MONTANA UNIVERSITY SYSTEM BOARD OF REGENTS
Executive Summary - Developmental Education Reform Task Force Final Report
May 17, 2013

PRESENTED BY: Sharon O'Hare, Assistant President for Student Success, University of Montana
Dr. John Cech, Deputy Commissioner for Two-Year and Community College Education
Dr. Neil Moisey, Interim Deputy Commissioner, Academic, Research and Student Affairs
on behalf of the membership of the Commissioner’s Developmental Education Reform Task Force

Preface: Remembering Students
It is the express wish of the Subcommittee on Placement and Assessment that this preface be included in the Executive Summary report to the Board of Regents.
Assessment/Placement Models Subcommittee, Dr. Doug Downs, Chair.

In much literature advocating for developmental education reform is a missing element: students and their actual backgrounds and experiences (see, e.g., Burdman 2012, Core Principles 2012). Developmental students are often so infrequently and poorly described that in their place we find a monolithic, idealized recent high-school graduate who doesn’t actually need developmental education and simply scored a little low on one test one day. This hapless student, basically-ready-for-college and really just needing a little extra help, is prevented by systemic forces in labyrinthine institutions from progressing to a degree and, discouraged, drops out. This narrative fuels an image of dev-ed as too expensive, largely unnecessary, and more likely impeding success than fostering it.

In contrast, our research on placement in the MUS and nationally has often found this idealized narrative to be incomplete, failing to capture both all the reasons students might not complete degrees and the true value of their developmental courses even when these require re-taking or result in non-completion. These other stories, involving students’ life circumstances and individual educability, are not only difficult to track by the quantitative means that reform conversations overwhelmingly favor, but are also inconvenient to the dominant narrative that the system is broken because it is inefficient. Many of our stories—similar to those conveyed in a recent Chronicle of Higher Education article on dev-writing (Hoover and Lipka 2013)—are of “inefficient” lives to which the State of Montana has, nevertheless, committed to provide access to higher education.

Silencing such student experiences and stories is convenient for proponents of reform intended to maximize system throughput (students attaining degrees with the greatest possible efficiency as measured by time and dollars) by minimizing preparatory coursework with its increased time to degree and expenses. It is less clear, however, that the mission of providing open access to higher education for all students remains a primary goal of these national reform efforts. Because we take as axiomatic the MUS’s commitment to open access, we strive to remember and to value, along with that loud narrative of dev-ed failure, the quieter, particularized stories of actual students—where they come from, what their dev-ed needs are, and what dev-ed systems will best honor the MUS commitment to open access. We strive to remember students for whom the odds of completing a degree are, by life circumstance, very
long, and to design systems optimized for them, not simply for students most likely to succeed from the outset.

We remember, for example, that while to reformers the “failure” to complete 30 credit hours in the first year of coursework is a troubling sign, to advisors and to students who never believed they could even be admitted to college, completing 12 hours that first year may constitute a triumph. We remember that “efficiency” means creating the best match of resources to individual students, not assuming that the next great solution will work for all students any better than the last great solution did. And we remember that people, individual students, measure the success and quality of their education by a wider variety of criteria than most proponents of reform-for-efficiency wish to. We have proceeded with these memories in mind, and encourage those who use this report to do so as well: to learn about and remember the actual people to whom our developmental systems are designed to open the MUS.

RELATIONSHIP OF DEVELOPMENTAL EDUCATION REFORM TO THE MUS STRATEGIC PLAN:

- **Goal 1 Access & Affordability**
  Increase the overall educational attainment of Montanans through increased participation, retention and completion rates in the Montana University System (MUS).

- **Goal 3: Efficiency & Effectiveness**
  Improve institutional and system efficiency and effectiveness.

HISTORY OF THE TASK FORCE

In October of 2012, Commissioner Clayton Christian formed the Developmental Education Reform Task Force (DERTF). See Appendix A for full membership roster. The group was charged with the review of developmental education practices throughout the MUS and called upon to make recommendations for the System to become the premier purveyor of developmental education in more streamlined and efficient ways, resulting in greater student success.

Through data and research in structure and policy, the DERTF was asked to holistically examine the role that developmental education plays in overall student success by completing the following activities:

1. Conduct baseline analysis of Montana Developmental Education Programs.
2. Utilize data from statewide ACT testing to inform planning and high school intervention opportunities.
3. Analyze existing national research and promising practices.
4. Analyze promising existing Montana developmental education reform and existing pilot project efforts.
5. Research prospective grant/external funding options to support reform efforts.
6. Develop recommendations to be presented to the Board of Regents (BOR) in May 2013, for reform based on local and national best practices and research. Those recommendations were to specifically address:
   - Establishing a consistent approach system-wide for providing developmental education.
   - Creating consistency of faculty status of developmental education instructors.
   - Creating consistency of oversight of developmental education courses/services to the two-year campuses.
   - Standardizing reporting on developmental education success and student progression through college level course work via an annual report to the BOR.
PROCESS
The first meeting of the DERTF was on December 17, 2012, co-chaired by Deputy Commissioners John Cech and Neil Moisey. During the inaugural meeting, Dr. Bruce Vandal from Complete College America (CCA) presented seven core principles for transforming remedial education, which were adopted by the Task Force to be used as guiding principles when formulating the recommendations.

The CCA Core Principles
Principle 1 Completion of a set of gateway courses is a critical measure of success toward college completion.
Principle 2 Enrollment in gateway courses should be the default placement for most students.
Principle 3 The content in required gateway courses should align with a student’s academic program of choice.
Principle 4 Students needing additional support should be provided assistance within the context of the gateway college-level course—as a co-requisite, not a pre-requisite.
Principle 5 Students with more significant learning challenges need clear routes to technical training and jobs with embedded academic support.
Principle 6 Multiple measures should be used to provide more guidance in the placement of students in gateway courses aligned to desired programs of study.
Principle 7 Students should start a program of study in their first year.

At the March 8, 2013 meeting, the BOR also adopted the CCA Seven Core Principles for transforming remedial education.

The Task Force carried out its work by dividing into five subcommittees to investigate five broad areas of developmental education reform:
1. Defining College Readiness (Dr. Heidi Pasek, Chair)
2. Assessment/Placement Models (Dr. Doug Downs, Chair)
3. Developmental Education Models that Work for Montana (Leanne Frost, Chair)
4. Student Support, Advising and Implementation (Anneliese Ripley, Chair)
5. Standards and Consistency Across the System (Sharon O’Hare, Chair)

Comprehensive reports from the first four subcommittees are attached as Appendices B-E. The Task Force decided the fifth subcommittee report, Standards and Consistency across the System, should serve as the Executive Summary, as it represents the findings and recommendations arising from the first four reports.

RECOMMENDATIONS FOR IMPROVING COLLEGE COMPLETION FROM COMPLETE COLLEGE AMERICA (CCA)

CCA 1. Deliver remedial instruction for gateway college-level course content — as a co-requisite, not a pre-requisite.
   • Single Semester Co-Requisite
   • One-Year Course Pathway
   • Embedded or Parallel Remediation in Career Technical Programs

CCA 2. When possible and appropriate, and especially at the two-year and community college campuses, create structured, block schedule programs that enable students to balance school, family and work.

CCA 3. Implement credit caps to ensure most programs adhere to the 60 credit/Associate Degree, 120 credit/Bachelor’s Degree standard.
CCA 4. Incent students to take 15 credits per semester, to stay on track for on time graduation.

CCA 5. Create smarter, default academic pathways to postsecondary credentials.
- Students who are Undeclared choose a “meta-major” when they enroll.
- Semester by semester course schedules/major maps for chosen major.
- Define Milestone courses for majors and track students to ensure they stay on course.
- Use technology to track student progress and flag students who veer off course.

CCA 6. Set the Conditions for Reform
- Set completion goals
- Use metrics to measure progress
- Create a state plan
- Performance Funding

CCA 7. Implement high impact, large scale “game changer strategies
- Co-Requisite Remediation
- Block Scheduling
- Credit Caps
- Incentives for On Time Graduation
- Default Pathways to Credentials

In most instances, the Task Force used the CCA recommendations for improving college completion as a jumping off point for the development of recommendations specific to developmental education reform. A significant qualification to that statement is that the Task Force recognizes there will always be students who need one or more semesters of stand-alone developmental coursework. It would be to these students’ detriment to initially place them into a college-level course.

TASK FORCE RECOMMENDATIONS FOR REFORMING DEVELOPMENTAL EDUCATION
Following are the recommendations from the Task Force:

College Readiness
1. MUS and OPI work together to develop common goals and strategies related to communication regarding College Readiness, including:
   - First time high school freshmen going to college;
   - Integration into the MUS/OPI high school-to-college “Big Sky Pathways” Carl D. Perkins initiative;
   - Nontraditional adult learners, including adults pursuing high school equivalency;
   - Integration with Montana Career Information System (a web-based career and educational advising system for students); and
   - Joint communication with parents, teachers, counselors, and students regarding college readiness expectation. Now that all high school juniors will take the ACT, MUS should provide guidance on how to interpret the scores with regard to college readiness, and suggest coursework to take during the senior year to increase college readiness.
**Placement and Assessment**

2. Create a common placement system using multiple measures.

Discussion:
The Task Force found that MUS campuses use a variety of placement mechanisms to place students into developmental and college-level math and composition courses. Even those campuses using the same placement mechanism have different cut-off scores for the same course. There is little to no reciprocity of placement; if a student takes a placement test on one campus and then transfers to another MUS institution, they may be required to take the receiving campus’ placement test. Now that every developmental and college-level math course has defined common learning outcomes, a common placement mechanism used throughout the system is both feasible and advisable.

**Developmental Ed Course Redesign**

3. Create Developmental Education/Gateway Discipline Councils (reading, writing and math) with the goal to increase communication and scalability of best practices and course redesign pilots.

4. Create consistency across the system by requiring that all developmental education be taught by college faculty or part-time faculty whose supervision is integrated into the academic structure. The goal is to increase communication, align qualifications, and encourage opportunities for developmental education faculty to also teach gateway courses assuring vertical integration.

**Student Success and Advising**

5. Create a requirement for campus long-term tracking of students enrolled in developmental courses to gateway courses and on to completion using multiple indicators of success.

Discussion:
The Task Forces recommends each college develop a plan that engages developmental students from their first contact with the college through the completion of their remedial sequence and their entry into college level work. Colleges should identify how they are helping students plan for success through their:

- assessment and placement,
- orientations,
- academic goal setting and planning, and/or
- the registration process.

Colleges will demonstrate how they initiate success for students by providing:

- accelerated or fast track developmental education,
- a first year experience,
- a student success course, and/or
- learning communities.

Colleges will also describe the intentional strategies they have in place to sustain success, such as:

- class attendance,
- alert and intervention programs,
- experiential learning beyond the classroom,
- tutoring, and
- supplemental instruction.

What a college offers students depends on:

- the resources and services that a college determines can be effective for their students, and
- can be provided given the resources of the college.
6. Create policy strongly recommending all entering students who are placed into a developmental math or writing course register for those courses during their first semester and require they complete those initial courses by the end of the second semester. Campuses are to report to the Office of the Commissioner of Higher Education once a year regarding developmental education success and progression, including the intervention strategies being used with students who fail to successfully complete the developmental education sequence.

**Resources to Support Reform**

7. As we move into the second phase of the Performance Based Funding, recommend the BOR allocate a portion of the performance based funding resources to support developmental education reformation recommendations.

Discussion:
Research strongly links success in developmental education courses with student retention, student success in subsequent coursework, and ultimately leading to increased completions. The College Affordability Plan (CAP) commits the MUS to incorporating performance funding to increase college completions and other related outcomes aimed at accelerating time to degree.

**EXCELLENCE IN ACTION: CURRENT DEV ED REFORM SHOWING PROMISE**

- FVCC: Course acceleration. Students have opportunity to complete both M061 and M065 in one semester.
- MCC: Course acceleration. Students with appropriate COMPASS scores have the opportunity to complete WRIT 015 and WRIT 095 concurrently in one semester.
- UM Western: Removing stop-out points. M090/M095 are taught as a linked course over two blocks.
- Helena College UM: Co-requisite instead of prerequisite. Students needing dev ed in writing register for WRIT101 with WRIT 096 as a co-requisite lab.
- Gallatin College/MSU: Integrate learning with basic skills/college success program by having a student cohort take M065, WRIT 095 and COLS 100 (Effective Academic Practices).

**DEVELOPMENTAL EDUCATION REFORM PILOT PROJECTS UNDERWAY**

The different campuses are in various stages of the redesign effort. Some have well-established redesigned efforts, such as Montana State University Billings’ modularized M098 accelerated Introductory and Intermediate Algebra course which has now become part of the regular course offerings.

Others have tried a redesigned program, found it ineffective, and are now discontinuing the effort, such as Montana State University Northern’s emporium model using the computerized ALEKS system.

Others have implemented pilots this year or are planning to implement pilot programs this summer and fall. Below is a list of programs either implemented in spring 2013 awaiting results or to be implemented in fall 2013.

**Mathematics**

- Gallatin College
  - (spring) – lab and mastery-based option for M096 Survey of Algebra;
  - (fall) – M065 Pre-algebra linked with M066 Pre-algebra lab with study skills, M085 Pre-Algebra computer-based, accelerated format incorporating mastery learning; and
  - The College is also considering a non-algebra alternative for non-STEM students.
• Helena College & Great Falls College
  o Accelerating and modularizing M090 Introductory Algebra and M095 Intermediate Algebra into one M098 course.
• Helena College
  o Co-requisite M091/M121 to embed Intermediate Algebra into the College Algebra curriculum.
• Highlands College
  o Combining the computerized Hawkes Learning System with printed study guides, and
  o Possibly “flipping” the classroom, so that lectures are completed outside of class via videos, and class time is used for hands-on activities or homework.
• University of Montana Office for Student Success
  o (summer) – Optional four-week online remediation program (EdReady) with academic coaching for freshmen wanting to raise their math placement score. EdReady is a Gates Foundation-funded initiative.
• University of Montana Math Sciences Department
  o (fall)–Co-requisite, EdReady online lab requirement for students needing modest skills refresher for M105, M115 and M121.
• Missoula College
  o Considering the emporium model, which is lab based.

Writing
• Aaniiih Nakoda College, Great Falls College, Helena College, Highlands College, and possibly Missoula College and City College
  o Using a lab or co-requisite model to move more college-ready WRIT 095 Developmental Writing students directly into WRIT 101 College Composition I.

Multi-Discipline
• Fort Peck Community College, MSU Northern - Summer/Bridge/Boot Camp.
• Gallatin College, Helena College, MSU Northern - Cohort/Learning Communities.

More information about these specific programs can be found in the Individual Campus Developmental Education Summaries (Appendix A) of the Developmental Education Course Redesign Work Group Final Report to the Statewide Developmental Education Reform Task Force: Montana Office of the Commissioner of Higher Education.

CONCLUSION
The Developmental Education Reform Task Force has done more than recommend changes in policy and practices associated with the delivery of developmental education throughout the MUS. The reports from the four subcommittees, included as attachments to this Executive Summary, provide a comprehensive review of how MUS colleges and universities are currently delivering developmental education and recommend changes in the way students are assessed and placed into developmental courses.

While the Task Force recognizes the importance of students completing developmental course work in one semester so students can be mainstreamed into college level course work more quickly, the membership recognizes there are students who may need additional time. The Task Force does support continued research and pilot programs which aim to maximize student learning and retention through shortening, when appropriate, a student’s track to the completion of a gateway course. The Task Force also recommends changes in the way the two-year and four-year institutions approach developmental students. This new approach requests colleges within the system engage students at each stage of their
relationship with the college—the planning phase, their first semester, and their subsequent courses—and that each college helps students prepare for success.

Next Steps

1. Implement pilot projects to identify innovative methods of increasing students’ success in developmental education and gateway courses. These pilot projects address many of the specific recommendations within each of the developmental education reform areas: implementing models that enhance the communication and shared understanding of college readiness; implementing and assessing innovative assessment and placement models, implementing and assessing developmental education models that work for Montana, comprehensive student support, advising and implementation programs.

2. Initiate amending Board Policies based on recommendations from Task Force by May 2014.

3. Convene Developmental Education Council (DEC) to implement and coordinate the recommendations, assess pilot study outcomes and make further recommendations based on those outcomes, and to coordinate and report to the Board the MUS Developmental Education Program outcomes. The DEC will include three academic leaders (one each from MSU, UM, and a Community College), the Deputy Commissioner of Two-Year and Community College Education, and the Deputy Commissioner of Academic, Research, & Student Affairs.
Appendix A

Taskforce Membership
# Taskforce Members:

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Representing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Cracolice</td>
<td>Faculty</td>
<td>University of Montana</td>
</tr>
<tr>
<td>Bob Curre</td>
<td>Director</td>
<td>Montana Digital Academy</td>
</tr>
<tr>
<td>Doug Downs</td>
<td>Faculty</td>
<td>MSU-Bozeman</td>
</tr>
<tr>
<td>Leanne Frost</td>
<td>Director, Development &amp; Transfer</td>
<td>Great Falls College MSU</td>
</tr>
<tr>
<td>David Hall</td>
<td>College/NOW Program Coordinator</td>
<td>Montana University System</td>
</tr>
<tr>
<td>Karen Henderson</td>
<td>Faculty</td>
<td>Helena College UM</td>
</tr>
<tr>
<td>Bob Hietala</td>
<td>Dean</td>
<td>Gallatin College MSU</td>
</tr>
<tr>
<td>Jim Hirseln</td>
<td>Faculty</td>
<td>University of Montana</td>
</tr>
<tr>
<td>Karin Janssen</td>
<td>Common Course Numbering Manager</td>
<td>Montana University System</td>
</tr>
<tr>
<td>Sue Jones</td>
<td>Director, 2-Year Mission Integration</td>
<td>Montana University System</td>
</tr>
<tr>
<td>Jan Lombardi</td>
<td>Director, GEAR UP</td>
<td>Montana University System</td>
</tr>
<tr>
<td>Neil Moisey</td>
<td>Interim Dep. Commissioner, Academic, Research, &amp; Student Affairs</td>
<td>Montana University System</td>
</tr>
<tr>
<td>Tom Moore</td>
<td>Assistant Superintendent</td>
<td>Great Falls Public Schools</td>
</tr>
<tr>
<td>Sharon O’Hare</td>
<td>Assistant Vice President for Student Success</td>
<td>University of Montana</td>
</tr>
<tr>
<td>Dennis Parman</td>
<td>Dep. Superintendent</td>
<td>Office of Public Instruction</td>
</tr>
<tr>
<td>Heidi Pasek</td>
<td>Associate Dean, 2-Year</td>
<td>Great Falls College MSU</td>
</tr>
<tr>
<td>Sarah Pett</td>
<td>Faculty</td>
<td>Miles Community College</td>
</tr>
<tr>
<td>Richard Pierce</td>
<td>Academic Dept. Chair</td>
<td>City College at MSU Billings</td>
</tr>
<tr>
<td>Carole Pinnell</td>
<td>Faculty</td>
<td>Flathead Valley Community College</td>
</tr>
<tr>
<td>Anneliese Ripley</td>
<td>Dean, Outreach &amp; Research</td>
<td>University of Montana Western</td>
</tr>
<tr>
<td>Amy Verlanic</td>
<td>Director, 4-Year Technical Outreach</td>
<td>Montana Tech</td>
</tr>
</tbody>
</table>
Appendix B

Defining College Readiness Subcommittee Report
Defining College Readiness Work Group

Final Report to the
Statewide Developmental Education Reform Task Force:
Montana Office of the Commissioner of Higher Education

May 2013
Introduction and Background

It is safe to say that the United States is experiencing a college-readiness crisis. Too few of the nation’s students are ready to tackle postsecondary education without additional remediation and are required to take developmental courses as a part of their first year of college (American College Testing, 2006). In America, education has always been considered the great equalizer, with access to a public education leading to a greater quality of life for individuals and for all (Schmidt & Burroughs, 2013).

Over a decade ago, McCabe (2000) reported that 41% of entering two-year college students and 29% of all entering college students needed remediation in at least one of the basic skills of writing and mathematics. For the academic year 2010-2011, 32% of Montana’s high school graduates enrolled in remedial math or English in the fall semester immediately following graduation. Of those, 8% needed assistance with both math and English. Twenty percent needed help with math and only 3% needed remediation in English only (Montana University System, 2013).

In a nation-wide attempt to improve these numbers, Jenkins and Spence (2006) noted that, in a growing number of regions around the country, local leaders are working to more closely coordinate publicly funded education, from primary through post-secondary levels, with social services and workforce and economic development programs to produce a better-trained workforce and promote economic growth. Several states are actively supporting the efforts of these regional partnerships.

In November of 2012, to support such partnerships in the state of Montana, the Office of the Commissioner of Higher Education (OCHE), created the Montana Statewide Developmental Education Reform Task Force. The Task Force consisted of membership from across the Montana University System (MUS) and the Office of Public Instruction (OPI), with broad-based representation from the primary through postsecondary sectors of public education.

The Statewide Task Force & the Charge of the Defining College Readiness Workgroup

The Statewide Developmental Education Task Force mission is, after performing a thorough review of both existing national and MUS best practices, to develop recommendations for developmental education reform to be presented at the May 2013 Board of Regents meeting. Those recommendations should address:

- Creating a consistent, systems-wide approach for providing developmental education;
- Creating consistency of faculty status of developmental education instructors;
• Creating consistency of oversight for developmental education courses and services; and,
• Standardizing annual reporting to the Board of Regents on developmental education student success and progression through completion of college level course work.

The Task Force formed five workgroups, each with a specific charge:

• Defining College Readiness;
• Assessment/Placement Models;
• Developmental Education Models that Work for Montana; and,
• Student Support, Advising and implementation; and Standards and Consistency Across the System)

This Report is the culmination of the work of the Defining College Readiness Workgroup. Our charge was to develop a common definition (K-12 higher education) of college readiness for math and writing. This definition was to involve alignment of the Montana Common Core Standards, the Smarter Balanced Achievement Level Descriptors, and the definitions of College Readiness, with MUS and campus definitions.

The members of the Work Group were: Heidi Pasek, Chief Academic Officer, Great Falls College Montana State University; Sharon O’Hare, Assistant VP for Student Success, University of Montana-Missoula, Tom Moore, Assistant Superintendent, Great Falls Public Schools; Dennis Parman, Deputy Superintendent of Public Instruction; and Benjamin Barckholtz, Director, Academic Support Center, Montana State University-Billings.

**Links to Smarter Balanced and the Common Core State Standards**

The Smarter Balanced Assessment Consortium (Smarter Balanced) developed an interconnected system of initial achievement level descriptors (ALDs) for English language arts/literacy) and mathematics that are aligned with the Common Core State Standards (CCSS) and the Smarter Balanced assessment claims.

Representatives of higher education worked closely with their K-12 colleagues on the development of the Smarter Balanced assessments. The partnership was important because a primary goal of Smarter Balanced is that colleges and universities use student performance on the Grade 11 summative assessments in ELA and mathematics as evidence of readiness for entry-level, transferable credit-bearing college courses.
Connecting student performance to a tangible postsecondary outcome sent a signal to students, parents, and schools that the knowledge and skills delineated in the CCSS matter, providing individual students with a powerful incentive to do their best work on the assessments and demonstrating the clear link between students’ K-12 experience and the demands of higher education.

In general, the CCSS enable the development of such polices to more clearly connect K-12 and higher education. The standards were also developed by both higher education faculty and K-12 content experts to clearly articulate the knowledge and skills necessary for college readiness in English language arts and mathematics.

The Smarter Balanced draft Initial ALDs and College Content-Readiness Policy take that process a step further by defining the performance standards that students must meet in order to be exempt from remedial or developmental coursework (not only what students must learn but to what degree they must master the specified knowledge and skills).

**College Readiness within the Context of Smarter Balanced and the CCSS**

College readiness encompasses a wide array of knowledge, skills, and dispositions, only some of which will be measured by the Smarter Balanced assessments. As a result, Smarter Balanced narrowed the focus of its “college readiness definition to “content readiness in the core areas of ELA/literacy and mathematics (see Table 2).

<table>
<thead>
<tr>
<th>English Language Arts/Literacy 2</th>
<th>Students who perform at the College Content-Ready level in English language arts/literacy demonstrate reading, writing, listening, and research skills necessary for introductory courses in a variety of disciplines. They also demonstrate subject-area knowledge and skills associated with readiness for entry-level, transferable, credit bearing English and composition courses.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics</td>
<td>Students who perform at College Content-Ready level in mathematics demonstrate foundational mathematical knowledge and quantitative reasoning skills necessary for introductory courses in a variety of disciplines. They also demonstrate subject-area knowledge and skills associated with readiness for entry-level, transferable, credit-bearing mathematics and statistics courses.</td>
</tr>
</tbody>
</table>
College Readiness Defined

In a broader sense than the Smarter Balanced look at college from the perspective of content readiness, overall college readiness consists of a combination of student characteristics and behaviors, academic skills and abilities, and an aptitude for the navigation of the college culture. Experts have determined these factors are mostly learned and can be, to some extent, predicted through a variety of standardized tests. Further, through K-12 and postsecondary collaboration, pedagogy and curriculum can be designed that supports student engagement and success (McCabe, 2000; Hammon, 1998).

College readiness has also been seen as a snapshot of skills in mathematics and writing (with possibly reading) as a student enters an institution of higher education. However, in order to assist with defining college readiness as it spans outside of its current scope of a college entrance and along the education pathway ranging from kindergarten through degree completion, a broader foundational approach to college readiness might serve the Task Force better.

To support that assertion, the Defining College Readiness Workgroup focused on the consensus that most critical to the definition of college readiness were issues regarding needed skills in core areas of ability which involve the competencies in mathematics, writing and included reading ability on their list. Further analysis determined there were also calls for a more holistic view of incoming students in skill areas regarding life skills, outside factors, and mindset. Regardless of the difficult logistics involved with assessing these problems, the student, as a person should be involved with his or her own actual definition of readiness (Complete College America, 2012).

The Work Group found that several states in the U. S. recently made bold changes to tackle the challenges of increasing college readiness. Among these, there was a common thread of finding the factors where a student could theoretically perform satisfactorily without remediation. What these endeavors required were a larger picture view of the students as they travelled their education pathway. In addition where traditional tools may place students unnecessarily into developmental education, it was also important to understand the placement tools. Thus, as much focus needs to be placed on the methods of assessing students as defining their readiness (Complete College America, 2012).

It was also considered that readiness for college level course work should be viewed as occurring along a continuum; it is not an either/or state. For example, some students will require much less remediation, such as a brief refresher course, for college level course success. Other students, perhaps those who have been out of the classroom form many years, may require more extensive and intensive remediation.
Additionally, the literature explored the idea that college readiness encompassed a wide array of additional knowledge, skills, and dispositions that would not all be measured by placement and assessment systems. There was an increasing recognition to address the transition from high school to college that takes place during the student’s first semester of college attendance. Further, there was a reported need to develop strategies and policies to address this aspect of college readiness. If everyone at every level is focused on strategies that ultimately lead to college readiness for all students, strong pathways will be created. Those pathways could be supported by common core standards, known to all.

**Recommended Definition of College Readiness for Montana**

It is the recommendation of the Defining College Readiness Work Group of the Statewide Developmental Education Task Force that college readiness in Montana identifies its foundational definition as:

**College-ready students are those who have the academic and personal skills and behaviors to complete a college course successfully without the need for developmental education.**

It is noted that these factors are mostly learned and can be, in the case of college-content readiness, to some extent, predicted through a variety of standardized tests. Further, through K-12 and postsecondary collaboration, pedagogy and curriculum can be designed that supports student engagement and success.

College readiness should be identified through multiple measures as recommended by the Assessment and Placement Workgroup of the Statewide Task Force. As an example, the measures might be supported by an assessment of a combination of:

1. Academic knowledge and skills evidenced by successful completion of a rigorous high school state common core curriculum focused upon advanced academic skills, such as reasoning, problem solving, analysis, and writing abilities.
2. Success in college-prep, dual credit, and college-level courses taken in high school that require in-depth subject area knowledge, higher-order thinking skills, and strong study and research skills.
3. College planning skills, as demonstrated by an understanding of college and career options and the college culture and processes.

Lastly, pedagogy and curriculum should be designed that supports student engagement and success. Our K-12 and post-secondary systems in Montana are ready to come together to
support the common goal of collaboration on curriculum and the creation of assessments that help us to align instructional material and experiences at all levels.

Works Cited


Appendix C

Assessment/Placement Models
Subcommittee Report
Placement and Assessment Work Group

Report to Developmental Education Taskforce

April 22, 2013

Workgroup Members

Doug Downs (chair; MSU), Bethany Blankenship (UM-Western), Brittany Budeski (Great Falls C), Karen Henderson (Helena C), Jim Hirstein (UM), Jan Lombardi (GEAR UP), Carole Pinnell (Flathead Valley CC), Mary Ann Sodja (MSU), Joyce Walborn (Helena C), David Hall (OCHE)

Summary

The charge of the Placement/Assessment work group was

- To research and compile current MUS assessment/placement models in developmental math and writing
- To research their effectiveness
- To identify and research the effectiveness and efficiency of other assessment/placement tools
- To make specific recommendations for a system-wide assessment and placement policy based on these analyses, guided by the mission differentiation of the campuses within the MUS.

We have completed this charge, finding the following:

- Across the MUS, there is more variation than consistency in placement tools and measures in math and writing. What is consistent is reliance on a single-test/fixed score model of placement.
- There is general satisfaction at MUS institutions with existing placement methods, particularly as modulated by personal assessment of placed students to ensure mis-placement is minimized and quickly corrected. There is no evidence of widespread deficiency in placement systems.
- While current placement methods are satisfactory, a number of alternative methods hold promise for optimizing and increasing the efficiency of developmental placement. Chief among these are multi-measure/variable-cut-score systems that allow consideration of high-school performance, enhanced preparation for math placements, and guided self-placement for writing placements.
- There is good reason for the mission-differentiated variability of placement tools and measures across the MUS, so that a system-wide placement policy would be unworkable except at the level of principle. These principle recommendations are offered in the conclusion of this report.

Preface: Remembering Students

In much literature advocating for developmental education reform is a missing element: students and their actual backgrounds and experiences (see, e.g., Burdman 2012, Core Principles 2012). Developmental students are often so infrequently and poorly described that in their place we find a
monolithic, idealized recent high-school graduate who doesn’t actually need developmental education and simply scored a little low on one test one day. This hapless student, basically-ready-for-college and really just needing a little extra help, is prevented by systemic forces in labyrinthine institutions from progressing to a degree and, discouraged, drops out. This narrative fuels an image of dev-ed as too expensive, largely unnecessary, and more likely impeding success than fostering it.

In contrast, our research on placement in the MUS and nationally has often found this idealized narrative to be incomplete, failing to capture both all the reasons students might not complete degrees and the true value of their developmental courses even when these require re-taking or result in non-completion. These other stories, involving students’ life circumstances and individual educability, are not only difficult to track by the quantitative means that reform conversations overwhelmingly favor, but are also inconvenient to the dominant narrative that the system is broken because it is inefficient. Many of our stories—similar to those conveyed in a recent Chronicle of Higher Education article on dev-writing (Hoover and Lipka 2013)—are of “inefficient” lives to which the State of Montana has, nevertheless, committed to provide access to higher education.

Silencing such student experiences and stories is convenient for proponents of reform intended to maximize system throughput (students attaining degrees with the greatest possible efficiency as measured by time and dollars) by minimizing preparatory coursework with its increased time to degree and expenses. It is less clear, however, that the mission of providing open access to higher education for all students remains a primary goal of these national reform efforts. Because we take as axiomatic the MUS’s commitment to open access, we strive to remember and to value, along with that loud narrative of dev-ed failure, the quieter, particularized stories of actual students—where they come from, what their dev-ed needs are, and what dev-ed systems will best honor the MUS commitment to open access. We strive to remember students for whom the odds of completing a degree are, by life circumstance, very long, and to design systems optimized for them, not simply for students most likely to succeed from the outset.

We remember, for example, that while to reformers the “failure” to complete 30 credit hours in the first year of coursework is a troubling sign, to advisors and to students who never believed they could even be admitted to college, completing 12 hours that first year may constitute a triumph. We remember that “efficiency” means creating the best match of resources to individual students, not assuming that the next great solution will work for all students any better than the last great solution did. And we remember that people, individual students, measure the success and quality of their education by a wider variety of criteria than most proponents of reform-for-efficiency wish to. We have proceeded with these memories in mind, and encourage those who use this report to do so as well: to learn about and remember the actual people to whom our developmental systems are designed to open the MUS. It is our workgroup’s express wish that a version of this preface be included in the Taskforce’s final report to the Board of Regents.
Methods

To proceed in its charge, the workgroup used the following methods:

- To ascertain current placement systems, the workgroup reviewed existing OCHE data on math and writing placement methods and fleshed these out by collecting “on-the-ground” narratives from those overseeing placement at most MUS institutions.
- To ascertain effectiveness of current placement systems, workgroup members reported the best data and/or narratives available from their own institutions, and sought data from those overseeing placement at institutions not represented on the workgroup, including conducting interviews with some faculty overseeing placement at other institutions.
- To ascertain alternative methods of placement and their effectiveness, workgroup members individually conducted reviews of literature and then pooled resources they found in order to summarize trends in the literature. The workgroup also sought accounts from MUS institutions of pilot programs and other alternative placement methods already tested or in use.
- Development of policy recommendations proceeded via discussion among the workgroup which considered the collected data.

Current Placement Practices

Emerging best practices for dev-ed placement include placing by multiple measures (including high-school performance) and guided self-placement. While some institutions are piloting some of these practices, on the whole dev-ed placement in the MUS is based on single test scores. This section details both these common placement practices and alternative practices being tested in the system.

Math

Most MUS institutions use the COMPASS math placement exam in a single-text/fixed cut-score system. Exceptions include MSU-Bozeman and Gallatin College, which use an in-house, validated placement exam (MPLEX), and UM-Missoula and Missoula College, which use the ALEKS adaptive, computer-based placement exam. In addition, most colleges accept ACT/SAT scores (UM-Western, MSU, Gallatin College, MSU-Billings, Great Falls College, Helena College, MSU Northern, and MT Tech).

Cut scores on these placement exams vary considerably, usually in accordance with an institution’s actual developmental offerings. For example, placement into M095 requires an ACT of 19 or below at MSU-Northern, but a range of ACT 18-21 at UM-Western. It is not possible to summarize, or gain a systematic overview of, principles underlying cut scores. Variables include not only the cut score for a given exam, but a wide range of exam subscores (on the COMPASS, for example, pre-algebra, algebra, and college algebra subscores) and exam types (COMPASS, ACT, MPLEX, ALEKS) as well as differing dev-ed courses offered at particular institutions (M061, 065, 080, 090, 095, 096, 097, 098) and variations in uses of courses even of shared numbers across institutions, dependent on variations in student populations, instructional resources, and institutional missions. Differences between institutions’ cut scores do appear to be tied to the content that is taught at each level, meaning that, for example, some Introductory Algebra courses require a higher starting point of student knowledge than others. Cut
scores across the MUS fall within the typical range of scores indicated in the National Assessment Governing Board’s 2012 national survey of cut scores in reading and mathematics (Fields and Parsad 2012).

Most innovation is in curriculum design rather than placement, but innovative curricula will likely impact placement over time. For example, different institutions are piloting self-paced courses, modular courses, enhanced computer-based instruction, mastery learning, acceleration, and integrated tutor support—as such innovations are validated with particular student bodies, we would expect that placement systems will be adjusted to take advantage of them. This may lead to placement becoming more complicated as curricula can support placement with greater precision, but it should increase overall efficiency. In short, innovative curricula will invite continued attention to placement as such curricula make available placement options that do not currently exist.

Again, where curricular alternatives are already implemented, placement is being updated to follow. For example, Great Falls College’s accelerated 090/095 combined course obviously requires different placement scores from those used for the courses individually. However, placement is still by single test/fixed cut score. In addition, Helena College has piloted “math camps” for placement preparation.

Narratives from math instructors and placement specialists suggest the desirability of exploring alternative placement practices but do not suggest a fundamentally broken system. For example, Rich Rehberger, chair of dev-math at Gallatin College, notes that they’re regularly validity-testing the MPLEX and updating its questions to fill gaps indicated by actual student results, so that GC and MSU are happy with that placement exam. At the same time, he indicates that they’d like to study a combination of assessments with a range of cut scores, rather than a single assessment/fixed score system. This response is representative of the feedback our committee received overall from dev-math specialists: no sense of a fire burning down the house, but a sense that it’s worth looking into alternative placement systems. Joyce Wallborn (Helena College) finds from her research review that adjusting placement on its own probably will not significantly change course outcomes; rather, changes are likely to come from curricular innovations that placement is also adjusted for.

Writing

Similar to developmental math, there are many means of placement and many routes through coursework across MUS institutions, varying by student body, institutional mission, and available resources. And, again, institutions overwhelming use a single-test/fixed cut-score placement system rather than a multiple-measure / variable score approach.

Writing placement raises the fundamental choice of direct assessment (actual writing sample, scored by humans or machine), indirect assessment (multiple choice grammar/conventions/vocabulary/reading comprehension exam, machine-scored), or personal assessment (as in guided self-placement or faculty-recommended placement). All three approaches are used across the MUS, and in fact most institutions use all three in some way. For example, an institution which places by SAT will use that exam’s blend of indirect and direct assessment, and follow up a developmental placement with initial personal assessment by the writing instructor.
MUS institutions all allow single-score direct or indirect placement (via COMPASS, ACT + Writing, SAT, MUSWA, etc) to be challenged and overridden by direct assessment (local placement exam) or personal assessment (instructor moves a student from one course to another after initial assessment of writing in the course). Because enrollment numbers in dev. writing are not high in absolute terms (891 students MUS-wide in 2010, or fewer than 100 students per institution), these practices for identifying and re-placing mis-placed students are seen by dev-writing instructors as adequate. **Our review finds no evidence of consistent over-placement (placing students too high, resulting in failed gateway courses). And because dev-writing instructors system-wide are alert to the potential for under-placement, and do regularly take measures to ameliorate it, they report solid confidence that under-placement is not a widespread problem either.**

A particular challenge of writing placement is that (unlike math) writing is not divisible to discreet, leveled skills creating a clear progression of ability. Rather, writing is a relatively indivisible, “holistic” activity in which all component skills need to be practiced and learned simultaneously in order to acquire any one of them well. As such, **writing develops not by level but through time** as a range of writing tasks requiring different configurations of component skills accretes and receives feedback. One of the key factors in quality of writing instruction is the writer’s ability to see how their writing is received by readers (peers, instructors, other users of the texts they create). As a result of this nature of writing development (“all-at-once” over time, rather than skill-by-skill), accurate placement is **notoriously difficult.** The reality is that no placement system ever devised reliably predicts student success in the placed course. A review of research by Haswell (2004) in fact characterizes the predictive power of both indirect and direct writing assessments for placement as “painfully weak.” McKendy (1992) compared 13 studies correlating direct assessment scores with first-year composition grades; correlations ranged from random to .4. In Haswell’s (2004) words, “for decades college writing placements have been made on scores that leave unexplained, at best, two thirds of the variance in future course performance, and, on average, nine-tenths of it.” Matzen and Hoyt (2004) suggest that standardized tests mis-placed 62% of students compared with personal assessments of first-week in-course writings. Smith (1993) found 14% under-placement (placing into a lower course than necessary).

The same characteristics of writing that make accurate placement difficult to achieve, however, also make **writing placement relatively low-stakes** (compared with math placement). Writing courses are much more sensitive to non-content factors (so-called “non-cognitive skills”) such as student engagement, persistence, study habits, reading abilities, and general problem-solving abilities, than they are to matters purely writing-related. An understanding teacher and a dedicated student can make a writing course work even if the student is somewhat underprepared, whereas no placement decision will enable an unengaged student to succeed. When students fail in writing courses, the source of the failure is far more often poor work habits than lack of writing ability.

When developmental writing courses prove useful to students, therefore, it is usually because 1) lower course caps allow them better-than-usual feedback from the instructor, 2) the additional **time in writing instruction** provided by the course is instrumental, and/or 3) the course serves to build students’ confidence as it provides them a stable picture of their actual writing abilities in a college environment. (While curriculum is not the purview of this workgroup, we are aware that a number of
institutions use not limited “basic-skills” dev-writing instruction but full-on “college-writing” curricula which closely resembles the curricula used in WRIT 101, and we applaud those choices.) Because of these advantages, according to Karen Henderson (Helena College) and others, students will often elect to remain in developmental courses even when some evidence suggests they could place into a gateway course. And it is likely because of such advantages that, for example, Gallatin College students who take developmental writing courses have a higher ensuing pass rate in WRIT 101 than their peers who did not take developmental courses—a finding that aligns with research correlating success in dev-writing with retention and graduation (Baker & Jolly 1999, White 1995).

Less flexible than writing placement is reading placement. Reading is the ability fundamental to all other developmental education, including dev-math. Reading comprehension of textbooks, assignment sheets, exam instructions, and student support materials is simply non-negotiable for college success. At some MUS institutions, no stand-alone developmental reading coursework is available. At some CCs (Helena, Miles, Flathead) a stand-alone developmental reading course has been created (in addition to the “college study skills” style classes that many campuses offer for credit to at-risk students). These courses do not appear to be a bottleneck for students; placement into them is conservative (tending toward over- rather than under-placement) and crucial to the success even of other developmental work.

The most common innovation in writing placement is guided (or directed) self-placement, which has been piloted in the MUS by UM-Western for two years and was discontinued because UM-Western’s open enrollment policy made the thoughtful nature of the self-placement time frame difficult to navigate. UM-Western also uses a “stretch” version of WRIT 101 that in wide deployment would shift placement practices. Miles City is experimenting with making two dev-writing courses concurrent rather than sequenced and as such has altered placement; they have not yet had enough students in the pilot program to judge its success. Similarly, Helena College and Great Falls College will both pilot a structured-learning-assistance WRIT 101s with concurrent “labs” (WRIT 096/098) for students scoring just below their E-Write cut scores for WRIT 101. As with dev-math, these curricular innovations will themselves create placement implications that will be more clear as the curricula are tested and normalized.

**Recommendations for Placement Alternatives**

We have found in the literature, and reached among ourselves, clear consensus on placement methods which are increasingly considered best-practices. Even though our research into placement in MUS has not demonstrated brokenness, we recommend the following practices and methods be explored, piloted, and adopted to the extent that they prove to optimize developmental placement. We recommend the following not as policy but as guiding principles only, the resulting implementations to be designed and instigated by MUS institutions in whatever ways best reflect their local needs, student bodies, institutional missions, available resources, and institutional and OCHE funding.

- **Shift from single-test / fixed-cut-score placement to multi-measure / variable-range cut-score in both math and writing.** The only people who appear to have any faith in the value
of test-only placement are those who sell the tests. Multiple measures also create a “basket” of indicators that can eliminate the need for rigidity in any single measure, thus creating a variable range of cuts for each measure depending on other measures. The largest challenge in creating such a system will be selecting measures and validating, through student experience, various combinations for placement.

- **Ensure that some of the new multiple measures relate to high school performance.** Particularly in the realm of writing, high-school gpa is the single best predictor of college performance. The literature is essentially unanimous (as are the members of this workgroup) in recommending much greater weight be put on high-school gpa and performance. The main difficulty seems to be timely access to high-school records.

- **Ensure that some of the new multiple measures increase sensitivity to and account for student background, experience, and context, particularly when a student falls in a gray range for placement.** A multi-measure system, while predicted to place students more accurately, will also predictably create more judgment calls for admissions counselors and advisors. In those moments, knowing a student’s current life circumstances or understanding elements of their educational background that may not show up on a transcript can be crucial to making the best placement judgment. Therefore, it is imperative that a multi-measure placement system include not only permission but encouragement for those involved in placement decisions to communicate with the student about relevant circumstances, as is already common in current placement practices.

- **As Montana shifts to ACT Aspire and Common Core-based learning assessments, develop placement ranges for the new resulting scores, while preserving emphasis on multi-measure placement.** Test developers will continue to attempt single-measure assessments that actually suffice for placement, most recently by “customizing” traditional one-size-fits-all products to specific states and learning outcomes. While obviously MUS will respond to whatever OPI directs secondary education to use statewide, we must ensure that our responses remain within a framework that places less weight on any single test score, no matter the test.

- **For Math placement, develop supplemental preparation systems for high-stakes placement tests.** Both the literature and input from dev-math specialists around the state suggest the great value of refresher coverage of math prior to placement testing. The most frequent suggestion is week-long “math camps” with placement testing at the end. The obvious benefit of such preparation is that students can demonstrate closer to their peak knowledge potential and thus gain the highest possible placement. Challenges that programs will likely have to address will be, simply, encouraging students to make the time before a semester (an extra week of daycare, extra week off from work) to make such a system work. Clearly, new funding sources will need to be procured to facilitate such preparation systems.

- **For Writing placement, adopt a multi-measure system in which test scores plus GPA help guide student self-placement.** Guided self-placement (GSP) works by increasing student self-efficacy, transferring power and responsibility from the institution to the student and helping increase their investment in their placed course. Results from self-placement
systems already in place suggest that students place at or slightly more conservatively than an institution’s existing measures would place them. GSP would require significant investment from campuses and MUS in informing applicants about the system.

- **For Writing placement, the only true “multiple measure” of writing is a portfolio assessment, which MUS should explore using.** The reason that even direct writing assessments are notoriously unreliable and poor predictors of success in college writing is because no single writing experience can create a sufficient description of a writer’s abilities. Only a collection of multiple texts written in different situations and for different purposes and audiences can truly give a sense of how one writes. Unfortunately, portfolios have in the past been difficult to assemble and validate authorship on, and expensive to assess. Nevertheless, we would do well to explore the possibility of placement portfolios, as advances in software make collection and validation much easier and assessment much more streamlined. Again, however, portfolio placement would present a significant new expense.

- **Support continued development of placement optimized to new curricular initiatives.** As, for example, concurrent/embedded courses, structured learning-assistance courses, and stretch writing courses become more widespread, new placement practices will need to be explored to keep up with the possibilities the new curricula make available.

- **Commit to funding assessment of placement practices system wide.** MUS needs to support continued exploration of “bold” placement systems by funding not just their development but assessment of them, system-wide. A practical question on funding will arise post-pilot: it’s likely that grant funds will be attainable to test these systems, but the real question will be about sustainable funding for those systems that prove their worth. For campuses to invest in pilots, they’ll need some assurance about funding sources in the long-term.

- **Facilitate better coordination between dev-ed programs, gateway programs, and college admissions offices.** Radical changes in placement, particularly those requiring increased complexity (as multi-measure systems will), will necessitate new levels of communication among stakeholders and principal facilitators in placement. MUS might issue guidelines to admissions offices to help coordinate this communication.

- **Facilitate better coordination between college admissions and high-school records-keepers.** Hopes for multi-measure assessment weighing high-school performance depend on access to such records which in the past has not always been easily obtained. Such systems cannot work without reliable feeding of high-school records to MUS admissions offices.

- **Facilitate and support an MUS wide standing dev ed clearinghouse or coordinating committee that maintains the communication on dev ed established by this Taskforce and its workgroups.** For obvious reasons, this opportunity to learn about each other’s dev-ed systems has been tremendously helpful, and ongoing support (financial and time) in coordinating communication among dev-ed programs would be a sound investment.
Bibliography


Appendix D

Developmental Education Models that Work for Montana Subcommittee Report
April 2013

Introduction and Background

As part of the statewide Developmental Education Reform Task Force, this work group was formed to examine developmental education course redesign models and make recommendations concerning course redesign efforts. The committee reviewed national models and gathered information on existing and planned efforts within the state. The following are included in this report:

- A summary of national developmental education redesign models
- An inventory of current and planned developmental education practices in math, writing and reading from campuses in the state
- A list of recommendations from the work group based on national best practices
- Developmental education summaries from individual campuses

Work group members included the following:

- Chair: Leanne Frost, Director of Developmental Education and Transfer, Great Falls College MSU
- Mark Cracolice, Faculty, University of Montana
- Karen Henderson, Faculty, Helena College UM
- Sue Jones, Director of 2-Year Mission Integration, Montana University System
- Sarah Pett, Faculty, Miles Community College
- Richard Pierce, Academic Department Chair, City College MSU Billings

National Developmental Education Redesign Models

All those involved in higher education would like to see underprepared students successfully achieve their goals; the question is, “What is the best way to help students be successful?” Unfortunately, one clear-cut answer does not exist. Some experts advocate for reducing developmental education courses and “mainstreaming” students into college-level work (Charles A. Dana Center, 2012). Other experts believe developmental education courses provide the best way for students to gain the academic and life skills necessary to complete college coursework (Boylan, 2012; Goudas & Boylan, 2012). And, still others promote extending the time students take to complete a developmental education course to allow more time for underprepared students to grasp the necessary concepts to proceed (Glau, 2007; Zachry, 2009). As the debate continues, colleges and universities across the nation are examining their developmental education courses and trying ways to improve student learning and success by redesigning their courses. Most redesign efforts fall into the following categories (Rutschow & Schneider, 2011):

- Remediating prior to enrolling in developmental education courses
  - Examples: summer bridge programs, intensive “fast-start” courses prior to the start of the semester, strengthening K-12 education

- Accelerating through developmental education courses
Examples: reducing the number of dev. ed. courses by combining courses or revising curriculum, self-paced options, modularizing content, linking dev. ed. courses as co-requisites with college-level classes

- Contextualizing developmental education content into programs of study
  - Examples: embedding curriculum into specific programs, providing hands-on experiential learning

- Supporting developmental education instruction
  - Examples: computer-aided instruction, strategic advising, tutoring, Supplemental Instruction, learning communities, additional lab

The language used to name the redesigned model may differ (for example, “compressed” versus “accelerated”), but the rationale behind the redesign remains the same. In practice, many of the redesign efforts incorporate more than one redesign element (Edgecombe, 2011). However, some popular, specific course redesign models currently being discussed, implemented and assessed are as follows, as defined by the National Center for Academic Transformation (http://www.thencat.org/PCR/Proj_Model.htm):

**The Supplemental Model**

The supplemental model retains the basic structure of the traditional course and a) supplements lectures and textbooks with technology-based, out-of-class activities, or b) also changes what goes on in the class by creating an active learning environment within a large lecture hall setting.

**The Replacement Model**

The replacement model reduces the number of in-class meetings and a) replaces some in-class time with out-of-class, online, interactive learning activities, or b) also makes significant changes in remaining in-class meetings.

**The Emporium Model**

The emporium model eliminates all class meetings and replaces them with a learning resource center featuring online materials and on-demand personalized assistance, using a) an open attendance model or b) a required attendance model depending on student motivation and experience levels.

**The Fully Online Model**

The fully online model eliminates all in-class meetings and moves all learning experiences online, using Web-based, multi-media resources, commercial software, automatically evaluated assessments with guided feedback and alternative staffing models.

**The Buffet Model**

The buffet model customizes the learning environment for each student based on background, learning preference, and academic/professional goals and offers students an assortment of individualized paths to reach the same learning outcomes.
Montana Developmental Education Practices

When asked to review current state developmental education practices and redesign efforts, it quickly became apparent to the work group that no such clearinghouse of information existed. To gather the needed information, the work group asked each campus to submit a summary of its developmental education offerings and any existing or future redesign efforts. An inventory of practices taken from those responses is included in this report, as well as the individual summaries themselves (see Appendix A).

Although the redesign efforts in Montana vary by campus, some important conclusions can be made:

1. Montana campuses are at varying stages in the redesign process. Some are just beginning, such as at UM Western, while others have been in process for several years, such as at MSU Billings.
2. Campuses have focused most of their redesign efforts on developmental math, as opposed to developmental writing or developmental reading.
3. A variety of redesigned models and combination of models for developmental math are being offered throughout the system.
4. Most campuses are offering “pilot” sections of redesigned courses and then comparing student success rates in those pilots to the traditional classroom settings.
5. Support for developmental education courses through tutoring seems to be offered at every campus.
6. Common Course Numbering has increased the MUS’s ability to compare efforts across campuses.
7. Computer-aided instruction through programs such as ALEKS, Hawkes, MyMathLab, and MathXL is fairly common; however, using those programs in a self-paced or lab-only/“emporium” models seems rare.
8. Acceleration models combining two developmental math courses are being tried.
9. Redesign models in math are being supplemented by other efforts to increase student success, such as attendance policies, mastery learning, and notetaking frameworks.
10. Redesign efforts in developmental writing center around “co-requisite” or “mainstreaming” models of WRIT 095/WRIT 101 in an effort to accelerate students into the college-level WRIT 101 College Composition I class.
11. A couple of campuses are starting to build learning communities by linking their developmental courses or pairing those courses with a College Success class.
Appendix E

Student Support, Advising and Implementation
Student Success and Advising Workgroup

Report to the Statewide Developmental Education Reform Taskforce:
Montana Office of the Commissioner of Higher Education

April 2013
Student Success and Advising

The Developmental Education Reform Taskforce-Student Services and Advising Workgroup was charged to research the current levels and types of student support within the MUS, identifying the strengths and weaknesses of the systems, to research alternative/evolving/collaborative approaches to providing support for developmental education articulating the effectiveness and efficiencies of these systems, and to make specific recommendations based on these analyses. The workgroup was further charged to forward recommendations that are relevant to the mission differentiation of the campuses within the MUS. This report follows these major themes.

Current Levels and Types of Student Support with the MUS

The Student Success and Advising Workgroup began its work by surveying MUS campuses and community colleges. Questions were developed to obtain information about current student success and advising services for developmental education students and to elicit information relevant to Complete College America’s (2012) guiding core principles regarding services for students enrolled in gateway courses.

Surveys were distributed to all of the community college and MUS campuses; seven complete surveys were returned. The results represent two community colleges, two 2-year, one 4-year, and two graduate-level institutions. A summary of the survey results are included as an appendix to this report (_________).

All of the respondents reported advising, tutoring, developmental math and developmental writing services; however, the levels and types of services and the responsibility for their provision varied widely. Responsibility for student advising and developmental coursework is largely the responsibility of academic departments. Tutoring responsibilities are largely centralized in campus-supported learning centers. Some campuses utilize a mixed model of shared departmental and centralized responsibilities for advising, tutoring and developmental support services. Although administrative responsibilities vary across the system, a number of system strengths and weaknesses emerge from the survey responses.

System Strengths

The following strengths were noted from the survey responses.

- All of the mission-differentiated campuses in the MUS provide academic services for developmental students.
- Enrollment caps and smaller class sizes for developmental math and writing courses are widely enforced (between 20 and 25).
• All campuses report interest in exploring innovative approaches to developmental coursework—more so with math than with writing strategies.
• Lab tutoring and skill development services are widely available to students.
• Faculty members play a central role in advising all students.

System Weaknesses

The following weaknesses were noted from the survey responses.

• Online courses, services, and support systems are not equally available for developmental students.
• Writing and math labs are not equally available.
• Two-year programs have the least available student support and advising services.
• None of the campuses celebrate developmental student successes.
• The amount of dedicated space and staff for developmental students varies widely.
• Few campuses offer linked classes or co-requisite enrollment options.

 Alternative, Evolving and Collaborative Approaches

As previously noted, advising, tutoring, developmental math and developmental writing services are widely available throughout the MUS. All campuses deliver specialized academic services for developmental students. The type and level of academic services varies, but all are focused on students enrolled in developmental coursework. An alternative approach is to focus on supports for developmental students placed in gateway courses.

Several of Complete College America’s guiding core principles (2012) emphasize the need to integrate academic supports into gateway courses. The core principles state:

• Enrollment in a gateway college-level course should be the default placement for many more students.
• Additional academic support should be integrated with gateway college-level course content as a co-requisite, not a pre-requisite.

Although all of the Student Support and Advising Survey respondents reported similar levels of available support services for students enrolled in gateway courses, few reported having staff or space specifically dedicated to assisting developmental students enrolled in gateway courses.

Most campuses reported course registration restrictions as a widely used intervention strategy (e.g., students must successfully complete developmental coursework before enrolling in gateway courses). The use of co-requisite enrollment strategies is not a widely used intervention.
The Student Services and Advising Survey focused on academic services; it failed to address the non-academic needs of developmental students. The need to address non-academic services emerged from the open response section of the survey. Respondents stressed the need for developmental services to address case management, financial aid, time management, and career counseling.

**Recommendations**

The Student Services and Advising Workgroup forwards the following recommendations.

- Maintain autonomy of mission-differentiated campuses to determine appropriate compliment of academic support and advising services for developmental students.
- Consider the resource implications of extending developmental support services into gateway courses.
- Support campuses in developing strategies for student support services concurrent with developing curricula responsive to CCA principles.
- Increase resources for student support and advising services in two-year colleges, as these currently do most of the developmental education.
- Dedicate staff and physical space to support developmental education students. Staff includes counseling, financial and academic support, as well as classroom instructors. Physical space includes support centers with sufficient computers/laptops/tablets.
- Consider the resource implications of long-term tracking of developmental student success.
- Further consider the non-academic needs of developmental students and support delivery of non-academic services.

**Reference**


**Workgroup Membership**

Anneliese Ripley – University of Montana Western  
Doug Downs – Montana State University  
Bob Hietala - Gallatin College  
Beth Howard – The University of Montana  
Sue Jones – OCHE  
Sara Pett - Miles City Community College  
Amy Verlanic – Montana Tech  
Joyce Walborn - Helena College  
Mandy Wright - Great Falls College