

MICHIGAN CENTER FOR STUDENT SUCCESS

An Initiative of the Michigan Community College Association



Skills Builders in Michigan's Community Colleges

Fall 2017

Michigan's community colleges are focusing on increasing student success, especially the rate at which students earn certificates or degrees or transfer to a university. While student outcomes are improving, there still are too many students who enroll but never earn a postsecondary credential.

Research indicates that some of the students who do not complete a degree or transfer are enrolling in a community college primarily to develop or improve skills that are valuable in the labor market. These *skills builder* students focus on career and technical education (CTE), attend community college for a short period of time, succeed in their courses at a very high rate, and frequently experience increased wages after enrolling, but rarely complete a credential or transfer.

While faculty and administrators have long acknowledged that colleges enroll skills builders, these students have been difficult to identify in a systematic manner. Identifying skills builders can contribute to a more comprehensive understanding of the community college student populations in Michigan.

To help understand more about this student population, Peter Bahr from the University of Michigan investigated skills builders in Michigan community colleges, extending his [prior research](#) on skills builders in California community colleges. Using data from five Michigan community colleges, Bahr found a total of 11,253 skills builders in a sample of 166,301 new Michigan community college students. Results of Bahr's study are described in this brief. Additional details are available in the [full report](#).

Skills builders are career and technical education (CTE) -focused students who attend community college for a short period of time, succeed in their courses at a very high rate and frequently experience increased wages after enrolling, but rarely complete a degree or transfer.

Who are Michigan's skills builder students?

Skills builder students account for more than one-quarter (27%) of new CTE-focused students in the five community colleges engaged in this study, and about one in fourteen (7%) students in the broader population generate of new students. CTE students are the subset of the analytical cohort who attempted at least half of their credits in CTE fields.

Skills builders account for 7% of the community college student population and 27% of CTE-focused students.

Skills builders attend community college for an average of 1.4 semesters, enrolling in an average of 6.1 credits (2.1 courses), of which the sizeable majority (94%) are in CTE fields. Their average success rate in their courses is 100%, and they achieve an average GPA of 3.4. One in nine skills builders (11%) has attended college previously, which is about half as many as in the broader population of new CTE-focused community college students. On the following page, Figure 1 describes the enrollment profile of skills builders.

How do skills builders compare to other segments of the student population?

Skills builders are disproportionately male (61%), as are new CTE-focused students generally (59%), though male students account for less than half (47%) of all new community college students. On average, skills builders are six years older than the larger population of CTE-focused students (35 vs. 29), and 10 years older than new students generally (35 versus 25). Skills builders attend college for just a short-time, about one-third as long as students in the broader population of CTE students, and they take about one-fifth as many courses, on average. Conversely, skills builders succeed in their courses at a much higher rate than do CTE students (100% vs. 79%), with an average GPA that is nearly a full point higher (3.4 vs. 2.6, using a 4-point scale).

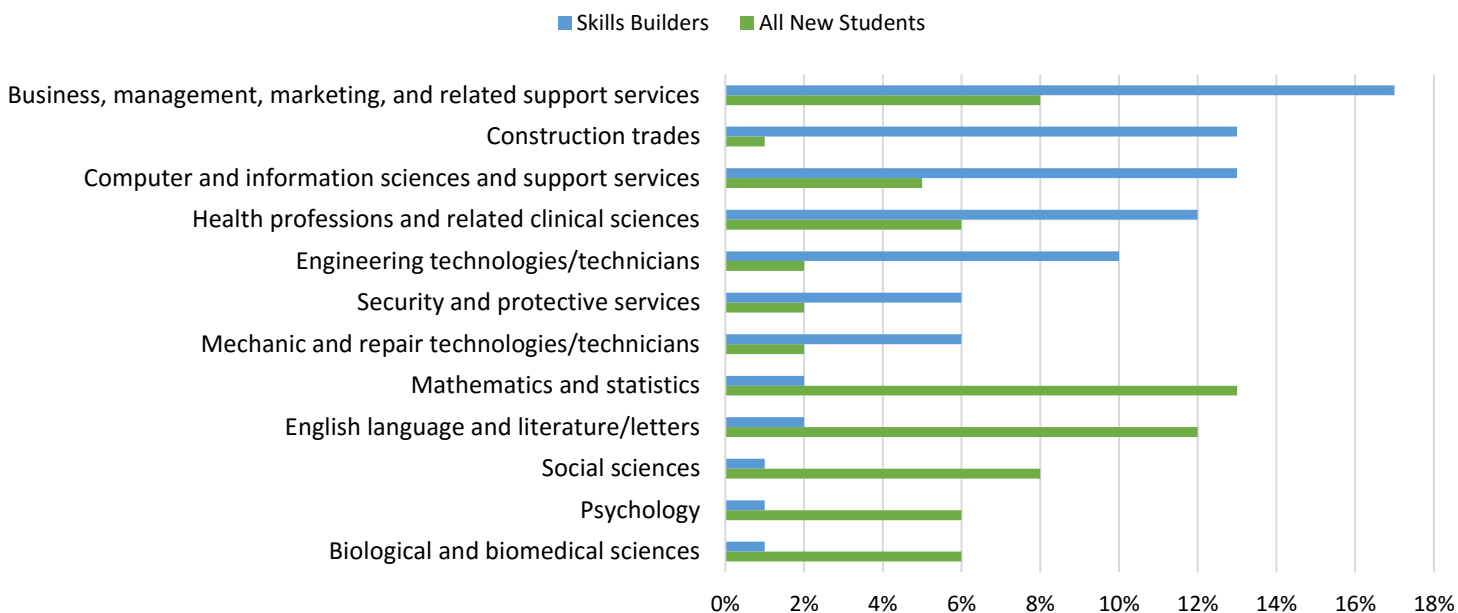
Figure 1: Demographic and Enrollment Profile

	All Students	All CTE Students	Skills Builders
Average age at entry	25	29	35
Female	53%	41%	39%
Attended college prior to enrolling in Michigan CC	25%	21%	11%
Average number of semesters enrolled	4.1	4.2	1.4
Average number of courses attempted	10.2	10.2	2.1
Percentage of all credits attempted that were in CTE fields	29%	80%	94%
Percentage of courses completed successfully (with a passing grade)	73%	79%	100%
Average GPA	2.3	2.6	3.4

In what areas of study are Michigan skills builders enrolled?

Skills builders focus their course-taking in a handful of fields. Bahr's Michigan study examined the percentage of all credits attempted in each field defined by the Classification of Instructional Programs (CIP). Nearly four out of five credits (79%) attempted by skills builders were in one of seven fields, including business (17%), construction trades (13%), computer and information sciences (13%), health professions (12%), engineering technologies (10%), security and protective services (6%), and mechanic and repair technologies (6%). For comparison, among new students generally, the top seven fields were mathematics and statistics (13%), English (13%), social sciences (8%), business (8%), biology (6%), psychology (6%), and health (6%).

Figure 2: Course enrollment of skills builders and all students



Do Michigan skills builders experience an earnings boost after enrollment?

Analysis of skills builders' average earnings (as indicated in the state unemployment insurance database) demonstrate a downward trend in the five years before skills builder students enrolled in community college, followed by a clear reversal of this trend beginning immediately after their first semester of enrollment. Their earnings climbed at an average rate of \$272 per year (inflation adjusted to 2011 dollars) in the five years following college entry.

Bahr's Michigan study demonstrates that 7% of new community college students and 27% of new CTE-focused students are skills builders. A number of implications can be drawn from these findings, and colleges can use the results of this study in a variety of ways to better serve skills builder students who enroll.

Identify programs that serve skills builders and align programs to meet their needs

The [full report](#) of Bahr's study includes criteria that colleges can apply to identify their own skills builders on a continuing basis without the need to replicate Bahr's elaborate and time consuming study. These criteria draw on variables to which individual colleges are likely to have access, including the number of terms in which students enroll, the percentage of community college course credits completed successfully by a student, the total number of community college credits attempted by a student, the percentage of attempted credits that were in CTE fields, and the nature of students' postsecondary enrollment (if any) in the one year immediately prior to enrolling in community college.

With the capacity to identify skills builders and the programs in which they enroll, colleges can capitalize on the pathways that skills builders pursue to develop short-term and stackable credentials. Programmatic changes of this sort should be informed by an understanding of the relationships between the particular courses that skills builders take, industry needs for particular skill sets, and the role of professional certifications and licenses in translating classroom learning to employment opportunities.

Connect professional certification and licensure records to student records

Institutional metrics of student success traditionally have focused on awards issued by colleges and universities — postsecondary degrees and certificates. However, these metrics neglect the important role that community colleges play in workforce development by preparing students for professional certifications and licenses, which may be how skills builders are able to translate the coursework that they complete into earnings gains, as demonstrated in Bahr's Michigan study. As a result, success metrics must evolve to include licenses and professional certifications commonly earned by students.

Increase access to labor market outcomes

Bahr's Michigan study demonstrated the importance of labor market information for understanding student experiences, as skills builders have declining earnings prior to enrolling in community college followed by a marked change and increasing earnings after college. To effectively design, redesign, and implement programs that respond to industry needs, colleges require continuing access to labor market data about their students, such as the state unemployment insurance (UI) data.

Continue to focus on student success

While skills builders represent a meaningful fraction of new students in Michigan community colleges, especially in CTE programs, there still are many other students who leave college without a postsecondary credential. Colleges should continue to focus on how they can better serve students who enroll but do not earn a credential or transfer. Initiatives such as Guided Pathways, Math Pathways, the Accelerated Learning Program, and Project Win-Win are promising practices that can improve student outcomes.

Michigan Center for Student Success

The Michigan Center for Student Success is an initiative of the Michigan Community College Association. The Center was founded in 2011 with a generous grant from the The Kresge Foundation. The Michigan Center for Student Success provides state-level support to Michigan's 28 community colleges by serving as a hub connecting leadership, administrators, faculty, and staff in their emerging and ongoing efforts to improve student outcomes, emphasizing linkages between practice, research, and policy. Visit our website at www.mcca.org for additional information about the Center, our initiatives, and to access publications, webinars, and materials from events hosted by the MCSS. The recommended citation for this brief is Bahr, P. R., & Orians, E. L. (2017). *Identifying skills builders in Michigan community colleges*. Lansing, Michigan: Michigan Center for Student Success.