CAPR | CENTER FOR THE ANALYSIS OF POSTSECONDARY READINESS

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Strategies for Scaling Multiple Measures Assessment

Lessons from Arkansas

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Community colleges and other open-access postsecondary institutions face a critical challenge in accurately assessing incoming students' skill levels and placing them into appropriate math and English courses. Traditionally, these institutions have relied on scores from standardized tests such as ACCUPLACER for placement decisions (Bailey et al., 2015). While the landscape of placement and course options has changed over the last decade (Plancarte et al., 2024), single-test-based placement systems remain commonplace and fallible. Research has shown that these systems can lead to significant misplacements, often resulting in students being directed into prerequisite developmental education courses when they could have succeeded in college-level courses (Bailey et al., 2010; Belfield & Crosta, 2012; Clotfelter et al., 2015; Scott-Clayton, 2012; Scott-Clayton & Rodríguez, 2015). Misplacement is particularly concerning for students from historically marginalized groups, who are disproportionately represented in developmental education (Bailey et al., 2010; Daugherty et al., 2021; Rodríguez et al., 2015).

In response to these issues, colleges and researchers have sought a more holistic understanding of students' academic preparation and readiness for college through multiple measures assessment (MMA). As the evidence base grows, many colleges are embracing MMA, which considers indicators of student performance such as high school GPA, coursetaking patterns, and noncognitive assessment results rather than standardized test scores alone (Bahr et al., 2014; Cullinan et al., 2018; Ganga & Mazzariello, 2019; Kopko et al., 2022; Plancarte et al., 2024). Studies have demonstrated that MMA can lead to increased enrollment in and completion of college-level courses (Cullinan & Biedzio, 2021; Kopko et al., 2023; Ratledge, 2020; Staples, 2020), potentially reducing barriers for students who may struggle with standardized tests or who have

been away from formal education for some time. Increasingly, MMA is used to place students who are deemed in need of support into corequisite rather than prerequisite developmental courses, which raises important questions about the role of placement in an evolving developmental education reform landscape.

The COVID-19 pandemic accelerated the adoption of MMA due to the impracticality of administering in-person standardized tests. In 2023, nearly three-quarters of broad-access colleges were using some form of MMA (Plancarte et al., 2024). The shift to MMA has shown promise: MMA can not only improve access to and success in college-level courses but also be more cost-effective for both students and society (Kopko et al., 2023; Kopko et al., 2024). Further, several states have enacted legislation allowing for or requiring the use of alternative measures for student placement, which suggests a growing recognition of MMA's potential benefits.

This brief focuses on MMA implementation in the state of Arkansas, where a decentralized governance model grants colleges considerable autonomy in determining their assessment and placement policies. In 2017, Arkansas state code began to allow for the use of MMA, though adoption was slow initially. Under this policy, Arkansas colleges must report a college-readiness exam score for each student, but the Arkansas Division of Higher Education (ADHE) guidelines permit the use of any evidence-based criteria alongside or in place of traditional assessments (ADHE, 2017). This flexibility, which was in place during the COVID-19 pandemic and is still in place today, allows colleges to design and implement placement practices tailored to their specific contexts and student populations.

Despite strong evidence supporting MMA, challenges remain for its widespread adoption. Some faculty and staff members, for example, are concerned about the reduced role for developmental education due to MMA's typically higher percentage of placements into college-level coursework. As the higher education landscape evolves, it is crucial to address challenges to MMA implementation and to provide strategies for states, systems, and colleges to adopt more effective placement practices to promote student success in and equitable access to college-level coursework. To that end, drawing on work that took place in Arkansas by state-level staff at Arkansas Community Colleges (ACC), ADHE, and several Arkansas colleges, this brief describes the process of adopting MMA in the state and presents five state-focused strategies for the scaling of MMA. Throughout the brief, readers will find examples and resources, such as CAPR's research-based toolkit, which may be helpful for those who want to design new or improve existing MMA systems.

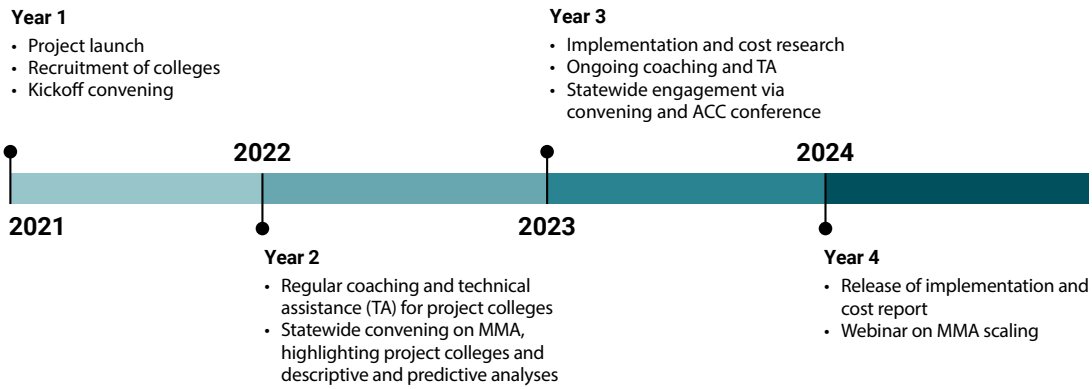
MMA Adoption in Arkansas

In 2021, CAPR researchers launched a project to help colleges and states across the country adopt and implement MMA, which involved close collaboration with colleges in Arkansas and Texas (CAPR, n.d.). Arkansas was selected as a partner state for this work because of its existing policy allowing the use of MMA, its demographically diverse student population, the accessibility of its historical transcript and placement data, and the longstanding commitment of its state leaders to undertake evidence-based developmental education reform. Moreover, corequisite reform efforts throughout Arkansas led by Strong Start to Finish (https://strongstart.org)—a collaborative network of education leaders, foundations, policymakers, and researchers working to improve first-year college success through targeted student support initiatives—signaled an ongoing commitment to systematic change.

The project sought to broaden the capacity of colleges in Arkansas and Texas to use MMA placement systems and to gather insights on designing and deploying such systems across different developmental education reform settings and state-policy landscapes, providing the groundwork for the statewide scaling of MMA. This project included the provision of technical assistance and coaching at six Arkansas colleges implementing or improving MMA as well as research on implementation and the costs of adopting MMA.

At the beginning of the project, CAPR researchers established regular meetings with ACC and ADHE. These cross-organization meetings marked the beginning of a collaborative effort to establish clear project goals, a defined timeline, and key project milestones for improving placement practices across Arkansas community colleges through the expanded use of MMA. Together, ACC, ADHE, and CAPR developed a four-year project timeline and set measurable benchmarks for scaling MMA implementation. To facilitate the process, ACC and ADHE connected with critical institutional stakeholders, including early adopters of MMA as well as colleges that had not yet incorporated alternative placement practices outside of the COVID-19 context. ACC and ADHE encouraged broad participation in the project, and CAPR subsequently put out a call for interested institutions to participate, ultimately engaging a sample of three two-year colleges and three four-year colleges across the state.

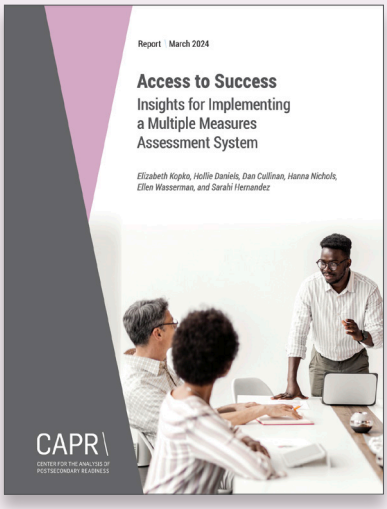
FIGURE 1. Project Timeline in Arkansas



RELATED PUBLICATION:

HOW COLLEGES IN ARKANSAS AND TEXAS IMPLEMENTED MMA

Based on interview data, a prior report from this project, *Access to Success: Insights for Implementing a Multiple Measures Assessment System*, describes the adoption of MMA at 12 two- and four-year colleges in Arkansas and Texas. The report discusses the collaboration needed among institutional leaders, administrators, faculty members, and advisors; the role of state context; the costs of implementation; and implementation challenges, such as obtaining staff buy-in, managing student data, and ensuring sufficient staffing.



A recently released CAPR report highlights the results of MMA implementation and cost research at the six Arkansas project colleges (Kopko et al., 2024; see description in box above). Following this research, ACC and ADHE released updated statewide placement guidance for colleges in 2023 in partnership with CAPR (ADHE, 2023), citing years of national research on the efficacy of MMA in general and on high school GPA specifically as the best and most cost-efficient predictor of student performance in college (e.g., Hayward, 2020). The guidance also recommended a high school GPA of 2.5 for college-level English and math placement, which was selected by ADHE. That chosen cutoff was informed by practices in other states, such as California and North Carolina (Cullinan et al., 2018), and by predictive analyses conducted by CAPR (Cullinan & Rizik, 2022). While the high school GPA cutoff of 2.5 was recommended by ADHE, colleges were ultimately allowed to select their own measures (including standardized tests in addition to high school GPA) and cutoffs. Indeed, some colleges chose higher high school GPA cutoffs for college-level placement alone and placed students who fell below that cutoff into corequisite developmental education alongside college-level coursework. While prerequisite developmental courses still exist in Arkansas, corequisites have been widely adopted.

Strategies for Scaling MMA

What can other states learn from Arkansas about how to adopt MMA at their colleges? Based on what happened there, this brief presents five state-based core strategies: (1) Draw on nationwide developmental reform efforts and collaborate within the state to guide planning; (2) create a central repository to share implementation resources; (3) assess what data are readily available

before deciding how to design MMA; (4) develop a statewide strategic plan for implementation; and (5) monitor and modify MMA implementation using a continuous improvement model. These strategies, which are discussed in the following sections, are intended for entities with autonomy in decision-making and may be useful to state higher education departments or divisions, college systems, institutions, and other stakeholders interested in implementing and scaling MMA practices.

EVIDENCE ON MMA

Years of rigorous research on MMA provide a compelling rationale for its adoption (Kopko et al., 2023). Key findings include:

- **Greater college-level course access:** MMA increases access to college-level courses, which is a driving factor in positive student outcomes.
- **Improved placement accuracy:** MMA provides more accurate placements compared to the use of standardized test scores alone, reducing the likelihood of underplacing students into developmental education.
- **Reduction in remediation rates:** MMA reduces the number of students placed in prerequisite developmental education, where many tend to get stuck. If there are fewer students in prerequisite developmental education, more can enroll in college-level coursework immediately (with or without corequisite support).
- **All students benefit:** Student subgroups (by race/ethnicity, Pell recipient status, and gender) benefit similarly from MMA, increasing the rate of placement into college-level coursework for all.
- **Higher college-level course success rates:** Students placed using MMA are more likely to pass introductory college-level courses—particularly in math and English—than those placed using a single measure such as a placement test score.
- **Cost- and time-efficiency for students:** By reducing the number of courses students may be required to take, MMA helps students progress toward their degrees more quickly and affordably.

1. Draw on nationwide developmental reform efforts and collaborate within the state to guide planning.

Establishing partnerships and engaging in collaboration can be very useful in scaling MMA. External developmental education reform coalitions, such as Complete College America and Strong Start to Finish, can provide planning and implementation resources to state systems and help them build connections with other states pursuing similar reforms. Arkansas officials developed relationships with both Complete College America and Strong Start to Finish to support MMA and other developmental education reform activities. Partnerships allow states, systems, and colleges to share knowledge and best practices, accelerating learning,

reducing the duplication of efforts, and helping to obtain buy-in. This collaborative approach is particularly valuable in decentralized systems such as Arkansas, where institutions have significant autonomy.

Facilitating ongoing communication about MMA goals, design, and implementation among stakeholders within the state is also useful. Regular statewide convenings help attendees from colleges and the system learn how to advocate for MMA and share implementation experiences, while role-specific affinity groups (e.g., those among administrators, admissions staff, advisors, and faculty) allow for targeted discussions on challenges and solutions. The accompanying box shows guiding questions used in an affinity group at a statewide Arkansas convening.

Building on these collaborative communication structures, states can promote stakeholder buy-in for MMA by focusing on positive results and the common goal of improving student outcomes. Stakeholders may be more likely to embrace the culture of change if emphasis is placed on MMA as an innovative approach rather than on deficiencies of traditional placement. By framing MMA as an approach that aligns with an existing commitment to student success, leaders can help stakeholders see it as a natural evolution in academic support rather than a criticism of current practices.

Prioritizing external and internal collaboration and focusing on improving student outcomes may help stakeholders to address common challenges collectively. MMA implementation can also be aligned with broader statewide or institutional goals, which may create a more supportive environment for scaling MMA and may lead to more effective and sustainable implementation across diverse institutions.

Statewide Convenings in Arkansas

Yearly convenings by ACC and ADHE were held during the first two years of the project to help participating colleges learn more about MMA design and implementation, share resources and recent research, map out institutional intake and assessment processes, and unite institutional staff in similar roles across institutions via affinity groups. Below are example questions from an affinity-group session held at one of the convenings.

- At what stage of MMA implementation is your institution?
- What has worked well for implementation?
- What challenges has your institution/affinity group faced in implementation?
- How did you overcome those challenges, or what help could your peers provide in overcoming those challenges?
- What questions do you have for your peers at other campuses?

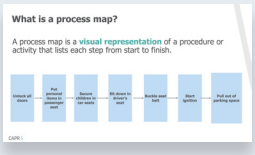
2. Create a central repository to share implementation resources.

Providing easy access to resources about MMA—including toolkits, training materials, and webinars—may be very helpful in the early stages of planning and adoption, when the implementation process is more iterative. One way of sharing such resources is through a centralized resource repository, such as a shared online folder, where stakeholders can access and contribute valuable materials. Providing information about innovative approaches from other states, systems, and colleges can help those crafting reforms make informed decisions about their own MMA models. Learning from others can be very useful. For example, the COVID-19 pandemic necessitated a rapid shift to MMA in Arkansas and elsewhere due to the challenges of administering standardized tests safely. As a result, colleges gained varying levels of experience with MMA implementation and achieved different degrees of success. Early successful adopters can serve as examples, demonstrating the feasibility of MMA implementation across different institutional contexts and student populations.

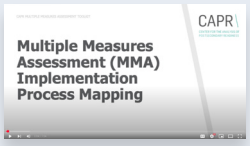
Attending and presenting at state or nationwide conferences and creating webpages dedicated to MMA on official state education, system, or institutional websites—see the box below about ADHE's MMA webpage—can also help foster engagement among educators, showcase success stories, and provide practical tools. These activities may also be useful to advocates who want to champion MMA initiatives in their own communities.

FROM THE MMA TOOLKIT:

LEARNING ABOUT ROLES AND PROCESSES



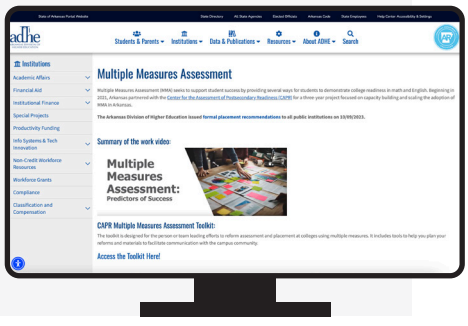
An eight-minute video in CAPR's MMA Toolkit helps staff think through how roles and processes will change across a college as it implements MMA.



Slides in the toolkit show how to create a map to visualize the MMA placement process for students and staff.

A Webpage on MMA for Arkansas Colleges

For Arkansas institutions, ADHE hosts an MMA page on their website that provides essential information, guidance, and tools for implementing MMA practices. It includes a definition of MMA, information on how communities of practice can informally discuss and share resources related to MMA, and links to external resources. Through the webpage, ADHE streamlines the process for institutions to learn about and adopt MMA. This may encourage consistency and collaboration in aspects of adoption across the state's colleges.



3. Assess what data are readily available before deciding how to design MMA.

Data plays a pivotal role in the successful implementation of MMA at all levels, as it enables states, systems, and colleges to both evaluate current placement outcomes and model potential improvements under new placement measures. Even in decentralized states, higher education divisions and college associations can be helpful in decision-making around data and its relationship to MMA design. Along with colleges themselves, states should carefully consider the data availability and accessibility of potential placement measures such as high school coursetaking and GPA. CAPR's data exploration checklist provides guidance on what data to check before and after implementation, including important considerations for placement feasibility, accountability, monitoring, continuous improvement, and evaluation.

To facilitate the effective scaling of MMA, states should take a proactive approach to data availability and invest in cost-effective data infrastructure, reducing financial barriers and establishing comprehensive data-sharing frameworks across educational institutions. In sparse data landscapes, the challenges are substantial, and even in states with established data systems, critical barriers can emerge. In Arkansas, for instance, TRIAND—a state-approved data recordkeeping system used to send transcripts between districts or high schools and colleges—was hampered by limited accessibility and the cost of individual licensing. This underscores the importance of state-level intervention in creating truly accessible data ecosystems and recommending low-cost MMA models that increase access to college-level coursework (Kopko et al., 2023; Kopko et al., 2024). Additionally, colleges and systems should consider diverse data types and sources when placing students, including work experience and noncognitive assessments. Research demonstrates the accuracy of self-reported data such as high school courses, course grades, and GPA (Sanchez & Buddin, 2016) and notes positive outcomes among students who were allowed to make their own decisions about placement via informed self-placement practices at colleges (Brathwaite et al., 2022). Successful implementation requires increased collaboration between offices such as admissions, advising, the registrar, and testing to break down institutional silos and expand data accessibility.

Flexible MMA models are particularly appropriate when placing nontraditional learners. Obtaining high school transcript data can be challenging for adult, immigrant, and international students who either earned a high school diploma a long time ago or did not complete their secondary education in the United States. Standardized test scores may also be unavailable or inapplicable for these populations. In light of this, states and systems should support institutions in collecting and analyzing data, including student-reported data that is both low cost and valuable. When necessary, institutions should be encouraged to use self-reported data for student placement to help prevent barriers to college-level course access.

After assessing data availability and before designing MMA systems, it is important to analyze existing academic outcome data (particularly in gateway English and math courses) to establish baseline performance metrics and identify gaps in student success under current placement methods. High school GPA data, for example, can be used to run simulations

testing different placement thresholds (such as a 2.5 GPA cutoff) and to project potential impacts of new placement methods on student outcomes. In Arkansas, state-level analyses helped to inform the previously mentioned statewide placement guidance from ACC and ADHE (see box below for more information).

Predicting Success at Arkansas Colleges

Using data from a subset of high school and college transcripts in Arkansas, CAPR researchers conducted analyses of success in college-level courses to determine which measures would be predictive of readiness to place students. The analyses showed that high school GPA predicted the probability of successfully passing a college-level gateway course (with a grade of C or higher) better than any other observable variable or combination of variables, consistent with findings from similar analyses in several other states. A video on this exercise describes it in more detail.

4. Develop a statewide strategic plan for MMA implementation.

MMA planning and strategy development by the state creates a strong foundation for coordinated system-wide transformation. Without comprehensive planning, states risk mixed messaging about the purpose and benefits of MMA, greater unknowns about institutional readiness and buy-in, and less consistent implementation. A well-structured approach begins with establishing regular communication channels between key stakeholders, including state higher education departments or divisions, college systems, and key personnel involved in data collection and analysis. Ongoing dialogue facilitates coordination and allow for strategy adjustments as needed.

States and systems should develop clear messaging about the policy change, establish support structures for institutions, and create a monitoring framework. By doing so, states and systems can promote transparency and clarity around expectations. Articulating how MMA connects with broader goals for student success and equity, providing institutions with necessary resources and professional development, and establishing useful methods for tracking implementation progress will help to align MMA reform with the goals of colleges. States and systems can then help individual institutions in developing their own strategic plans that align with broader goals while accounting for local contexts and needs. It is important to recognize that faculty and institutions are often best situated to plan and undertake meaningful reform. Especially in states where colleges have a great deal of autonomy, states should be wary of establishing goals for MMA that are too prescriptive. See box on next page on how one Arkansas college gained momentum in MMA adoption.

Building Momentum for Change at an Arkansas Community College

After analyzing their institutional data, stakeholders at one community college in Arkansas learned that students who entered credit-bearing courses sooner were more likely to persist and continue their education. One of the key areas the college decided to focus on was improving its placement process. One administrator shared:

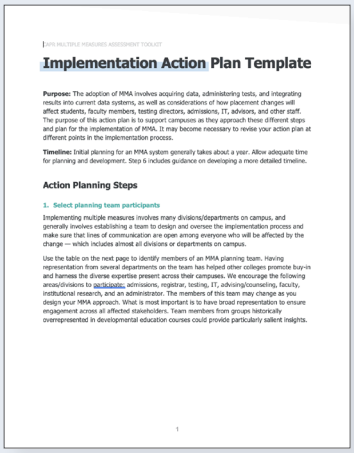
> *The group that really embraced this and moved it forward ... were the English faculty. They said, "Can we use writing samples? Can we use other assessments to be able to get them in?" And then we started implementing it that way, very much faculty driven, which I was very proud of. ... This isn't something where the state said, "Yes, you will do it." This was something that faculty saw in their classrooms: They have high-achieving students that could do the work, but because of placement issues, they were sitting in a developmental class.*

Successful planning at colleges may include setting clear goals at the onset of a new effort that reflect short- or long-term desired outcomes. A timeline showing when each milestone is estimated to be achieved could also be included. In general, MMA design and implementation may take as little as one academic year, typically beginning with pilots on a select population of incoming students. Differences in how quickly colleges can progress depend in part on institutional capacity and context. In Arkansas, some colleges planned and ultimately implemented an MMA placement system on a large scale within one year, while others took longer.

FROM THE MMA TOOLKIT:

A PLANNING TEMPLATE

An implementation action plan can be helpful in designing a new MMA system, planning for changes to roles and processes, and communicating with staff. A template for such a plan is found in CAPR's MMA toolkit.



CAPR MULTIPLE MEASURES ASSESSMENT TOOLKIT

Implementation Action Plan Template

Purpose: The adoption of MMA involves acquiring data, administering tests, and integrating results into current data systems, as well as considerations of how placement changes will affect students, faculty members, testing directors, admissions, IT, advisors, and other staff. The purpose of this action plan is to support campuses as they approach these different steps and plan for the implementation of MMA. It may become necessary to revise your action plan at different points in the implementation process.

Timeline: Initial planning for an MMA system generally takes about a year. Allow adequate time for planning and development. Step 6 includes guidance on developing a more detailed timeline.

Action Planning Steps

1. Select planning team participants

Implementing multiple measures involves many divisions/departments on campus, and generally involves establishing a team to design and oversee the implementation process and make sure that lines of communication are open among everyone who will be affected by the change — which includes almost all divisions or departments on campus.

Use the table on the next page to identify members of an MMA planning team. Having representation from several departments on the team has helped other colleges promote buy-in and harness the diverse expertise present across their campuses. We encourage the following areas/divisions to participate: admissions, registrar, testing, IT, advising/counseling, faculty, institutional research, and an administrator. The members of this team may change as you design your MMA approach. What is most important is to have broad representation to ensure engagement across all affected stakeholders. Team members from groups historically overrepresented in developmental education courses could provide particularly salient insights.

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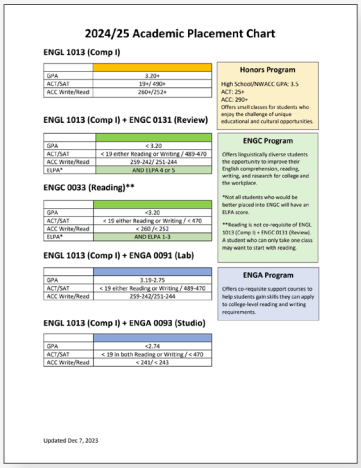
5. Monitor and modify MMA implementation using a continuous improvement model.

Continuous MMA improvement efforts consist of systematic data collection, regular evaluation of student outcomes, and strategic adjustments based on emerging evidence. Requiring institutions to share annual placement plans for review by the state higher education authority can help to create a cycle of reflection and refinement (see box below on this emerging process in Arkansas). This review process offers opportunities for state and system leaders to engage with institutions on their placement strategies and facilitate the ongoing optimization of MMA approaches.

Several Arkansas institutions in our project described committees of faculty and staff that were developed to monitor student outcomes and consider adjustments to existing measures and cutoffs or consider the use of new measures to place students. By establishing mechanisms for regular review and adjustment, states and colleges can adapt their approaches to MMA and developmental education more broadly based on changing circumstances, emerging institutional data, and new research findings from elsewhere. Embracing a culture of continuous improvement can enable MMA adopters to improve their practices iteratively in the service of better student experiences and outcomes.

Annual Review of MMA College Plans in Arkansas

In Arkansas, colleges have begun to submit annual placement plans to ADHE for review. This enables system leaders to better understand the adoption of MMA and engage with institutions on their plans, helping to ensure that they are using MMA effectively. Over the past two years, this review has revealed the widespread adoption of high school GPA as a standalone placement indicator at colleges across the state. Indeed, the majority of Arkansas colleges are now using high school GPA in some form for placement. The next phase in building this review process is improving data collection on how MMA affects student outcomes in a way that does not burden colleges by creating unnecessary new reporting requirements. An example placement chart shows one college's approach to MMA for English.



2024/25 Academic Placement Chart

ENGL 1013 (Comp I)

GPA	3.20+
ACT/SAT	19+/ 490+
ACC Write/Read	260+/252+

Honors Program

High School/NWACC GPA: 3.5
ACT: 25+
ACC: 280+
Offers small classes for students who enjoy the challenge of unique educational and cultural opportunities.

ENGL 1013 (Comp I) + ENGC 0131 (Review)

GPA	< 3.20
ACT/SAT	< 19 either Reading or Writing / 489-470
ACC Write/Read	259-242/ 251-244
ELPA*	AND ELPA 4 or 5

ENGC Program

Offers linguistically diverse students the opportunity to improve their English comprehension, reading, writing, and research for college and the workplace.

*Not all students who would be better placed into ENGC will have an ELPA score.

ENGL 0033 (Reading)**

GPA	<3.20
ACT/SAT	< 19 either Reading or Writing / < 470
ACC Write/Read	< 260 / < 252
ELPA*	AND ELPA 1-3

**Reading is not co-requisite of ENGL 1013 (Comp I) + ENGC 0131 (Review). A student who can only take one class may want to start with reading.

ENGL 1013 (Comp I) + ENGA 0091 (Lab)

GPA	3.19-2.75
ACT/SAT	< 19 either Reading or Writing / 489-470
ACC Write/Read	259-242/251-244

ENGA Program

Offers co-requisite support courses to help students gain skills they can apply to college-level reading and writing requirements.

ENGL 1013 (Comp I) + ENGA 0093 (Studio)

GPA	<2.74
ACT/SAT	< 19 in both Reading or Writing / < 470
ACC Write/Read	< 243/ < 243

Updated Dec 7, 2023

Conclusion

The scaling of MMA in Arkansas offers valuable insights for other states, systems, and colleges seeking to implement more holistic student assessment practices. Based on lessons from Arkansas, this brief recommends strategies that can be used by state-level actors to scale MMA in other states, as state policy remains the most powerful lever for statewide change in developmental education, regardless of whether the higher education system is centralized or decentralized.

Arkansas engaged in a thoughtful and deliberate process in scaling MMA. The collaborative effort of ACC, ADHE, and CAPR demonstrates the power of partnerships, knowledge sharing, and data-informed decision-making in the pursuit of systemic change. As a decentralized state, Arkansas created a model for MMA adoption that balances state-level guidance with institutional autonomy. Yet many of the strategies can be valuable for centralized states, even those that may want to introduce more uniform MMA policies across institutions.

MMA is not solely about achieving more accurate placement; it is about guiding students into appropriate learning environments that support their education and career goals. MMA is therefore intimately connected to other developmental education reforms that promote student success, such as corequisite student support. Indeed, at some colleges in Arkansas, their interest in and implementation of corequisite developmental reform was an impetus for the adoption of MMA. As other states consider similar reforms, the Arkansas experience underscores the importance of adaptability, ongoing learning, and a sustained commitment to better serve diverse student populations.

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