

# California AEBG Technology Opportunity Assessment

Prepared for the AEBG Office by The Ada Center and WestEd

*September 10, 2018*

## Project Overview

In May of 2018, The AEBG Office commissioned an independent review of the software tools and information management systems currently being used across AEBG providers. The goal of the review is to understand the current landscape of tools being used across sources, along with challenge points and opportunity areas that practitioners are experiencing with these tools and associated processes. The Ada Center, an organization that conducts national research on effective technology use in higher education, partnered with WestEd to compile the findings in this report.

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## Methodology and Acknowledgements

Across May through September 2018, The Ada Center conducted in-depth interviews on technology use with 30 practitioners representing over seventy AEBG providers. Together with WestEd, The Ada Center also conducted a survey of technology use. The survey yielded 107 responses, the full results of which can be seen in Appendix A. To compliment the provider interviews, The Ada Center conducted 10 student interviews across two AEBG provider sites, spoke with state-level agencies, and met with select AEBG software vendors. These interviews were used to contextualize comments made by practitioners.

The Ada Center, WestEd, and the AEBG Office would like to thank all participants for their time, thought, and candor. With the exception of providers profiled within this report, individual interviewees will not be named. The consortia within which The Ada Center interviewed directors, principals, coordinators, transition counselors, data specialists, and AEBG students are shown below:

AEBG Consortium
Coast Adult Education Consortium
Advance, Lake Tahoe
ACCEL, San Mateo
Allan Hancock College Consortium
Sequoias Adult Education Consortium
Ventura Adult and Continuing Education
North Far North Regional Consortium
Sierra ASSETS Consortium
Davis Adult and Community Education
South Bay Adult Education Consortium
Marin Adult Education
Mt San Antonio Regional Consortium
Inland Adult Education Consortium
Los Angeles Regional Adult Education Consortium

## Technology Landscape Summary

Based on The Ada Center’s research on key AEBG activities that might benefit from technology support, the below framework will be used to narrate how AEBG providers use software today. The framework generally follows the student journey, beginning with (1) prospective student outreach and engagement, and continuing on through (2) assessing student readiness, (3) helping students get on a path, (4) helping students stay on their path, (5) supporting student learning, (6) facilitating career and education opportunity, and (7) continually improving student outcomes.

### Key AEBG Activities Across the Student Journey



#### Engage Prospective Students:

Most AEBG providers do not use a software tool to manage engagement activities with prospective students. Software that tracks and manages interactions with prospective students is often called a ***Customer Relationship Management System (CRM)***. Due to the visible role that AEBG providers have within their communities and the word-of-mouth referral system that’s in place today, a CRM for prospective students is not a top priority for AEBG providers. Larger AEBG providers that do use a technology-supported process to track interactions with prospective students use a shared excel or google drive file to track interactions with interested students. Once a student formally enrolls in an AEBG program, that student information is then recorded in the ***Student Information System (SIS)***.

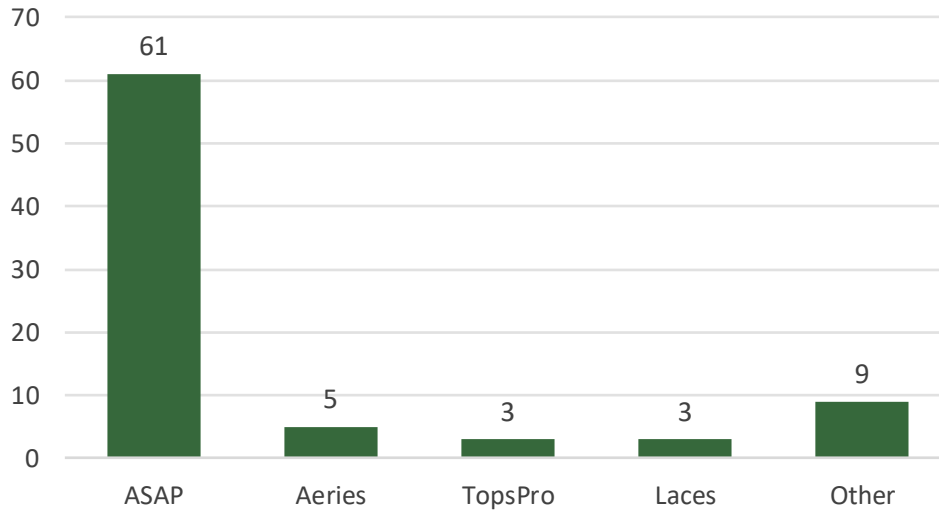
As soon as a student is enrolled in an AEBG program—a process that occurs primarily through pen-and-paper<sup>1</sup> that student’s information is entered in the SIS. Across a survey of providers, the most common SIS vendor for K-12 providers is ASAP (by a wide margin) and the most common SIS provider for community colleges is Ellucian Banner. Several small AEBG providers reported using CASAS TOPSPro Enterprise as a proxy SIS, however, for most providers, TOPSPro Enterprise does not have

<sup>1</sup> 43% of all respondents in the survey noted that their program uses only pen-and-paper applications (N=107).

the full functionality requirements to serve as a SIS.

### AEBG K-12 SIS Usage

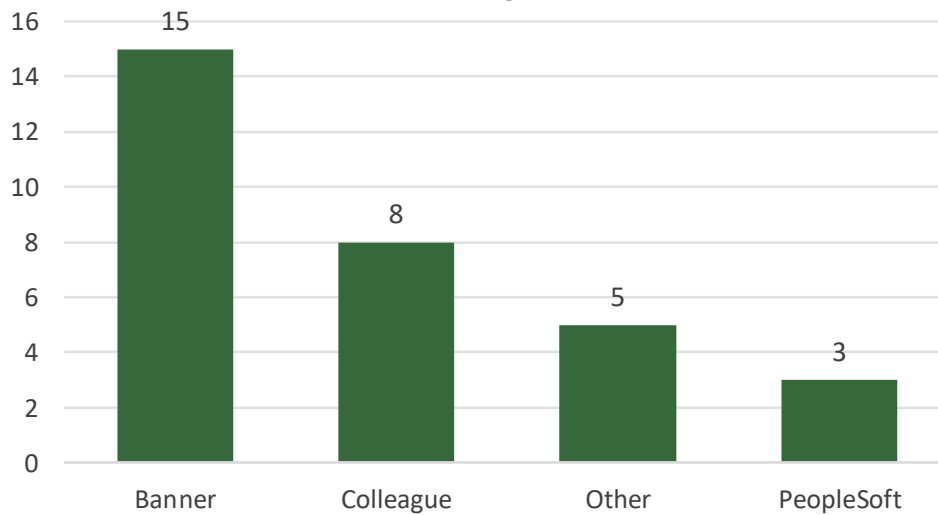
N=78



\* 5 respondents noted using 2 or more SIS

### AEBG CC SIS Usage

N=28



\* 3 respondents noted using 2 or more SIS

2

<sup>2</sup> Note that 1 respondent skipped SIS Usage question in the Technology Assessment Survey

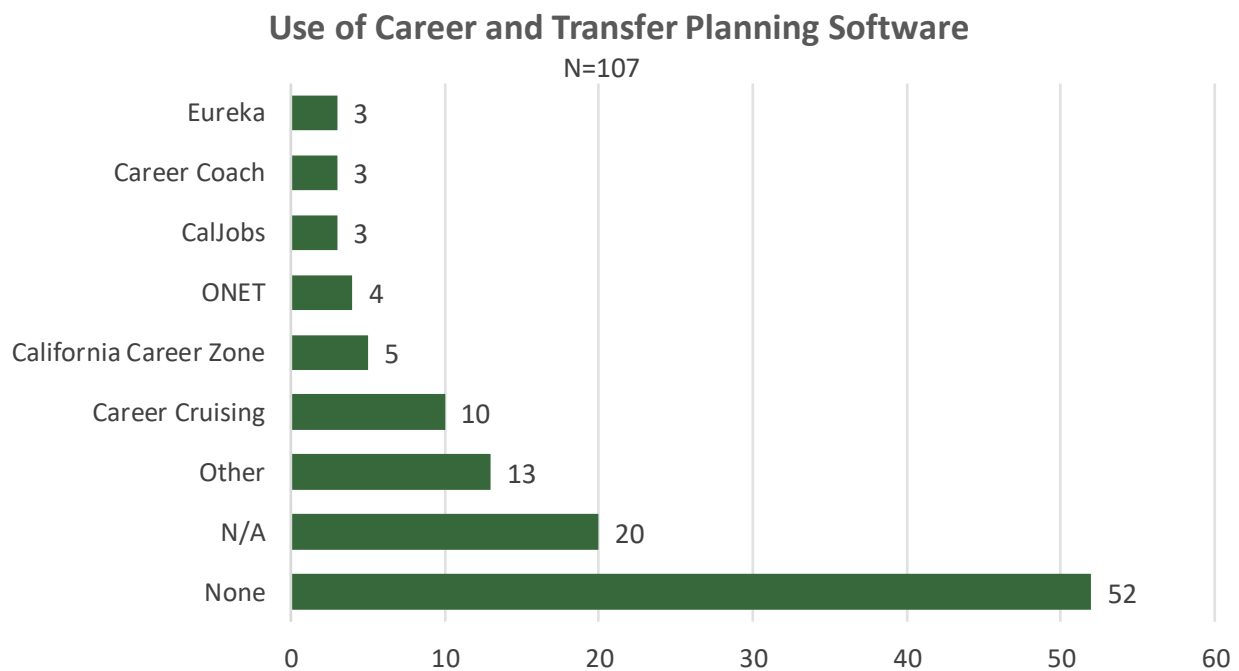
### Assess Student Readiness

The vast majority of AEBG providers use CASAS to assess student readiness for their programs. Several providers shared a preference for ACCUPLACER or TABE, but overall providers were comfortable with their assessment curriculum and technology.

### Help Students Get on a Path

As AEBG providers expand their counseling teams, students are receiving more face-to-face guidance throughout the enrollment and onboarding process. Even with added staff capacity, many AEBG counselors focus their counseling time on not-so-simple paperwork and orientation processes that are key to enrollment. Only a handful of providers interviewed have been able to create space to help students develop a career and education plan as part of their onboarding.

Many providers lamented the lack of career navigation and education planning software tools used in AEBG, despite the growing number of available tools on the market today; over 60% of providers do not currently use career or transfer planning software to help students chart a path through AEBG and beyond.



\* 6 respondents noted using 2 or more digital learning systems

### Help Students Stay on Their Path

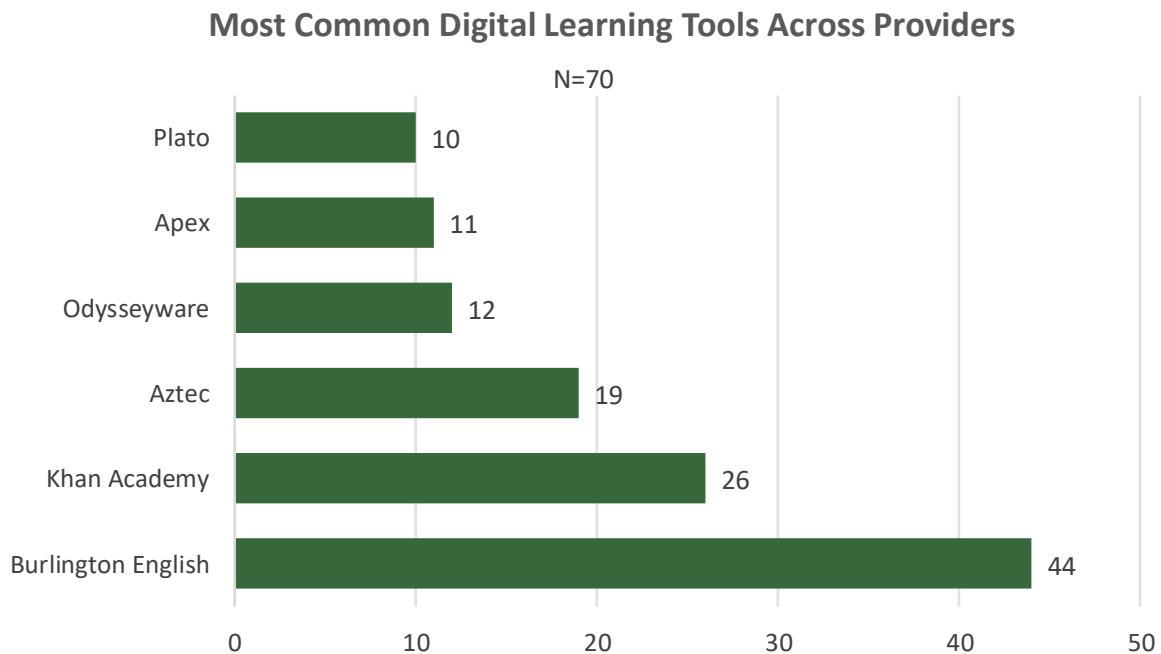
While many AEBG providers shared that a CRM for prospective students is not a top priority, most AEBG providers agree that a **Case Management System** for enrolled students would be very helpful

to their student success efforts. A case management system is unique from a SIS like ASAP, an appointment scheduling system like SARS, or a reporting tool like TOPSPro, in that it's designed to provide an intuitive, holistic snapshot of what's happening with a given student. Case management systems track staff and instructor interactions with students, preemptively detect students who might need support, and enable the creation of different 'views' so that individuals with different roles in the extended AEBG network have access to the appropriate student information.

Today, most AEBG providers do not have a case management system but rather use their SIS along with email, phone, excel, and google drive to create a case management approach. A growing number of AEBG providers are considering the procurement of a case management system. Several AEBG providers are currently implementing or are considering an emerging software tool called CommunityPro. Others are hoping to use established vendors like Hobsons, or smaller vendors like Nuro Retention.

### Support Student Learning

AEBG providers use a host of digital learning technologies to support student learning. The most frequently used tools are depicted below:<sup>3</sup>



\* 53 respondents noted using 2 or more digital learning systems

While several of these digital learning tools offer features comparable to a *Learning Management*

<sup>3</sup> See full list of responses for this question in the Appendix.

*System* (LMS), many of these tools lack the ability for students to manage their comprehensive course schedule and assignments, for faculty to share regular assignment feedback, and for faculty and students to communicate through a range of channels.

Despite the growth of the LMS across K-12 and higher education, most AEBG providers do not use an LMS. As a result, when students transition to for-credit college programs (even at the same institution), they'll need to learn how to use the LMS. In public higher education in California, Canvas is the most common LMS provider.

### **Facilitate Career and Education Opportunity**

With the introduction of AEBG, there's been a tremendous focus on student transitions. In particular, the transition from an AEBG program to a for-credit college program or a higher-earning job. Earlier in this report, we noted the absence of career and education planning tools at the start of a student's AEBG journey. This lack of technology support appears again as a student is nearing completion of an AEBG program.








Some AEBG providers are able to fill the software gap of helping students plan their next steps through transition counselors. Yet despite this high-impact, in-person counseling, many community colleges report challenges with 'receiving' AEBG students. Specifically, college enrollment staff are often not aware of students who complete AEBG programs and are now eligible to transition into for-credit programs—this is a challenge even within the same institution as AEBG students attempt to move from the non-credit to the for-credit side.

### **Continually Improve Student Outcomes**








All AEBG providers use TOPSPRO Enterprise for data reporting purposes, and many also use their SIS for additional reports. Much of AEBG practitioner data analysis efforts are focused entirely on state reporting. In particular, the reconciliation of data between the SIS and TOPSPRO Enterprise, and the cleaning of data for TOPSPRO Enterprise quarterly reports. Few providers use strategic data analysis and visualization tools like Tableau or Argos, but many are hopeful that this type of data analysis will be an option down the road. In particular, many providers are excited by state and regional efforts to map student movement across the education and career ecosystem.



## Representative AEBG K-12 Technology Use

 Engage Prospective Students	 Assess Student Readiness	 Help Students Get on a Path	 Help Students Stay on their Path	 Support Student Learning	 Facilitate Career and Education Opportunity	 Continually Improve Student Outcomes
Google Drive	CASAS	<i>No Tech - Transition Counselors</i>	SARS	Burlington English Khan Academy	<i>No Tech - Transition Counselors</i>	<u>TopsPro Enterprise</u>
ASAP	→					
Microsoft Outlook	→					

## Representative AEBG CC Program Technology Use

 Engage Prospective Students	 Assess Student Readiness	 Help Students Get on a Path	 Help Students Stay on their Path	 Support Student Learning	 Facilitate Career and Education Opportunity	 Continually Improve Student Outcomes
<u>CCCApply (Select Programs)</u>	CASAS	Career Cruising	SARS	Canvas (Select Programs)	<i>No Tech - Transition Counselors</i>	<u>TopsPro Enterprise</u>
Ellucian Banner	→					
Microsoft Outlook	→					

## Overview of Opportunity Areas

Through The Ada Center’s research, we encountered a myriad of opportunities to improve how software supports strong and equitable AEBG student outcomes. For the purposes of this report, we focused on state-level recommendations that have the potential to be high-impact and feasible to implement in today’s climate. For a recommendation to be ‘high-impact’, we considered relevance across AEBG providers and how acting on the recommendation could improve the student experience. For a recommendation to be ‘feasible’, we considered the cultural and political context, cost, and staff time required. The recommendations that rose to the top of high-impact and feasible are listed below:

- **Recommendation #1: Launch a Statewide Career Planning Software Repository**
- **Recommendation #2: Support Consortia Case Management Systems**
- **Recommendation #3: Encourage AEBG Learner Management System (LMS) Usage**
- **Recommendation #4: Form a Statewide AEBG Reporting Software Product Council**
- **Recommendation #5: Expand Technical Assistance Offerings to Include Cross-Systems Support**

## Launch a Statewide Career Planning Software Repository

Many AEBG students—especially those earning a high school equivalency or taking an ESL course—are on their first steps to a job with a family-sustaining wage. While recent efforts in California have focused on intentional career and education planning, such as Guided Pathways and Student Success and Support Program (SSSP), these efforts are often directed to students enrolled in for-credit courses.

As a result, it’s not until most AEBG students begin for-credit programs that they are given access to a full range of career planning tools. Most consortia providers argue it’s time to change that. A growing number of AEBG providers are investing in career exploration and planning tools, and others are evolving their orientation programming to provide a career and education planning component.

When asked what would be most useful to improving use of career and education planning software, providers shared that they’d like a better understanding of available tools. Specifically, a repository of available tools sorted by function and fee. For example:



### Type of Tool:

- Personality and Interest Inventory (Traitify, Meyers Briggs; Eureka.org; Findyourcalling.com)
- Career and Education Planning (Career Cruising, Career Surfer; California Career Zone)
- Job Board (CalJobs; Job Speaker)
- Career Readiness Training (Big Interview; Career Ready 101)



### Cost Structure:

- Free
- State-Paid License Fee
- Per-Institution License Fee at a Cost of X
- Per-Student Fee at a Cost of Y

The California Career Resource Network already has a few excellent resources available on their website, however, practitioners agreed a more robust and tailored repository (with suggestions for implementation) would be an immensely helpful state-level resource.

While software is only one dimension of career planning and job placement, students agree it's a helpful component. When asked about one technology AEBG students wish they had access to, 9/10 interviewed students said they would most benefit from a career navigation and interview preparation tool. And yet today over 60% of AEBG providers surveyed (n=107) shared they do not currently use any type of career or transfer planning software tool.

## Support Consortia Case Management Systems

AEBG providers are a critical piece of a much larger network of support for the students in their career trajectories. Most AEBG providers regularly coordinate with local employers, nearby education institutions, adjacent AEBG providers, and a plethora of community support organizations. To create a cohesive network of support, AEBG providers have created positions like Transition Navigators and Transition Coordinators to help students get the support they need to succeed. In addition to guiding students through AEBG, these individuals regularly call, meet in-person, or email support staff across the broader community.

For most AEBG providers, coordination regarding students typically occurs through non-electronic means. That is, an AEBG Transition Navigator is calling a counselor at the local community college to discuss a student case. While many times these phone calls or in-person communications resolve the immediate issue at hand, these modes of interaction miss an opportunity to create a ‘record’ of what’s happening with a given student. As students navigate the education and support community absent a common database of student interaction history, often they must repeat their stories many times.

The absence of a student interaction database also poses a host of challenges for counselors and navigators. AEBG staff currently spend a good deal of time digging through paper records, email history, and student recollections to paint a picture of what’s happening with any given student, detracting from valuable counseling time. And perhaps even more importantly for AEBG, the absence of student interaction history prevents data analysis to understand which interventions, student attributes, and activities are positively correlated with improved student outcomes.

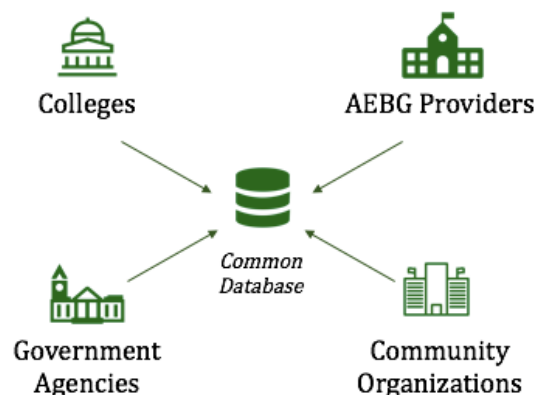
Acknowledging this challenge, a handful of consortia and providers have moved forward with the implementation of technology-supported case management models. The Lake Tahoe Consortia ADVANCE is working to implement a tool called CommunityPro Suite that would enable AEBG providers and key regional organizations to create a common case management system for the students they support. The Consortia is partnering with the Workforce Development Board, CalWorks, and others on data-sharing agreements to enable the creation of comprehensive student records across the student journey.

Right now, the data inputs for CommunityPro in the Lake Tahoe area occur through CSV files from participant systems, but over time the system is hoping to include APIs (Application Programming Interfaces) that enable less manual, more regular data sharing.

The benefits of the CommunityPro approach include access to comprehensive data sources for a given community. The drawback of that comprehensive data access is that CommunityPro is focused more on breadth of data access rather than depth of access. As of today, the tool doesn’t offer the ability for real-time data exchanges with both read and write-back capabilities to core higher education and K-12 systems.

Despite these data limitations, early feedback on CommunityPro is positive. Consortia members that are using CommunityPro as part of a case management system are very pleased by its referral history feature, illustrated below:

**System Reads and Extracts Data from Core Systems Across Community**



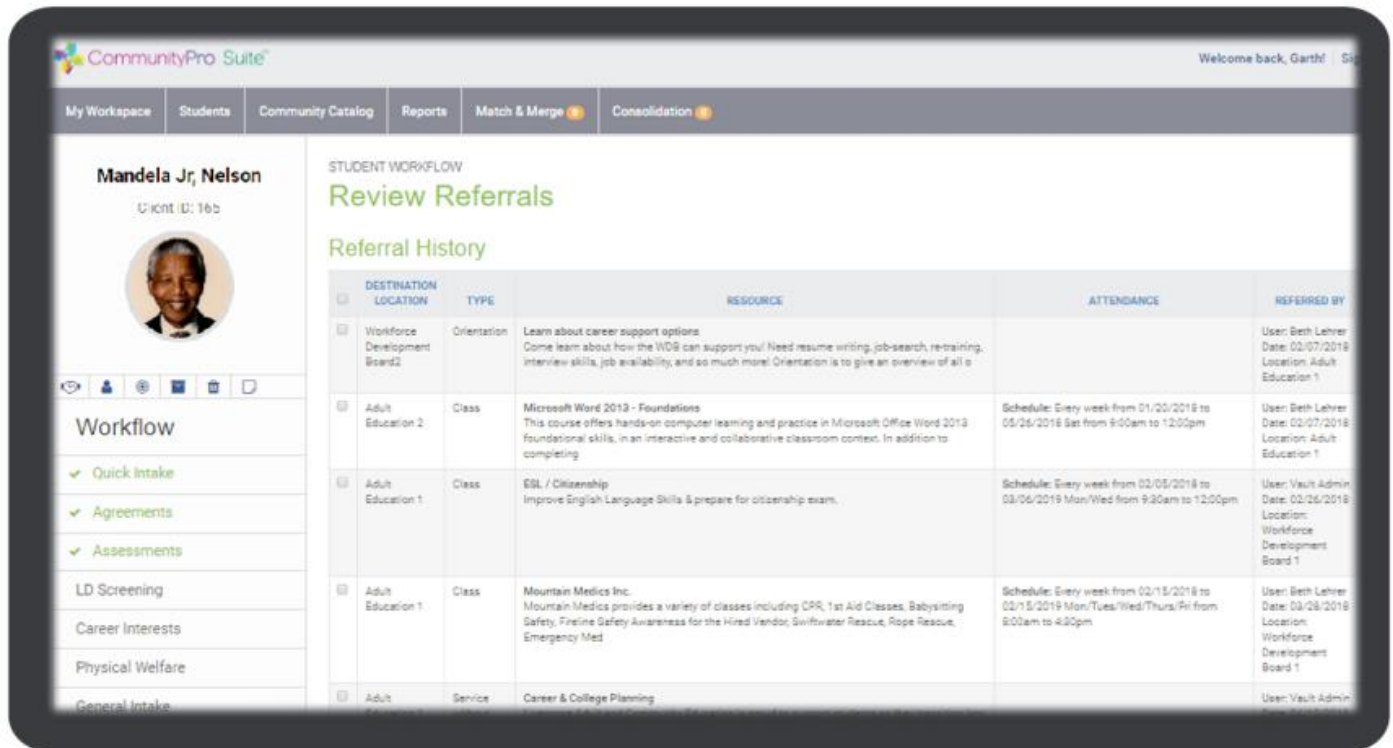


Photo Credit: [CommunityPro Suite](#)

Other consortia are taking different approaches to technology-supported case management, with some K-12 providers using a system called Hobsons - Naviance to help onboard students and manage them through the onboarding process. Several AEBG Providers like Glendale LEARNS are using CalJobs to case manage cohorts of students. AEBG providers at community colleges that currently use Hobsons - Starfish and EAB - Navigate to support for-credit students are exploring what it might look like to extend those capabilities to AEBG. East Region Adult Education (ERAE) has been partnering with Nuro Retention to develop an early alert and case management system specific to the demographics of adult learners. And other providers are still using Google Sheets to track key (non-sensitive) information about students and share it with role-appropriate staff.

Often the greatest obstacle with implementing case management systems is not the annual license fee cost (about \$40,000 annual), but the training of staff to appropriately configure and use the system. It takes the average provider about 2 years to fully implement a case management system, including establishing the appropriate integration with core data systems, configuring the case management system to local needs, establishing user policies, and getting staff trained and on board.

Due to the emerging nature of case management software applicable for AEBG, the state can best support these emerging innovations by:

- 1) Educating existing case management vendors about the unique needs of AEBG providers and

adult learners.

- 2) Enabling the sharing of promising practices and templates across AEBG consortia that are implementing a technology-assisted advising model. For example, making a consortia data-sharing agreement available to other consortia embarking on similar projects.
- 3) Creating a small fund to support the evaluation of case management models across the state. Given the nuances in how AEBG offices organize their advising supports, this evaluation would be helpful in determining the effectiveness of interventions including early career planning, different orientation models, software-supported models, and others.

## Encourage AEBG Learner Management System (LMS) Usage

In the last two years, Learner Management Systems (LMS) have become ubiquitous in K-12 and Higher Education. These systems are no longer merely a tool for administrators to manage and track online course participation, they're now a popular resource among students in blended learning environments and face-to-face-courses. Many community college adult learners report using the LMS to manage their homework assignments, track course progress, and engage with the curriculum. Many adult learners also report the initial learning curve for using the LMS is steep.

AEBG providers are poised to prepare students for the transition to a LMS environment by introducing students to the LMS in upper-level ESL, CTE, or High School Equivalency courses. Some AEBG providers already use an LMS, typically in the form of a course-specific digital learning platform. For example, Burlington English has a particularly effective LMS-like set of functionality for ESL.

To smooth the AEBG student transition to for-credit coursework, many AEBG providers agree that introducing students to the LMS of their host district or community college is ideal. Unfortunately, few AEBG providers have been able to do so. In most cases, the licensing fees for extending LMS software to AEBG is cost prohibitive. In other cases, there are process barriers like the lack of a common email address for AEBG students.

While there are numerous LMS providers across K-12 and Higher Education such as Schoology, Moodle, Blackboard, Desire2Learn, and Pearson, the California Community College Chancellor's Office has selected Canvas as the preferred LMS for the state's community college system. As a result, The Ada Center recommends that the Chancellor's Office explore the extension of Canvas to AEBG students in a pilot capacity.

In addition, the results of the AEBG technology survey indicate that many providers are not familiar with LMS technology, and would benefit from greater education about these systems. An illustrative screenshot from an instructor's view in Canvas is provided below:

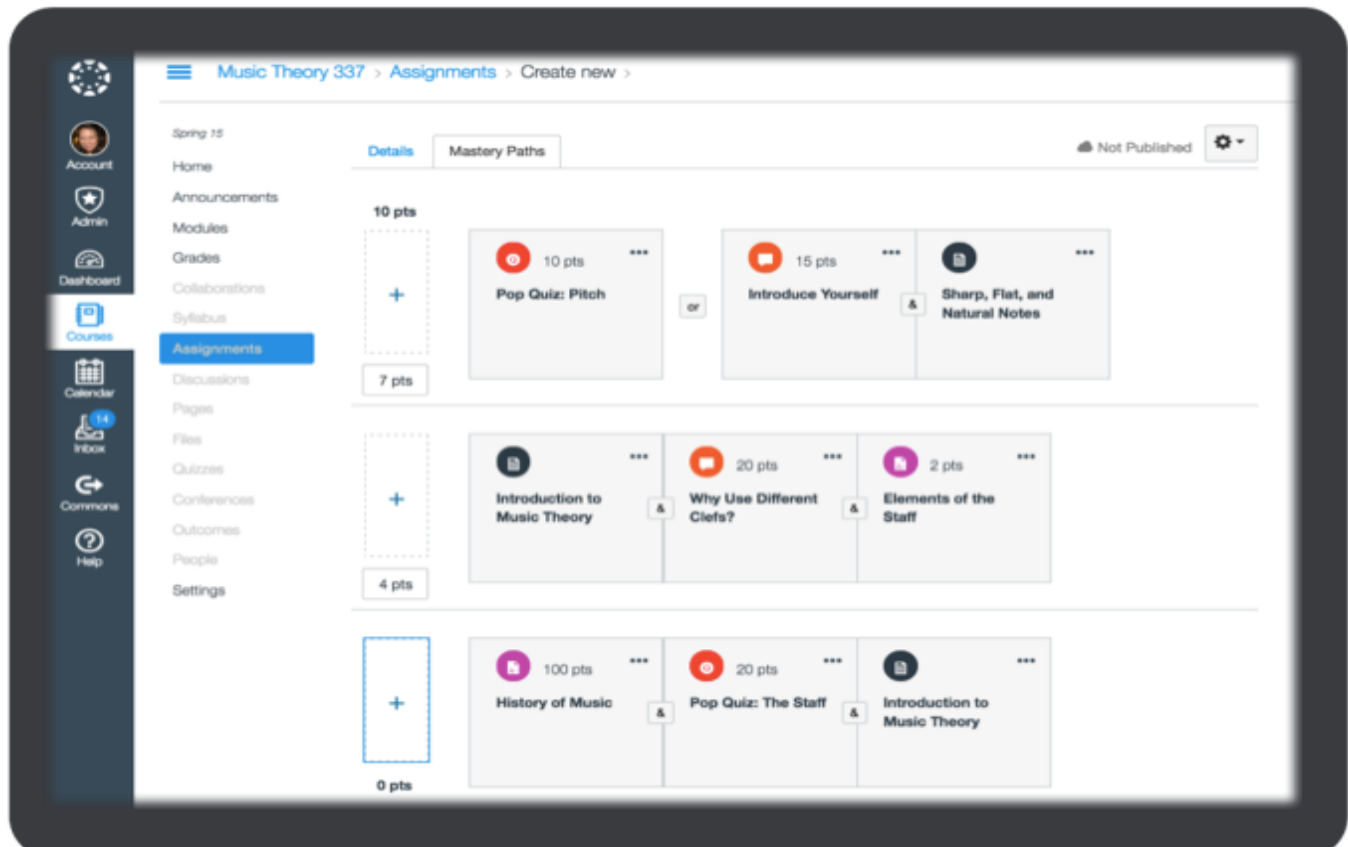


Photo Credit: [Canvas](#)

## Form a Statewide AEBG Reporting Software Product Council

Research with practitioners surfaced a common set of feedback regarding the use of CASAS TOPSPRO Enterprise for quarterly AEBG reporting. Providers agreed that TOPSPRO Enterprise could be improved to meet AEBG needs, however, the vast majority of practitioners interviewed argued that TOPSPRO Enterprise is still their preferred vendor for statewide reporting needs (excluding community college programs that will be transitioning to MIS reporting in 2019). As a result, The Ada Center recommends forming a Statewide AEBG Reporting Software Product Council to help improve upon the statewide reporting system of choice.

The Reporting Software Product Council should be composed of 5 -7 AEBG directors that represent a diverse mix of provider sizes, contexts, and technology stacks. The charter of this council is to aggregate feedback on provider and state needs to share with the state's reporting vendor, currently CASAS

TOPSPRO Enterprise, and brainstorm resolution.

## AEBG Reporting Software Council



5 - 7  
Director-Level  
Members



Represent SIS  
Landscape;  
predominantly ASAP



Different Sizes  
and Program  
Offerings



Quarterly  
Meetings with  
Vendor

It's recommended that a Software Council act as a distinct entity from the Data and Accountability Working Group to ensure the charter of both groups is given appropriate attention. However, the Data and Accountability Working Group and the Software Council will need to ensure strong communication; having at least one individual serve on both groups would be one means of ensuring that coordination.

The Software Council's success hinges on support from the state's chosen software provider; Representatives at CASAS TOPSPRO Enterprise expressed a willingness to engage with the Software Council to help ensure their product roadmap reflects AEBG provider needs. Because the needs of AEBG will not be static, the Software Council is the best means of ensuring that the state's reporting software can keep pace with innovations in the field.

The Ada Center's research with practitioners unveiled several challenges related to quarterly reporting that merit discussion by the Software Council:

- Many AEBG providers cited **bandwidth problems when submitting quarterly reports**. During quarterly submission periods, practitioners noted that TOPSPRO Enterprise produces faulty error messages and/or takes over 24 hours to receive files. Due to these challenges, college staff often work overtime to get the data files submitted in advance of state deadlines. CASAS recently implemented several strategies to mitigate these challenges, however, the Software Council should partner with CASAS to ensure files can be easily uploaded during peak periods. Resolution to file uploading barriers is essential for building practitioner confidence in the state's reporting system.
- Nearly all providers cited the ability to **clearly and consistently track positive student momentum** as a challenge with quarterly reporting. While TOPSPRO provides clear data fields to track a student literacy gain or a student transition to a post-secondary program that's for-credit, providers noted that current reports aren't designed to track important CTE milestones like



industry-recognized occupational credentials or skills gains—a major facet of AEBG. In addition to these concrete milestones, providers also noted the inability for TOPSPro Enterprise to capture indicators of civic engagement, a critical service that AEBG provides. For example, many ESL programs support populations of elderly, retired students learning English to enhance their personal mobility and engage with younger family members. These students don’t intend to reenter the workforce or continue in education. They do, however, hope to be able to vote, complete paperwork, and engage more deeply with their communities. Providers noted that current reporting tools don’t enable providers to effectively track progress for students with different definitions of success.

- In addition to challenges with tracking student progress milestones unique to AEBG, providers also noted the lack of data fields for **tracking student services utilization**. While some activities like ‘resume preparation’ are included within TOPSPro Enterprise reports, other critical workforce preparation and onboarding activities are excluded.
- Providers also expressed a future-thinking aspiration for the state to share TopsPro Enterprise **data that’s been integrated with data from other state-level sources such as wage data**, regional partner data (e.g., Homeless Collaborative), and others. CASAS TopsPro Enterprise is currently working with the Employment Development Department to provide a base wage data match to AEBG providers. To maximize the success of this new functionality, a discussion of its role out should be discussed by the Software Council.

The above areas are among several that should be discussed by a newly formed Reporting Software Council. The Council will play an important role in partnering with the state’s chosen reporting vendor to address practitioner challenges through a combination of suggested product changes, provider trainings, and policy alignment. The Ada Center suggests that the AEBG Software Council be formed immediately to assist the state with the upcoming reporting software RFA.

## Expand Technical Assistance Offerings to Include Cross-Systems Support

Those AEBG providers who do not have a history of using CASAS TOPSPro Enterprise for WIOA reporting describe the process of submitting quarterly AEBG reports in TOPSPro Enterprise as akin to speaking a foreign language. For some, the language and data definitions used within TOPSPro Enterprise are not consistent with providers’ existing data systems and business processes. In particular, AEBG providers cited attendance, service utilization, and enrollment reporting within TOPSPro Enterprise as being distinct from comparable reporting done within other education systems.

As discussed in the previous section, several of these challenges stem from lack of alignment between

desired AEBG data collection and the WIOA-focused content of TOPSPRO Enterprise. However, many of these challenges are part and parcel of migrating 490 AEBG providers with variances in organizational structures, business processes, student populations, service offerings, other technologies, and histories to a common language and reporting system, agnostic of the system itself.

The state has supported a number of training initiatives to strengthen provider reporting capacity, including site visits, webinars, conferences, and a social media presence. The Technical Assistance Project, launched in earnest in May 2017, has partnered with OTAN, CASAS, and CALPRO to provide support to both WIOA and non-WIOA AEBG providers across the state. Many providers credited site visits from OTAN and CALPRO as being essential to their improved data capacity. These same providers shared that generic webinars illustrating reporting requirements without interacting with individual provider data have been far less helpful.

The Ada Center spoke with providers about additional supports that would be most helpful to strengthening the quality of AEBG data. These conversations converged on a technical assistance model with the following attributes:

- **Reverse engineer data collection, input, and ownership processes from desired end goals.** To effectively submit state-level data to TOPSPRO Enterprise *and* to gather consortia-specific data for analyses, there's a need for strong data collection and input processes – what data do we need to collect when a student first finds us? At orientation? On the first day of class? Which systems do each of these data points get entered in? How frequently should we update the data? Who is responsible for updating the data? Many AEBG providers would benefit from facilitated support in reviewing and streamlining their data collection, input, and ownership processes.
- **Create a data flow map.** As an output of reverse engineering data processes, a facilitator would support consortia in the creation of an information flow map that articulates the what, when, who, where of each piece of critical student data that is being collected for AEBG.
- **Recommend needed configuration changes to systems that manage AEBG data. If that's not immediately possible, suggest work-arounds.** After completing the above exercise, there may be necessary changes to provider software systems. Nearly all Student Information Systems can be configured to meet AEBG data collection needs through the use of creative labels, repurposing data fields, and adding new data fields. The challenge for most AEBG providers is the IT capacity to make these changes. Because many AEBG providers currently have limitations on IT capacity that prevent timely systems configuration, the creative use of google sheets or excel may be viable interim solutions (as long as IT is consulted on the format of these interim solutions so they can be converted to a more sustainable format down the road).

These technical assistance attributes involve more intensive, cross-systems support than is currently available in the field today. Some consortia have been able to conduct aspects of the above exercises independently—several AEBG consortia have hired administrators with experience in ASAP and TOPSPRO Enterprise to work overtime with their non-WIOA providers to establish effective processes related to data inputs and reporting—though other consortia are very much struggling to integrate seemingly disparate software systems and human processes.

At the beginning of this report we shared how many community college enrollment offices are not aware of the AEBG non-credit students on campus that are eligible for transition to a for-credit program at their institution. That challenge has a variety of viable solutions, which can be discussed and quickly remedied by engaging in the exercises articulated above. This is just one example of the data management challenges that can be mitigated through the above support model.

The Ada Center recommends exploring how cross-systems technical assistance might be extended to providers in regional workshop or site visit format. Providers recommended OTAN or the Institutional Effectiveness Partnership Initiative (IEPI) as possible partners in delivering this type of support.

## Concluding Thoughts

Much as the collective identity and language of AEBG is evolving, the software landscape to support AEBG activities is evolving too. Several years in the future, The Ada Center anticipates California AEBG providers will have access to a tool that provides a picture of how adult learners are moving across the education and employment ecosystem through merged data sets. We also anticipate that many AEBG providers will be utilizing community-wide case management tools to help students access available supports and prevent students from slipping through the cracks. This work will be hard— involving changes to business processes and more than a few IT tickets—and there will still be much left to do.

Several of the greatest obstacles and aids to this software-related progress lie in coordination with AEBG partners. Through Guided Pathways efforts, many California community colleges are undergoing business process review, particularly with respect to student onboarding and intake. There is a real opportunity for AEBG providers and their community college partners to collectively map data processes, particularly around student transitions. Further, as many community colleges struggle with IT capacity constraints (providers report IT tickets with 3 - 4 year wait times), coordination across non-credit and for-credit entities on IT priorities and staffing needs will become essential.

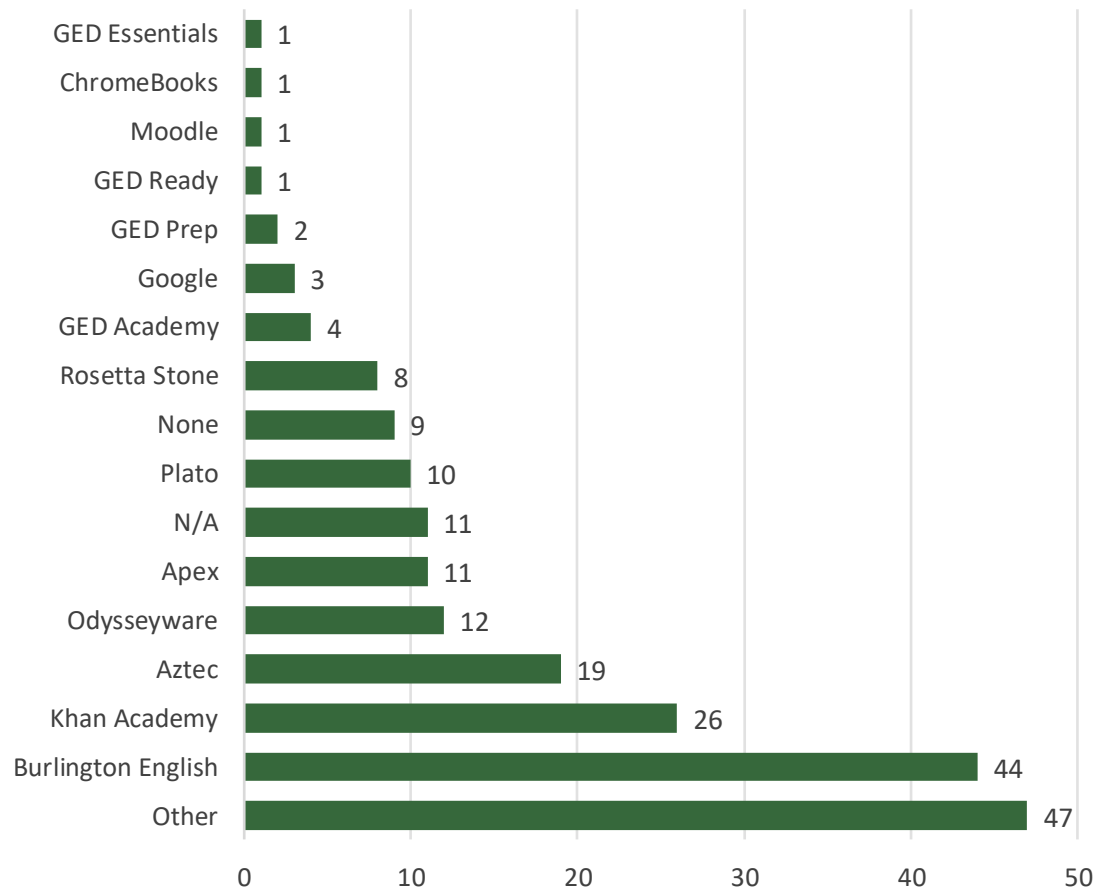
Seizing on opportunities to facilitate idea-sharing and greater understanding among AEBG providers, K-12 districts, community colleges, and agencies will be key to achieving software goals and the creation of an effective ecosystem of student support. The Ada Center encourages providers, state agencies, and funders to continually look for ways to facilitate this type of collaboration.

## Appendix A: AEBG Technology Survey Results

1. Most common digital learning tools across providers. Question asked on Technology Assessment Survey, “Which digital learning tools, if any, do you use for ESL? For high school equivalency? For example, Burlington English or Khan Academy.”

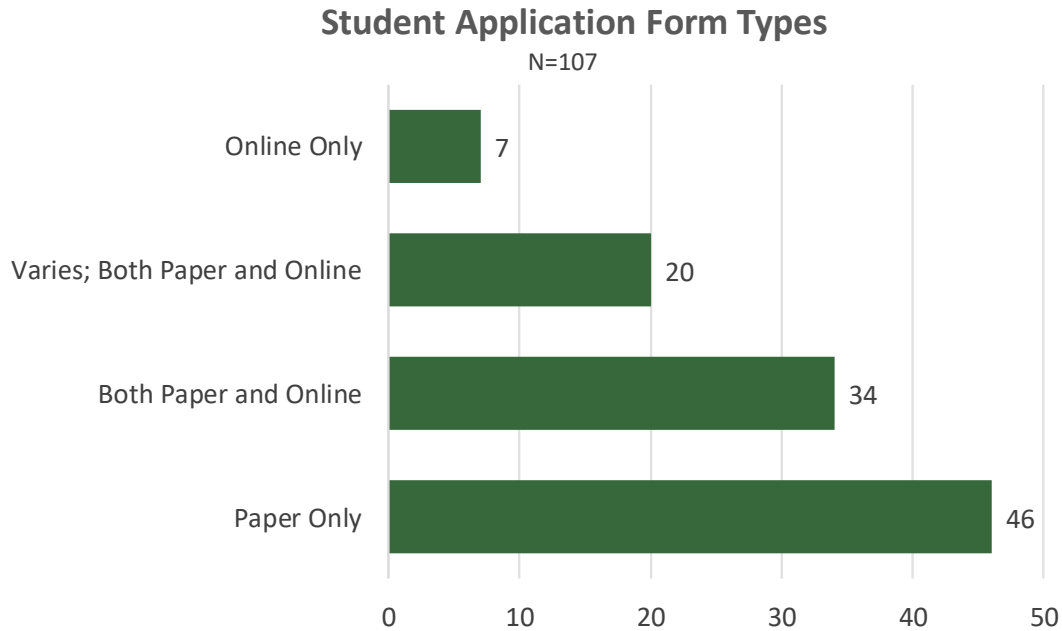
### Most Common Digital Learning Tools Across Providers

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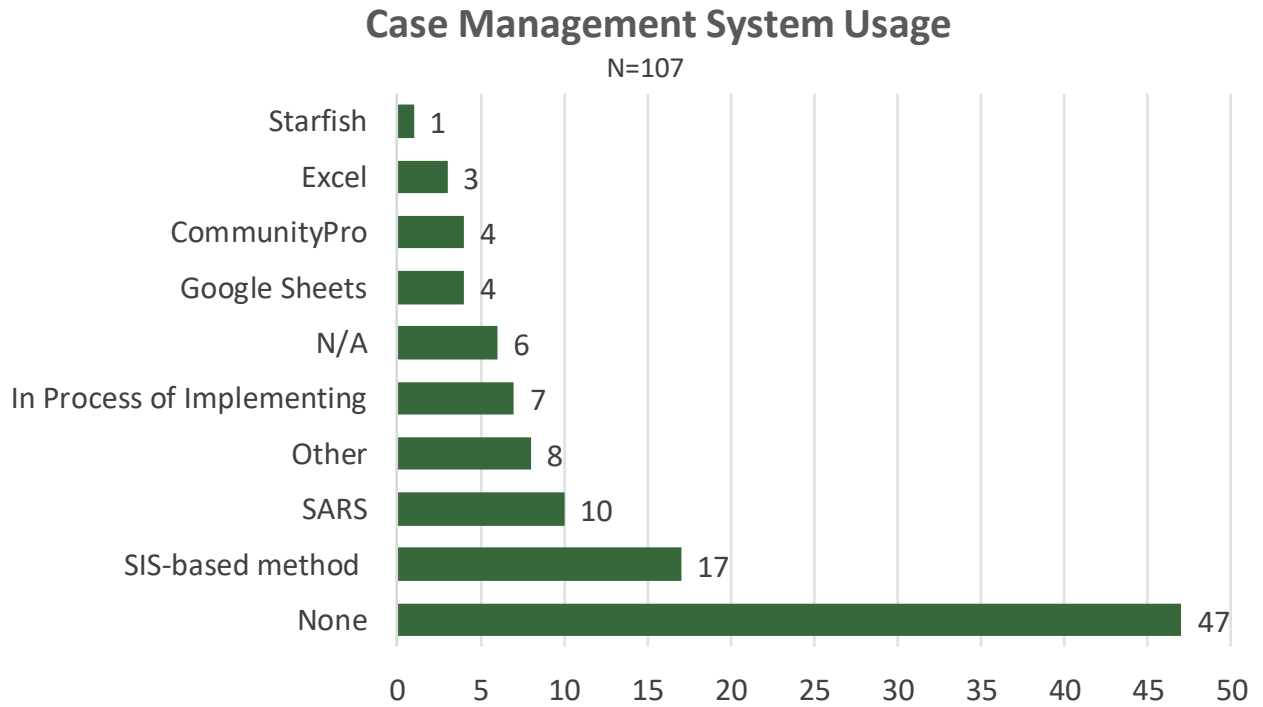


\* 53 respondents noted using 2 or more digital learning systems

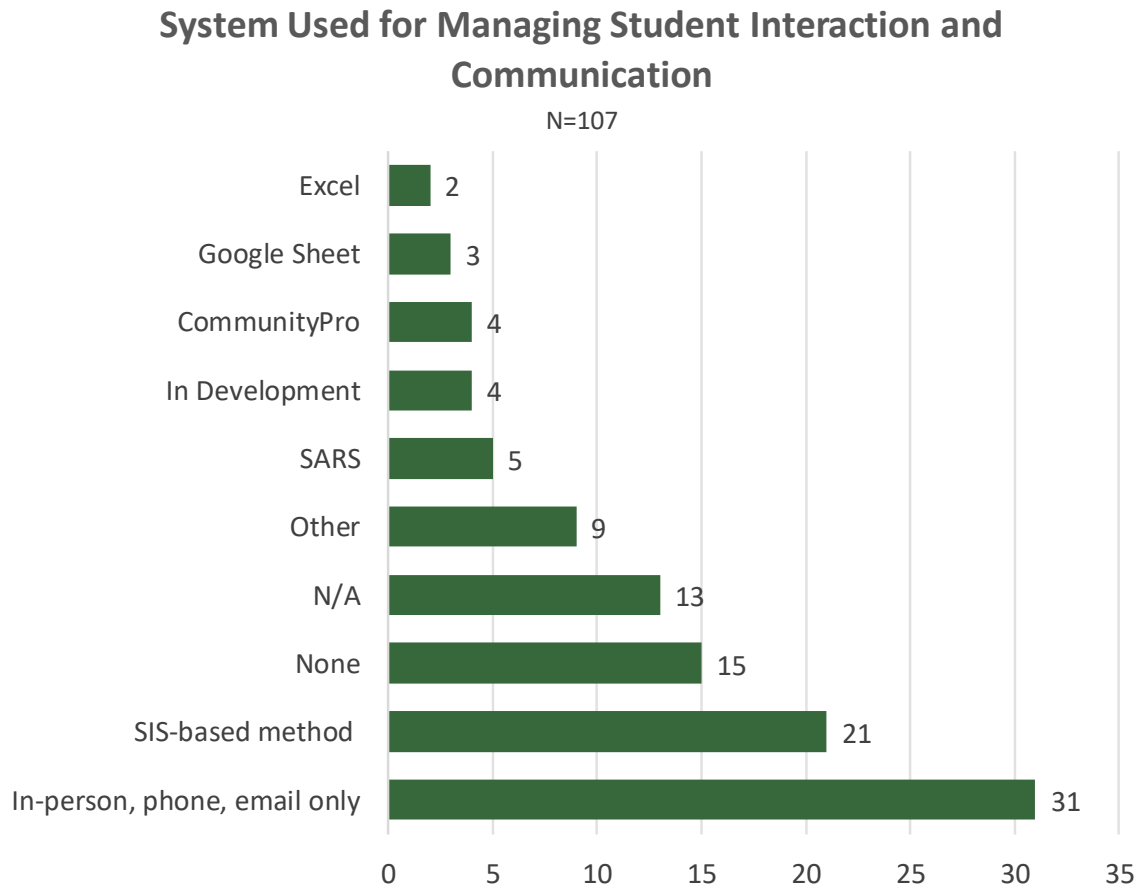
2. Student application form types across all respondents. Question asked on Technology Assessment Survey, “How do students apply or enroll to attend your adult school or college? Is there an online application process or is it solely paper registration or both paper and online?”



3. Case management system used across all respondents. Question asked on Technology Assessment Survey, “Do you use any type of software tool to ‘case manage’ students? That is, a system to track student interactions, enabling the creation of student profile that can be used to help ensure students are getting access to the right supports.”



4. System used for managing student interaction and communication across all respondents. Question asked on Technology Assessment Survey, “*Could you describe the process (including any software tools used) by which you manage student interactions and communication, both at your sites and among your nearby partners?*”





5. LMS systems used across all respondents. Question asked on Technology Assessment Survey, “Do you use a learner management system? If so, which one and for which students?”

