



Year 2, Quarter 4 Report

The Context of SHAPE

The Schools and Higher Education Advancing Public Education (SHAPE) program began in 2012 with the goal of creating a collaborative model between public schools and universities to improve learning and teaching across the preschool to doctorate spectrum. The second round of SHAPE extends this goal with an emphasis on 21st century learning and teaching through the following initiatives: International Baccalaureate, Dual Language Immersion, Global Competence, Early Interventions, STEM, Arts Integration, Universal Design for Learning, Professional Learning Communities, and Blended Learning. Innovation through each of these initiatives is helping to shape the picture of what twenty-first century learning and teaching looks like from preschool through doctoral level education.

As SHAPE evolves, four hallmarks of twenty-first century learning in MCPS and at UM are surfacing. Each of those 21st century learning hallmarks and the SHAPE initiatives that support them are listed in the table below.

21 Century Learning Hallmarks	SHAPE Initiatives
Inquiry-based learning that helps solve problems in novel, creative ways	International Baccalaureate STEM Arts Integration Professional Learning Communities Blended Learning
Blended learning	Blended Learning STEM Universal Design for Learning Early Interventions
Expanded cognitive flexibility through dual language learning and global awareness	Dual Language Immersion Global Competence International Baccalaureate
Equity	Early Interventions Universal Design for Learning Professional Learning Communities Blended Learning International Baccalaureate Arts Integration

Initiative Updates



Regionally, Missoula has been a hot spot for International Baccalaureate education over the fourth quarter. At UM, Dr. Lucila Rudge co-taught the second course in the three-course IB series, Assessment and Learning in IB Programs, with Cameron Johnson from Big Sky High School and Jeff Kessler from the Missoula International School (MIS) to a cohort of 7 graduate students. Rudge placed 2 students at Hellgate High School and 2 students at Big Sky High School, 1 student at Lewis and Clark, and 2 students at MIS for the clinical component of the program.

Dr. Rudge has also proposed a fully online self-support version of the IB Educator Certificate for in-service teachers around the world; this proposal is awaiting approval. To complement and highlight the work in IB being done around the state, particularly locally, Dr. Rudge has begun planning a symposium on IB, “What is International Baccalaureate education, and why are so many schools adopting IB programs?,” which will be held at UM on the evening of 28 February. Finally, the *International Journal of Teacher Education and Professional Development* has accepted Dr. Rudge’s manuscript, “A self-study of factors affecting the collaboration between university and school professionals,” for publication in early 2018. Dr. Rudge has another manuscript under review, which she co-authored with a graduate student.

MCPS has served as an instructional proving ground for Montana schools interested in IB, as local teachers continue to deepen and broaden their knowledge of IB. Lewis and Clark Elementary School hosted visits from Ophir Elementary in Big Sky, Fair-Mont-Egan School in Kalispell, and from Clark Fork School and Rattlesnake Elementary in Missoula to see a Primary Years Program in action. Coupled with this, IB schools in the district have supported teachers’ professional development, sending staff to a workshop in Denver and holding a book study on developing teaching strategies grounded in inquiry. Across the district, leaders have met regularly to implement the IB Action Plan and refine as necessary. Part of this work has entailed creating policies and agreements that are aligned with the International Baccalaureate Organization and that are publicly available. Finally, IB coordinators at Big Sky and Hellgate High Schools meet monthly with Diploma Candidates to meet the goals of the IB Learner Profile, which includes traits such as being an inquirer, a thinker, principled, caring, balanced, and a risk-taker, among others. High School students have also creating a scholarship fund for student who cannot afford to pay for the exam fees.



The Dual Language Immersion (DLI) initiative has been very active this quarter. As DLI expands across grade levels at Paxson Elementary School, an after-school Spanish Club for students new to Paxson. Facilitated jointly by 8 UM undergraduates under Dr. Pablo Requena's supervision and Paxson staff, the Spanish Club has served 11 students. Because of their experience participating in Paxson's Spanish Club, several undergraduates have now expressed interest in pursuing teaching as a career path. To further support language learners and learn from their seasoned colleagues, teachers at Paxson have participated in instructional rounds. With this, Paxson will be using the new STAR Spanish Reading assessment as part of its Universal Screening test to measure students' learning in both Spanish and English literacy.

Efforts to expand DLI within MCPS and around the state are underway. Washington Middle School has begun to prepare for Spanish Immersion students who will be entering 6th grade in the 2018-2019 academic year. To audiences across the state, Dr. Brayko co-presented two workshops on language learning at MEA-MFT, the annual teacher conference. With graduate student Navin Mahabir, Dr. Brayko highlighted effective practices in language instruction; with UM graduate and literacy specialist Jennifer Jilot (Chippewa Cree), Dr. Brayko shared research-based practices in building students' vocabularies. These two workshops resulted in the construction of a Montana listserv for educators interested in language learning and teaching.



In the fourth quarter, the University of Montana's Franke Global Leadership Initiative partnered with Blackstone LaunchPad on campus to redesign and deliver the Global Summer Institute to area high school students, UM undergraduates, and community partners in 2018. Also in this quarter, the Franke Global Leadership Initiative worked with 3 Big Sky and 2 Hellgate High School seniors on study abroad programs for their first year of college. This work has involved establishing meetings between students and their families and UM faculty in philosophy, computer science, biochemistry, environmental studies, physics, and pre-medicine to ensure students are enrolled in robust courses that will easily transfer into their degree programs at UM when they return.

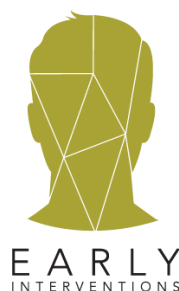


Many of the activities in STEM have been relatively quiet as Dr. Lisa Blank was in Ukraine on a Fulbright Fellowship in the fourth quarter. Even so, the computer science endorsement program at UM is up and running. In the spring of 2018, Dr. Blank will work with the Learning and Belonging Preschool to refine and launch Early STEM offerings for the Elementary and Early Childhood teacher preparation programs.



The fourth quarter has been especially busy in the Arts Integration initiative. Activities focused on outreach, planning for the Arts Integration Conference to be held at UM in June 2018, developing an STEAM-focused school within MCPS, and examining the growth of Arts Integration in MCPS over the last 6 years. Outreach activities include the presentation of 9 workshops on topics ranging from filmmaking to dance to drama at MEA-MFT in October to offering workshops for third grade teachers in integrating dance and science in November and December, facilitated by Jordan Dehline Burt, a MCPS teaching artist. Planning for the Arts Integration Conference in 2018 is well underway and will continue into the first and second quarters of 2018.

To further buttress STEAM integration, MCPS has committed to transforming Chief Charlo Elementary School into a model STEAM school. A team of teachers and Principal Vinnie Giammona will participate in site visits at schools in southern Nevada to consider frameworks for STEAM schools. Coupled with this, all K-8 schools in MCPS have completed the School Arts Mapping Tool to identify and reflect on student opportunities in the arts over the last 6 years. The District will share its results with the Kennedy Center and the SPARK! Board in 2018.



Activities within the Early Interventions initiative during the fourth quarter focused on research. Dr. Trent Atkins has been working with the Missoula Interfaith Collaborative and the United Way to connect directly with families of pre-K children. These new connections have provided information necessary for Dr. Atkins to tailor his researcher protocol, refine the pre-K assessment, and create targeted outreach materials for families.

Dr. Atkins' work with the Missoula Interfaith Collaborative will continue in 2018.

Within MCPS kindergarten teachers at Rattlesnake Elementary have continued Parent Teacher Home Visits, while teachers at Franklin (1st grade) and Paxson Elementary (all grade levels) have implemented Family Academic Collaborative Teams (formerly Academic Parent Teacher Teams). In survey data collected from families who participated in the Parent Teacher Home Visits, 97% of respondents noted their child "enjoyed" or "really enjoyed" the home visit, while 79% of respondents found the home visit to be "helpful" or "very helpful." One parent wrote, "I thought the visit was so helpful in decreasing our child's nerves. We feel blessed to have had this opportunity." Another parent wrote, "It was perfect. I think it's an amazing thing for our kids to have such deep commitment from their teachers. Thank you!" Two parents through that meetings at school should have been more useful.

The Family Academic Collaborative Team meetings at Franklin and Paxson are used in place of traditional parent-teacher conferences. In addition to providing information on how their students were doing, teachers shared with parents the significance of foundational skills, such as learning sight words when learning how to read, and provided families with games to play at home to buttress students' learning in school. Informal feedback collected from parents indicates that the kindergarten, 1st grade, and 2nd grade Family Academic Collaborative Team meetings were useful.



Universal Design for Learning (UDL) practices continue to expand throughout the region. Within MCPS, teachers have expanded their use of Read and Write for Google to make content more accessible for students. With this technology, teachers have worked with individual students and with small groups to learn another language (French at Hellgate High School), to support students with physical and/or learning disabilities, and to expand titles used in English Language Arts classes.

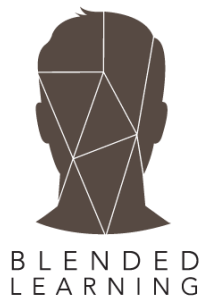
In addition to MCPS incorporation of tools that amplify students' access to content, Dr. Morgen Alwell has expanded her outreach in training educators in UDL at UM and regionally. Along with her regular course offering, Inclusion and Collaboration, Dr. Alwell led a faculty inquiry project collaboratively with two doctoral students on how to incorporate the principles and practices of UDL in university classes. Graduate teaching assistants and faculty from across UM, Bitterroot College, and Missoula College participated in the project, designing responsive and fresh ways to teach their courses. Likewise, Dr. Alwell began a year-long professional development program in UDL, differentiated instruction, and co-teaching for faculty at St. Joseph's School, which serves pre-K-8 students. She has already led two workshops with two more planned for the spring semester. As part of her outreach activities, Dr. Alwell supervised a

student teacher at Cold Spring Elementary School, and she submitted a 3-hour symposium proposal to the Montana Council for Exceptional Children (M-CEC) conference in 2018, which was accepted. She will be presenting with two UM graduates in March.



Within MCPS, schools are coordinating with Dr. Elise Guest's office to learn how to examine data from the Smarter Balanced Assessment Continuum, the ACT, and the STAR Early Literacy and Reading assessments and use those data to inform instructional practices. With data, teachers are developing and testing common formative assessments and measurement tools to use with students. With instructional coaches, teachers representing different grade levels are participating in 5 distinct book studies across the district with the goal of improving their practice to improve student achievement.

In the fourth quarter, SHAPE research fellow David Levine and Dr. Adrea Lawrence designed a series of survey and focus group questions to investigate the journey to becoming a teacher. Levine and Lawrence have been working collaborative with Dr. Guest to design questions that get at a range of experiences in the professional development of novice teachers based on interviews Guest conducted with MCPS teachers. Levine and Lawrence will submit an Internal Review Board application early in the spring of 2018 to conduct both survey and focus group data collection with new teachers.



During the fourth quarter, the Montana Digital Academy (MTDA) began enrolling in-service teachers in the final SHAPE Blended Learning course, which will begin at the end of January, 2018. To date, a total of 12 teams, 46 teachers and 12 administrators, have enrolled from Cold Springs Elementary, Charles M. Russell High School, Columbia Falls High School, Corvallis Middle School, Elder Grove School, the Huntley Project, Lowell Elementary School, Meadow Hill Middle School, the Montana School for the Deaf and the Blind, West Valley School, and the White Sulphur Springs Public Schools.

MTDA has also been designing an original credit, personalized learning program for students in unique circumstances, which will launch in year 3 of the SHAPE grant. The personalized learning program features adaptive learning tools that adjust to students' mastery of content. Students in the personalized learning program will be able to take 1-2 courses at a time.