 4 shows how the MVS pass rate varies by enrollment reason. When a student is enrolled in an MVS course, the person enrolling the student selects one of five enrollment reasons. Those reasons are: course unavailable at local school, scheduling conflict, learning preference of the student, credit recovery, or other. As Figure 4 makes apparent, student performance in MVS courses is considerably different among these five reasons. Students who enroll in MVS courses because the course was unavailable locally or to resolve a scheduling conflict had pass rates in 2015-16 of 87.1% and 88.7%, respectively. Conversely, students using MVS courses for credit recovery purposes were less likely to pass, yielding only a 62.5% pass rate.

In addition to considering how pass rates varied by enrollment reason, it is also worth considering how the pass rate varied by district. Consider, for instance, the MVS pass rate of 82.6% for Foreign Language and Literature. One of the districts served by MVS had over 50 enrollments in Foreign Language and Literature courses, yet had a 71% pass rate. A different district also with more than 50 Foreign Language and Literature enrollments— including many of the same titles – had a pass rate of 95%. This district-level variability is similar to what was found statewide in the Effectiveness Report; some districts implemented high-performing online learning models and others did not. Figure 5 charts how districts’ MVS pass rates differed. Of the 384 Michigan districts that had pass rate data with MVS in 2015-16 (four districts only had audited enrollments), 176 of them (46%) had overall MVS pass rates of 90% or greater. Another 90 districts (23%) achieved MVS pass rates of 80% to less than 90%. Clearly, many Michigan districts experience high levels of success with MVS courses.

Implementation Resources

These data and the data in the Effectiveness Report clearly suggest many schools need help in implementing successful online learning programs.

Figure 4
2015-16 MVS Pass Rates by NCES Subject Area and Enrollment Reason

<table>
<thead>
<tr>
<th>NCES Subject Area</th>
<th>Course Unavailable Locally</th>
<th>Scheduling Conflict</th>
<th>Learner Preference</th>
<th>Credit Recovery</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture, Food, and Natural Resources</td>
<td>89.2%</td>
<td>100.0%</td>
<td>91.7%</td>
<td>-</td>
<td>93.8%</td>
</tr>
<tr>
<td>Business and Marketing</td>
<td>89.2%</td>
<td>78.4%</td>
<td>90.9%</td>
<td>60.0%</td>
<td>85.7%</td>
</tr>
<tr>
<td>Communications and Audio/Visual Technology</td>
<td>93.0%</td>
<td>100.0%</td>
<td>76.5%</td>
<td>&lt;10.0%</td>
<td>71.4%</td>
</tr>
<tr>
<td>Computer and Information Sciences</td>
<td>85.9%</td>
<td>79.3%</td>
<td>75.6%</td>
<td>80.0%</td>
<td>86.8%</td>
</tr>
<tr>
<td>Engineering and Technology</td>
<td>95.8%</td>
<td>100.0%</td>
<td>73.3%</td>
<td>-</td>
<td>100.0%</td>
</tr>
<tr>
<td>English Language and Literature</td>
<td>92.8%</td>
<td>89.4%</td>
<td>83.0%</td>
<td>55.2%</td>
<td>78.6%</td>
</tr>
<tr>
<td>Fine and Performing Arts</td>
<td>87.1%</td>
<td>84.6%</td>
<td>81.7%</td>
<td>&lt;10.0%</td>
<td>83.1%</td>
</tr>
<tr>
<td>Foreign Language and Literature</td>
<td>83.1%</td>
<td>83.8%</td>
<td>84.0%</td>
<td>65.1%</td>
<td>80.0%</td>
</tr>
<tr>
<td>Health Care Sciences</td>
<td>85.2%</td>
<td>86.4%</td>
<td>77.5%</td>
<td>50.0%</td>
<td>89.3%</td>
</tr>
<tr>
<td>Life and Physical Sciences</td>
<td>88.5%</td>
<td>87.7%</td>
<td>78.2%</td>
<td>63.5%</td>
<td>79.9%</td>
</tr>
<tr>
<td>Mathematics</td>
<td>88.1%</td>
<td>90.6%</td>
<td>82.0%</td>
<td>68.7%</td>
<td>81.5%</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>88.4%</td>
<td>88.0%</td>
<td>85.1%</td>
<td>85.0%</td>
<td>84.9%</td>
</tr>
<tr>
<td>Physical, Health, and Safety Education</td>
<td>85.9%</td>
<td>92.6%</td>
<td>84.0%</td>
<td>55.6%</td>
<td>87.4%</td>
</tr>
<tr>
<td>Public, Protective, and Government Service</td>
<td>90.9%</td>
<td>82.6%</td>
<td>81.1%</td>
<td>66.7%</td>
<td>91.2%</td>
</tr>
<tr>
<td>Religious Education and Theology</td>
<td>92.9%</td>
<td>100.0%</td>
<td>100.0%</td>
<td>50.0%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Social Sciences and History</td>
<td>91.7%</td>
<td>91.0%</td>
<td>85.3%</td>
<td>58.4%</td>
<td>86.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>87.1%</strong></td>
<td><strong>88.7%</strong></td>
<td><strong>82.9%</strong></td>
<td><strong>62.5%</strong></td>
<td><strong>83.0%</strong></td>
</tr>
</tbody>
</table>

Note: Percentages may not sum to 100% due to rounding.
for their students. Toward this end, *MVU* has focused on developing practical resources to support school administrators, counselors, teachers, and parents which are updated every year.

**Section 21f Tool Kit.** Section 21f of the State School Aid Act allows students in grades K-12 to take two online courses from their local district catalog or the statewide catalog of online courses hosted by *MVU*. With input from the Michigan Department of Education, the Michigan Association of Secondary School Principals, the Michigan Elementary and Middle School Principals Association, the Michigan Association of School Administrators, the Michigan Association of Intermediate School Administrators, the Michigan Association of School Boards, the Michigan Association for Computer Users in Learning, the Michigan Association for Supervision and Curriculum Development, and Regional Educational Media Center representatives, *MVU* created the Section 21f Tool Kit. The Tool Kit (available at [https://micourses.org/resources/21f_Tool_Kit.html](https://micourses.org/resources/21f_Tool_Kit.html)) provides comprehensive resources in a single site. From information about the legislation itself to FAQs about the law to an implementation guide, the Tool Kit contains critical information for both consumers and producers of online courses. In addition, the Tool Kit includes a link to the Pupil Accounting Manual; draft letters for parents, school personnel, and school board members; sample school board policy; and even sample surveys that can be used to gauge local interest in online learning.

**Parent Guide.** One of the most popular resources in the Tool Kit include *MVU*’s *Parent Guide to Online Learning*. The *Parent Guide* is a 16-page publication prepared for parents, guardians, counselors, and others who want to help students decide whether online courses are a good option for them. The guide outlines features of online learning and introduces some of the benefits that online learning offers. It also includes information on online learning opportunities in Michigan, characteristics of successful online learners, and how to prepare for learning online. The guide contains questions and an online learner readiness rubric to help students self-evaluate their skills, knowledge, and dispositions for online learning. The rubric also helps schools, educators, parents, and guardians understand what extra supports students might need during their online coursework. The *Parent Guide* is available for free at [http://media.mivu.org/institute/pdf/parentguide.pdf](http://media.mivu.org/institute/pdf/parentguide.pdf).

**Student Guide.** New in Fall 2016, the *Student Guide to Online Learning* is a 10-page publication prepared for middle and high school students who are interested in taking virtual courses. Most of the content comes from teachers, mentors, and students who have

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**Figure 5**

*2015-16 Districts’ MVS Pass Rate Distribution by Pass Rate Bins*
personal experience with online learning and includes sections focused on what students like about taking online courses, what they need to think about before enrolling, how to decide what course is right for them, and how to prepare for taking a virtual course. Parents, guardians, counselors, and others who want more resources to support their students may also find this guide helpful in beginning informed conversations. The Student Guide is available for free at https://micourses.org/resources/pdf/toolkit/studentguide.pdf.

**Mentor Resources.** Like the Parent Guide, MVU’s Mentor Fundamentals: A Guide for Mentoring Online Learners is full of practical, research- and experience-based best practices for school employees or parents who provide on-site support for online learners. Much of the content for Mentor Fundamentals was distilled from interviews with 14 experienced mentors from a range of school settings. These interviews yielded significant shared conceptions about mentor roles and responsibilities, proven practices that lead to increased student success, and common concerns about pacing and communication issues. The guide also includes a section that highlights the research conducted around mentoring online learners. Mentor Fundamentals fills an important void for schools as the professional development and assistance many mentors receive has been lacking. Mentor Fundamentals is freely available at https://micourses.org/resources/pdf/toolkit/mentorguide.pdf.

MVU also produced an online mentor orientation and training module, Mentoring Basics, that combines research with best practices derived from the mentor interviews. Mentoring Basics is available at http://olot.mivu.org/mentor/articulate/presentation.html.

**MLOT.** A final resource to mention is MVU’s Online Learning Orientation Tool – OLOT. OLOT is a self-paced, web-based resource intended to help students understand what online learning entails and introduces students to the skills and knowledge that are key to success in online learning. OLOT covers areas such as Knowing What to Expect, Technical Skills You’ll Need, Learning Skills You’ll Need, and Managing Day-to-Day. OLOT may be paired with the MVU Online Learner Readiness Rubric allowing mentors to direct students to modules and/or specific units within the modules based on the results of the student’s strengths and weaknesses as identified by the rubric.

Even though OLOT may be used by students independently, often it will be more effective if students have someone they are accountable to for the results and someone – their mentor, parent, or guardian, for example – supporting their efforts. OLOT is freely available at http://olot.mivu.org/.

**Conclusion**

Online learning in Michigan continues to grow rapidly as evidenced by more than 445,000 virtual enrollments in 2014-15. In contrast to the 60% pass rate found statewide during that time period, the data in this report provide evidence that MVS online courses are living up to the promise of high-quality online learning being available to students all across the state.

As students, parents, teachers, administrators, and policy leaders work to transition toward learning models that enable personalized learning for all students, MVU continues to catalyze and accelerate this reform through its online course offerings to middle and high school students; research, evaluation, and distillation of best practices; and professional development services.

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**Vision**
Michigan’s digital learning leader advancing personalized education for all learners.

**Mission**
Advancing K-12 education through digital learning, research, innovation, policy and partnerships.

*Michigan Virtual University,* a nonprofit corporation, is an equal opportunity employer committed to the principles of nondiscrimination.
Exhibit 1. 2015-16 Michigan Districts Served

Achieve Charter Academy
Addison Community Schools
AGBU Alex-Marie Manoogian School
Airport Community School Dist.
Alanson Public Schools
Alba Public Schools
Alcona Community Schools
All Saints Central School
Allegan Public Schools
Allen Park Public Schools
Allendale Public School District
Alma Public Schools
Almont Community Schools
Anchor Bay School District
Ann Arbor Public Schools
Arbor Preparatory High School
Arenac Eastern School District
Austin Catholic Academy
Bad Axe Public Schools
Baldwin Community Schools
Bath Community Schools
Bay City School District
Beal City Public Schools
Bear Lake School District
Beaver Island Community School
Beaverton Rural Schools
Bedford Public Schools
Belding Area School District
Bellaire Public Schools
Benzie County Central Schools
Berrien Springs Public Schools
Big Bay De Noc School District
Birch Run Area School District
Birmingham City School District
Black River Public School
Blissfield Community Schools
Bloomfield Hills School District
Bloomington Public School Dist.
Boone City Public Schools
Brandon School District
Breckenridge Community Schools
Breitung Township Schools
Bridgman Public Schools
Brighton Area Schools
Brimley Area Schools
Brown City Community Schools
Buchanan Community Schools
Buckley Community School Dist.
Bullock Creek School District
Byron Area Schools
Byron Center Charter School
Byron Center Public Schools
Cadillac Area Public Schools
Caledonia Community Schools
Calhoun Christian School
Calvary Baptist Academy
Calvin Christian High School
Canton Charter Academy
Canton Preparatory High School
Cardinal Mooney Catholic School
Caseville Public Schools
Cass City Public Schools
Cassopolis Public Schools
Cedar Springs Public Schools
Central Academy
Charlevoix Montessori Academy for the Arts
Charlevoix Public Schools
Charlotte Public Schools
Charlton Heston Academy
Charyl Stockwell Academy
Cheboygan Area Schools
Chesaning Union Schools
Chippewa Hills School District
Chippewa Valley Schools
City of Harper Woods Schools
Clarkston Community School District
Clinton Community Schools
Clintondale Community Schools
Coldwater Community Schools
Coloma Community Schools
Comstock Public Schools
Concord Academy Boyne
Concord Community Schools
Constantine Public School District
Coopersville Area Public School District
Dansville Schools
Dearborn City School District
Decatur Public Schools
Deckerville Community School District
DeLaSalle Collegiate High School
Delton-Kellogg School District
DeTour Area Schools
DeTour Arts and Technology Academy
DeWitt Public Schools
Dexter Community School Dist.
Divine Child High School
Dr. Joseph F. Pollack Academic Center of Excellence
Dryden Community Schools
Durand Area Schools
East China School District
East Grand Rapids Public Schools
East Jordan Public Schools
East Lansing School District
Eaton Rapids Public Schools
Edwardsville Public Schools
Elk Rapids Schools
Elkton-Pigeon-Bay Port Laker Schools
Engadine Consolidated Schools
Escanaba Area Public Schools
Eton Academy
Evart Public Schools
Ewen-Trout Creek Consolidated School District
Excel Charter Academy
Fairview Area School District
Farber Hebrew Day School
Farmington Public School District
Fennville Public Schools
Ferndale Public Schools
Forest Hills Public Schools
Forest Park School District
Fowler Public Schools
Fowlerville Community Schools
Fr. Gabriel Richard High School
Frankel Jewish Academy
Frankenmuth School District

SUPPLEMENTAL INFORMATION

Exhibit 1:
2015-16 Michigan Districts Served

Exhibit 2:
2015-16 Online Course Titles Offered by MVS to Michigan Schools

Exhibit 3:
2015-16 MVS Summary of Courses, Enrollments, and Pass Rates
Frankfort-Elberta Area Schools
Franklin Road Christian School
Freeland Community School District
Fremont Public School District
Fruitport Community Schools
Fulton Schools
Gabriel Richard Catholic High School
Galesburg-Augusta Community Schools
Gaylord Community Schools
Gibraltar School District
Gladwin Community Schools
Glen Lake Community Schools
Gobles Public School District
Godwin Heights Public Schools
Grand Blanc Community Schools
Grand Haven Area Public Schools
Grand Ledge Public Schools
Grand Rapids Christian High School
Grand Rapids Ellington Academy
Grand Rapids Public Schools
Grandville Public Schools
Grass Lake Community Schools
Greenville Public Schools
Grosse Ile Township Schools
Grosse Pointe Public Schools
Gull Lake Community Schools
Hamilton Community Schools
Hancock Public Schools
Harbor Beach Community Schools
Harper Creek Community Schools
Harrison Community Schools
Hart Public School District
Hartford Public School District
Hartland Consolidated Schools
Haslett Public Schools
Hastings Area School District
Hemlock Public School District
Hesperia Community Schools
Hillsdale Community Schools
Holland Christian High School
Holland City School District
Holly Area School District
Holt Public Schools
Honey Creek Community School
Hopkins Public Schools
Houghton Lake Community Schools
Houghton-Portage Township Schools
Howell Public Schools
Hudson Area Schools
Huron School District
Huron Valley Lutheran High School
Huron Valley Schools
Ida Public School District
Imlay City Community Schools
Ingham ISD
Interlochen Arts Academy
Ionia Public Schools
Iron Mountain Public Schools
Ishpeming Public School District
Island City Academy
Ithaca Public Schools
Jackson Public Schools
Jefferson Schools (Monroe)
Genesee County Schools
Jenison Public Schools
Joseph K. Lumsden Bahweting Anishnabe Academy
Kalamazoo Christian High School
Kalamazoo Public School District
Kalkaska Public Schools
Kearsley Community Schools
Kelloggsville Public Schools
Kenowa Hills Public Schools
Kensington Woods High School
Kent City Community Schools
Kentwood Public Schools
Keystone Academy
Kingston Community School District
Lake City School District
Lakeview Public Schools
Lakeview Sch. District (Calhoun)
Lakeview Sch. District (Berrien)
Lansing Catholic Central High School
Lansing Christian School
Lawrence Public School District
Lawton Community School Dist.
Leland Public School District
Lenawee Christian School
Lenawee ISD
Leslie Public Schools
Life Tech Academy
Litchfield Community Schools
Livonia Public Schools
Ludington Area School District
Lumen Christi High School
Lutheran High School South
Mackinac Island Public Schools
Mackinaw City Public Schools
Madison Public Schools (Oakland)
Manchester Community Schools
Manistee Area Schools
Manistee Catholic Central Schools
Manistique Area Schools
Marian High School
Marlette Community Schools
Marquette Area Public Schools
Marshall Public Schools
Martin Luther High School
Mason Public Schools (Ingham)
Mattawan Consolidated School
Mayville Community School Dist.
Mendon Community School Dist.
Menominee Area Public Schools
Michigan Center School District
Michigan Islamic Academy
Michigan Virtual Charter Academy
Midland Academy of Advanced and Creative Studies
Midland Public Schools
Milan Area Schools
Millington Community Schools
Monroe Public Schools
Montabella Community Schools
Muskegon Catholic Central High School
Negaunee Public Schools
New Life Christian Academy
Niles Community School District
North Branch Area Schools
North Dickinson County Schools
North Muskegon Public Schools
Northport Public School District
Northview Public School District
Northville Public Schools
Norway-Vulcan Area Schools
Notre Dame Preparatory School
Novi Community School District
Oakland FlexTech Academy
Oakridge Public Schools
Ojibwe Charter School
Okemos Public Schools
Olivet Community Schools
Onekama Consolidated Schools
Onsted Community Schools
Ontonagon Area Schools
Orchard View Schools
Ottawa Area Schools
Ovid-Elsie Area Schools
Oxford Community Schools
Pansophia Academy
Paramount Charter Academy
Paw Paw Public School District
Peck Community School District
Pellston Public Schools
Pennfield Schools
Perry Public School District
Pewamo-Westphalia Community Schools
Pickford Public Schools
Pinckney Community Schools
Plainwell Community Schools
Plymouth Christian Academy
Plymouth-Canton Community Schools
Port Huron Area School District
Portage Public Schools
Porterville Public Schools
Prevail Academy
Quincy Community School Dist.
Rapid River Public Schools
Reed City Area Public Schools
Reeths-Puffer Schools
Regina High School
Richmond Community Schools
River Valley School District
Riverside Academy
Riverview Community School District
Rochester Community School District
Rockford Public Schools
Rogers City Area Schools
Romeo Community Schools
Roscommon Area Public Schools
Rudyard Area Schools
Sacred Heart Academy
Saginaw City School District
Saginaw Township Community Schools
Saline Area Schools
Sand Creek Community Schools
Sandusky Community School District
Saranac Community Schools
Saugatuck Public Schools
Sault Ste. Marie Area Schools
School District of the City of Royal Oak
Schoolcraft Community Schools
Shelby Public Schools
Shepherd Public School District
Shiawassee Regional ESD
Shrine High School
South Christian High School
South Haven Public Schools
South Lyon Community Schools
South Redford Virtual Shared Time Program
Southfield Public School District
Southgate Community School District
Sparta Area Schools
Spring Lake Public Schools
St. Catherine of Siena Academy
St. Charles Community Schools
St. Clair County RESA
St. Ignace Area Schools
St. Joseph County ISD
St. Joseph Public Schools
St. Thomas School
Standish-Sterling Community Schools
Stockbridge Community Schools
Sturgis Public Schools
Summerfield School District
Superior Central Schools
Suttons Bay Public Schools
Swan Valley School District
Swartz Creek Community Schools
Taylor Preparatory High School
Tecumseh Public Schools
Thornapple Kellogg School Dist.
Three Rivers Community Schools
 Traverse City Area Public Schools
Trenton Public Schools
Tri County Area Schools
Troy School District
Ubly Community Schools
Union City Community Schools
Unionville-Sebewaing Area S.D.
Unity Christian High School
Utica Community Schools
Vanderbilt Area Schools
Vandercook Lake Public Schools
Vassar Public Schools
Vicksburg Community Schools
Walkerville Public Schools
Walled Lake Consolidated Schools
Warren Woods Public Schools
Washtenaw Christian Academy
Washtenaw ISD
Watervliet School District
Waverly Community Schools
Wayne-Westland Community School District
Webberville Community Schools
Wellspring Preparatory High School
West Branch-Rose City Area Schools
Zeeland Public Schools
# Exhibit 2. 2015-16 Online Course Titles Offered by MVS to Michigan Schools

**Agriculture, Food, and Natural Resources**
- Veterinary Science

**Business and Marketing**
- Accounting (A)
- Accounting (B)
- Business Ethics
- Entrepreneurship
- Hospitality and Tourism
- Sports and Entertainment

**Communications and Audio/Visual Technology**
- Journalism

**Computer and Information Sciences**
- AP Computer Science A (A)
- AP Computer Science A (B)
- Game Design
- Java Programming
- Microsoft Office 2013
- Social Media
- Visual Basic.Net Programming
- Web Design Basics HTML

**Engineering and Technology**
- Bioethics

**English Language and Literature**
- AP English Lang. & Comp. (A)
- AP English Lang. & Comp. (B)
- AP English Lit. & Comp. (A)
- AP English Lit. & Comp. (B)
- Composition - Advanced
- Composition - Beginning
- English 6 (A)
- English 6 (B)
- English 7 (A)
- English 7 (B)
- English 8 (A)
- English 8 (B)
- English 9 (A)
- English 9 (B)
- English 10 (A)
- English 10 (B)
- English 11 (A)
- English 11 (B)
- English 12 (A)
- English 12 (B)
- Mythology and Folklore
- Reading (6-8)

**English Language and Literature (Cont.)**
- Reading
- World Literature

**Fine and Performing Arts**
- American Film Survey
- AP Art History (A)
- AP Art History (B)
- Art Appreciation
- Digital Photography
- Directors of the Golden Age
- In Search of Cyrano
- Music Appreciation

**Foreign Language and Literature**
- American Sign Language 1 (A)
- American Sign Language 1 (B)
- American Sign Language 2 (A)
- American Sign Language 2 (B)
- AP French (A)
- AP French (B)
- AP Spanish (A)
- AP Spanish (B)
- Chinese 1 (A)
- Chinese 1 (B)
- Chinese 2 (A)
- Chinese 2 (B)
- Chinese 3 (A)
- Chinese 3 (B)
- Chinese 4 (A)
- Chinese 4 (B)
- French 1 (A) (6-8)
- French 1 (B) (6-8)
- French 1 (A)
- French 1 (B)
- French 2 (A) (6-8)
- French 2 (B) (6-8)
- French 2 (A)
- French 2 (B)
- French 3 (A)
- French 3 (B)
- French 4 (A)
- French 4 (B)
- German 1 (A) (6-8)
- German 1 (B) (6-8)
- German 1 (A)
- German 1 (B)
- German 2 (A) (6-8)
- German 2 (B) (6-8)
- German 2 (A)
- German 2 (B)
- German 3 (A)
- German 3 (B)

**Foreign Language and Literature (Cont.)**
- German 4 (A)
- German 4 (B)
- Japanese 1 (A)
- Japanese 1 (B)
- Japanese 2 (A)
- Japanese 2 (B)
- Latin 1 (A)
- Latin 1 (B)
- Latin 2 (A)
- Latin 2 (B)
- Latin 3 (A)
- Latin 3 (B)
- Spanish 1 (A) (6-8)
- Spanish 1 (B) (6-8)
- Spanish 1 (A)
- Spanish 1 (B)
- Spanish 2 (A) (6-8)
- Spanish 2 (B) (6-8)
- Spanish 2 (A)
- Spanish 2 (B)
- Spanish 3 (A)
- Spanish 3 (B)
- Spanish 4 (A)
- Spanish 4 (B)

**Health Care Sciences**
- Medical Terminology

**Life and Physical Sciences**
- Anatomy & Physiology (A)
- Anatomy & Physiology (B)
- AP Biology (A)
- AP Biology (B)
- AP Chemistry (A)
- AP Chemistry (B)
- AP Environmental Science (A)
- AP Environmental Science (B)
- AP Physics 1 (A)
- AP Physics 1 (B)
- AP Physics C - Mechanics (A)
- AP Physics C - Mechanics (B)
- Astronomy
- Biology (A)
- Biology (B)
- Chemistry (A)
- Chemistry (B)
- Earth Science (A)
- Earth Science (B)
- Environmental Science (A)
- Environmental Science (B)
- Great Minds in Science
- Human Space Exploration
- Oceanography (A)
Life and Physical Sciences (Cont.)
Oceanography (B)
Physical Science (A)
Physical Science (B)
Physics
Physics (A)
Physics (B)
Science 6 (A)
Science 6 (B)
Science 7 (A)
Science 7 (B)
Science 8 (A)
Science 8 (B)
Science Tracks

Mathematics
Algebra 1
Algebra 1 (A)
Algebra 1 (B)
Algebra 2 (A)
Algebra 2 (B)
AP Calculus AB (A)
AP Calculus AB (B)
AP Calculus BC (A)
AP Calculus BC (B)
AP Statistics (A)
AP Statistics (B)
Calculus (A)
Calculus (B)
Geometry (A)
Geometry (B)
Math Tracks
Mathematics 6 (A)
Mathematics 6 (B)
Mathematics 7 (A)
Mathematics 7 (B)
Mathematics 8 (A)
Mathematics 8 (B)
Mathematics of Baseball
Personal Finance (A)
Personal Finance (B)
Pre-Algebra (A)
Pre-Algebra (A) - Numbers
Pre-Algebra (B)
Pre-Calculus (A)
Pre-Calculus (B)
Probability and Statistics (A)
Probability and Statistics (B)
Trigonometry

Miscellaneous
Career Planning
Careers - Find Your Future
Employability Skills

Miscellaneous (Cont.)
Leadership Skills Development
Leadership Skills Develop. (A)
Leadership Skills Develop. (B)
Study Skills

Physical, Health, and Safety Education
Health
Personal Fitness

Public, Protective, and Government Services
Forensic Science - Intro
Forensic Science - Advanced

Religious Education and Theology
World Religions

Social Science and History
Anthropology (A)
AP Macroeconomics
AP Microeconomics
AP Psychology
AP U.S. Government & Politics
AP U.S. History (A)
AP U.S. History (B)
AP World History (A)
AP World History (B)
Archaeology
Civics
Criminology
Economics
History of the Holocaust
Native American History
Philosophy
Psychology
Sociology (A)
Sociology (B)
U.S. History & Geography (A)
U.S. History & Geography (B)
U.S. History (B)
U.S. History 8 (A)
U.S. History 8 (B)
World Cultures 6 (A)
World Cultures 6 (B)
World Geography 7 (A)
World Geography 7 (B)
World History & Geography (A)
World History & Geography (B)
World History (B)
### Agriculture, Food, and Natural Resources

<table>
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<th>Pass Rate</th>
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### Business and Marketing

<table>
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<td>Accounting (A)</td>
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<td>Business Ethics</td>
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<td>Entrepreneurship</td>
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<tr>
<td>Hospitality and Tourism</td>
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<tr>
<td>Sports and Entertainment</td>
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### Communications and Audio/Visual Technology

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<th>Count</th>
<th>Pass Rate</th>
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<tr>
<td>Journalism</td>
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### Computer and Information Sciences

<table>
<thead>
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<td>AP Computer Science A (B)</td>
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<tr>
<td>Game Design</td>
<td>211</td>
<td>74.4%</td>
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<tr>
<td>Java Programming</td>
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<td>84.2%</td>
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<tr>
<td>Microsoft Office 2013</td>
<td>49</td>
<td>73.5%</td>
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<tr>
<td>Social Media</td>
<td>118</td>
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<tr>
<td>Visual Basic.Net Programming</td>
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<td>79.8%</td>
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<tr>
<td>Web Design Basics HTML</td>
<td>132</td>
<td>88.6%</td>
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### Engineering and Technology

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Count</th>
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<tbody>
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<td>Bioethics</td>
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### English Language and Literature

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Count</th>
<th>Pass Rate</th>
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<tbody>
<tr>
<td>AP English Lang. &amp; Comp. (A)</td>
<td>53</td>
<td>94.3%</td>
</tr>
<tr>
<td>AP English Lang. &amp; Comp. (B)</td>
<td>52</td>
<td>94.2%</td>
</tr>
<tr>
<td>AP English Lit. &amp; Comp. (A)</td>
<td>60</td>
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<tr>
<td>Composition - Advanced</td>
<td>27</td>
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<tr>
<td>Composition - Beginning</td>
<td>108</td>
<td>86.1%</td>
</tr>
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<td>English 6 (A)</td>
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<td>66.7%</td>
</tr>
<tr>
<td>English 6 (B)</td>
<td>&lt;10</td>
<td>75.0%</td>
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<tr>
<td>English 7 (A)</td>
<td>10</td>
<td>90.0%</td>
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<tr>
<td>English 7 (B)</td>
<td>11</td>
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### English Language and Literature (Cont.)

<table>
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<th>Count</th>
<th>Pass Rate</th>
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<tbody>
<tr>
<td>English 9 (A)</td>
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<td>103</td>
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<td>English 10 (A)</td>
<td>112</td>
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<tr>
<td>English 11 (A)</td>
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<tr>
<td>English 11 (B)</td>
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<tr>
<td>English 12 (A)</td>
<td>197</td>
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<td>English 12 (B)</td>
<td>189</td>
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<tr>
<td>Mythology and Folklore</td>
<td>101</td>
<td>94.1%</td>
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<tr>
<td>Reading (6-8)</td>
<td>&lt;10</td>
<td>83.3%</td>
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<tr>
<td>Reading</td>
<td>44</td>
<td>81.8%</td>
</tr>
<tr>
<td>World Literature</td>
<td>54</td>
<td>92.6%</td>
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### Fine and Performing Arts

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Count</th>
<th>Pass Rate</th>
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<tbody>
<tr>
<td>American Film Survey</td>
<td>287</td>
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<tr>
<td>AP Art History (A)</td>
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<td>AP Art History (B)</td>
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<tr>
<td>Art Appreciation</td>
<td>136</td>
<td>80.1%</td>
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<tr>
<td>Digital Photography</td>
<td>193</td>
<td>93.3%</td>
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<tr>
<td>Directors of the Golden Age</td>
<td>75</td>
<td>85.3%</td>
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<tr>
<td>In Search of Cyrano</td>
<td>&lt;10</td>
<td>66.7%</td>
</tr>
<tr>
<td>Music Appreciation</td>
<td>252</td>
<td>84.1%</td>
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### Foreign Language and Literature

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Count</th>
<th>Pass Rate</th>
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<tbody>
<tr>
<td>American Sign Language 1 (A)</td>
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<td>American Sign Language 1 (B)</td>
<td>552</td>
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<tr>
<td>American Sign Language 2 (A)</td>
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<tr>
<td>AP French (A)</td>
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<tr>
<td>AP French (B)</td>
<td>&lt;10</td>
<td>100.0%</td>
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<tr>
<td>AP Spanish (A)</td>
<td>21</td>
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<tr>
<td>AP Spanish (B)</td>
<td>13</td>
<td>76.9%</td>
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<tr>
<td>Chinese 1 (A)</td>
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<td>Course Title</td>
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### Physical, Health, and Safety Education

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### Public, Protective, and Government Services

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### Religious Education And Theology

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### Social Sciences and History

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