

2007: A Milestone Year for Community College Accountability in California

by

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Paper Presented at the Association for Institutional Research (AIR)
48th Annual Forum, Seattle, Washington, May 25 – 28, 2008

Track 5, Research in Action, Session 517

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This presentation covers the developments regarding California's new accountability program dubbed ARCC (for Accountability Reporting for the Community Colleges)¹. The California situation may serve as a kind of case study for other state systems although California's context of educational policy and system size (109 colleges) does shape what one can generalize to other states.

This presentation begins with a review of the recent history so that readers can have a reasonable context for the ARCC events. Next, we describe the actual methodological features that may distinguish the California model from other community college accountability proposals/systems. We follow this with a discussion of the reaction of various stakeholders to the ARCC and with future developments. We close with a section on lessons that the California experience may offer to policy makers and higher education officials.

Historical Context

Accountability efforts for the community colleges gained prominence in the 1990s under an agreement between the Chancellor's Office and the Legislature and the Governor's Office. This agreement was known as Partnership for Excellence (PFE). This was the first wide-ranging accountability effort for the state's community college system because there had been no comprehensive statewide data system by which to measure institutional performance before that time. Partnership for Excellence resulted in additional funding for the state's community colleges but it hardly satisfied the interest in the executive branch for accountability.

PFE only compared actual volumes of specific "outputs" to a set of "adjusted" outputs to see if the system as a whole was meeting reasonable levels of performance. The PFE levels of performance adjusted for expected funding. But because the system always received less than the full level of expected funding, the expected performance levels were perennially adjusted downward (and subsequently met). Furthermore, PFE avoided identifying any cases of underperformance in the system since it emphasized the performance of all 109 colleges as a group. PFE eventually lost favor with the advocates of accountability in the state's oversight bodies (mainly the Department of Finance and the Legislative Analyst's Office), and a move began for a stronger form of institutional accountability.

In 2004, the Legislature and the Governor's Office made Assembly Bill 1417 law (AB 1417). AB 1417 required the Chancellor's Office to propose a performance reporting system with the assistance of "external" consultants. With the assistance of five national experts on community college performance, the Chancellor's Office satisfied AB 1417 by submitting a comprehensive plan for performance measurement that focused upon the performance of individual colleges on a set of six basic performance indicators. In the Budget Act of 2005, the Legislature and the Governor's Office followed up on the plan by authorizing and funding the Chancellor's Office to implement the proposal that AB 1417 had required.

¹ Interested parties can obtain more information about ARCC via e-mail at arcc@cccco.edu or at our website at: <http://www.cccco.edu/SystemOffice/Divisions/TechResearchInfo/ResearchandPlanning/ARCC/tabid/292/Default.aspx>

With the assistance of a new technical advisory group, the Chancellor's Office operationalized and implemented the proposal that sprung from AB 1417. The operationalization and implementation of AB 1417 became the system known as Accountability Reporting for the Community Colleges (or ARCC). As part of the implementation plan (ARCC), the Chancellor's Office convened meetings with the colleges and created a website to help the colleges to fulfill the requirements of ARCC. In March 2007, the Chancellor's Office submitted the official ARCC report to the Legislature with some fanfare (i.e., with a press conference and a special briefing for the Legislature).

The ARCC report received significant media coverage at the local level, and college officials basically gave positive responses to the official report. In some cases, college officials even initiated press coverage of the ARCC report as a way to counter the public impressions that had unexpectedly developed over the past twelve months as the result of two relatively critical policy reports from "think tank" organizations. To a certain extent, the attention that college officials accorded the ARCC report helps to fulfill the concept of "local accountability," which provides the underlying philosophy behind the ARCC. In lieu of the withholding of funds from "underperforming" colleges and in lieu of a state agency undertaking an investigation of an "underperforming college," the philosophy of local accountability holds that local voters and the local board of trustees for each college administration will act to improve their community college's performance if they have the proper data with which to evaluate that performance.

The press coverage of ARCC actually supplements the primary accountability mechanism that the ARCC requires of each college. This primary mechanism is the interaction of the local board of trustees with its college officials on the topic of the ARCC results. The legislation behind ARCC requires each college to submit documentation of this interaction to the Chancellor's Office within one year of the release of the official report.

Methodological Features

The discussion of methodological features subdivides into several topics that we list below.

1. Domain of the performance indicators
2. Format of performance indicators
3. Process for implementing the accountability system

The domain of the performance measures in ARCC encompasses (a) rates of completion for associate degree, transfer, or a certificate; (b) rates of completion of at least 30 units; (c) rates of term-to-term persistence; (d) rates of completion for vocational courses; (e) rates of completion for basic skills courses; (f) rates of improvement in basic skills courses; (g) the number and percent of public institution baccalaureate recipients who transferred from a California community college; (h) the annual number of transfers to any four-year institution; (i) the transfer rate to four-year institutions; (j) the number of degrees or certificates awarded per program; (k) the increase in total personal income following completion of a vocational degree or certificate; (l) the number of people with improvement in basic skills; and (m) ethnicity-specific rates of participation in the community colleges.

To qualify the above list, we note that items (g) through (m) apply only to state-level performance and not to college-specific performance. Volume metrics (counts) can communicate a level of effectiveness in performance of a function but they tend to unfairly favor institutions with a size advantage. Thus, the state-level metrics that used counts were not used for the analysis of college-specific performance. The measure of income gain applied only to analysis of state level performance because geographic variations in wages (based upon regional differences in labor markets) precluded use of this metric for between-college comparison. ARCC contains a performance indicator for the rate of improvement in courses for English as a Second Language (ESL), but the need to improve the quality and completeness of the ESL data in the colleges delayed implementation of this performance indicator until 2008.

The state-level metrics have value in that they help to evaluate state-level investments in the community college system while avoiding unfair between-college comparisons. The college-specific metrics have value in that they give the local board of trustees an equitable way to judge the performance of their community college administration on the different missions that they address.

The format of the performance data has four notable facets. First, the ARCC's reporting of the indicators includes the three most recent years of data available. This has great significance for the evaluation of a specific college's performance on one specific indicator. An analyst can evaluate the current performance of a college against its prior performance data. That is, a college has its own past as a "baseline" for determining how well a college has done on an indicator; the evaluator (a trustee or a voter, et al.) can make a judgment without comparing the performance of different colleges. A college's performance over multiple time periods in a specific area may have more meaning to decision makers than a college's performance in a single time period because a possible trend could signal a need for intervention (if the trend is a worsening one) or for positive reinforcement (if the trend is an improving one). This type of information basically enables an analyst to use the so-called "value-added" approach to performance evaluation.

Second, the ARCC's reporting of the college indicators includes a comparison of a specific performance indicator to the performance of other "peer" colleges on that same specific indicator. The ARCC provides statistically determined "peer groups" for each indicator at each college. That is, a college can have a specific, possibly unique, peer group for each of its performance indicators. The justification for the creation of a separate peer group for each indicator comes from the assumption that each performance indicator has intrinsic differences in their causal factors. The indicator-specific peer grouping also agrees with the assumption that community colleges strive to achieve multiple missions. Placing a college in a single peer group for the different indicators (i.e., the same peer group of comparable colleges for all of the indicators) essentially assumes that there is no difference between the missions and between the environments of each college. It certainly did not hurt that the use of peer grouping was more palatable to the colleges than a ranking of all 109 colleges on an indicator.

The statistical determination of each peer group results from a three-stage process. In stage one, researchers at the Chancellor's Office combine information from literature reviews and input from institutional researchers in the colleges to compile a list of "environmental" variables (sometimes called "exogenous" variables) that theoretically could affect a specific performance indicator. In stage two, the researchers at the Chancellor's Office use regression modeling to find the most parsimonious set of variables that "predict" a specific performance indicator. Of course, this regression model does not produce a "causal" model because the process omits college-controlled variables (like number of faculty or size of budget) from the regression models. This omission fits the purpose of the process, however, because the process only attempts to "adjust" the performance indicators for environmental variation between the 109 community colleges in the state. In stage three, the researchers at the Chancellor's Office use cluster analysis (with the parsimonious set of environmental variables identified through regression) to identify the set of comparison colleges that a given college will have for a given performance indicator.

Third, the ARCC's reporting of college performance includes a brief analysis/response from each college. That is, each college, following receipt of a draft copy of the numbers for its performance indicators, has the opportunity to include in the ARCC report unique local knowledge about its situation. This college "self-assessment" adds context to the numerical data that the Chancellor's Office calculates and tabulates for the report. This brief self-assessment fills the gaps in knowledge that a standardized MIS cannot capture---essentially accounting for the unique, unsystematic and uncontrollable events that affect an institution's performance on an indicator (such as natural disasters, riots, change in state law, etcetera).

The ARCC report presents a fourth type of data, enrollment statistics, to facilitate an evaluation of college-level performance. The Chancellor's Office used MIS data to produce college-specific statistics regarding demographics of the enrollments. The ARCC report shows this data as a "College Profile" in each college's section in the report (which totaled 753 pages). This fourth type of data may function as its own measure of college performance by indicating the size and diversity of its served population. At the same time, this fourth type of data may also provide important contextual information for the equitable interpretation of a college's numbers in its performance indicators and of a college's place within its peer group for a given performance indicator.

Process of Implementing the Accountability System

The most important element in the implementation process was the sharing of information. The ARCC process used a series of tools to share information about the new system. The Chancellor's Office created a web page to disseminate announcements and technical information. The web page included an extensive and up-to-date set of Frequently Asked Questions (FAQs) and versions of the report (the multiple drafts as they evolved as well as the final copy). The Chancellor's Office named a single point of contact (a specific staff person) to handle correspondence about ARCC, and ARCC had its own special e-mail address that a cadre of Chancellor's Office staff handled in a timely manner. The implementation process included in-person communication too. Chancellor's Office staff gave presentations at various annual conferences and at regional forums/meetings that they explicitly arranged for the ARCC topic. At these in-person events, the Chancellor's Office designed the sessions to hear input from the attendees as much as to disseminate information.

A second important element was the collaborative process behind the implementation. The initial AB 1417 proposal process created a momentum towards collaboration because the Chancellor's Office used a panel of national experts in tandem with a panel of state experts drawn from the system's community colleges. Following the Legislature's adoption of the AB 1417 proposal (also known as the AB 1417 framework), the Chancellor's Office instituted a technical advisory workgroup (a TAG) which it convened periodically throughout the implementation process. The TAG comprised representatives from the institutional research community; the college CEO's; the academic senate; college MIS staff; and the oversight agencies (namely the Department of Finance, the Legislative Analyst's Office, and the Governor's Office). This TAG played a very active role in shaping the accountability system as the Chancellor's Office staff deferred to their expertise on numerous decisions. It could be argued that the collaborative element not only contributed to the quality of decisions in the ARCC implementation (the correctness of the decisions) but it also contributed to the feeling of procedural justice in the ARCC implementation----which gradually facilitated the acceptance and support for the ARCC among the college officials.

A third important element was the infrastructure involved in the implementation. The Chancellor's Office obtained a small cadre of staff in the ARCC legislation to handle the ARCC implementation, and the Chancellor's Office fully authorized the Vice-Chancellor of Technology, Research & Information Systems to manage the project. In essence, this vice chancellor had carte blanche in this project. The staffing assignment was a fortuitous decision because this staffing structure provided experienced and credible supervisors with a staff that they could dedicate to the ARCC. The linkage of a pool of expertise (the experience of the supervisors) to new staff enabled an expeditious integration of analytical needs to an expansive data system at the Chancellor's Office. The linkage of the new work to the well-developed student database and to an expert MIS staff facilitated the processing of massive amounts of data within a relatively brief time frame. In a way, the ARCC implementation in the Chancellor's Office applied an elite cadre of skilled staff along with vast data resources in a process that had few internal administrative impediments.

Reaction of Stakeholders

In general, the community colleges accepted the ARCC report as an accountability mechanism. Four factors contributed to their acceptance of it. First, it provided a relatively equitable and valid method for evaluating each college's performance for each of its different missions. The logic of the evaluation and the quality of data behind the performance indicators gained support among college officials well in advance of the final report's public release. Second, the Chancellor's Office used a very deliberative process that included many campus-based interests in order to develop the official 2007 ARCC report. In addition, the Chancellor's Office shared its data and methods as early and as often as it could. This sharing aspect probably allayed many earlier fears that the AB 1417 accountability would be hastily and poorly implemented. In fact, the sharing of the draft versions improved the quality of the 2007 report. A number of institutional researchers at different colleges discovered errors that the Chancellor's Office corrected after getting comments from these institutional researchers. Third, the Chancellor's Office, in accord with the positions of the state oversight bodies, represented the 2007 ARCC Report as a pilot stage. If the 2007 ARCC Report had been treated as a final evaluation—one that would influence funding and/or legislation, the reception at the colleges may have been more negative. But nobody can say how much the "pilot" nature affected each college's position. Finally, many college officials perceived the ARCC report as a means to remedy a recently damaged public image. Because two different policy groups had preceded the ARCC with relatively negative conclusions and public messaging, college officials lobbied for the Chancellor's Office to put the ARCC report before the media as a counterbalance to its two predecessors.

Some colleges had trouble accepting the ARCC in its entirety. One college in particular rejected the findings in ARCC, especially in consideration of a less than stellar comparison that it received in the ARCC report.

The oversight interests (primarily the Department of Finance and the Legislative Analyst's Office) felt that the ARCC and its 2007 report met their expectations. This should come as no surprise. Representatives of the oversight interests actively participated in the technical work group that the Chancellor's Office periodically convened to develop the ARCC. So oversight interests had significant input to the process. The collaboration that these representatives enjoyed with the Chancellor's Office and with representatives from the colleges also may have resulted in a new level of understanding about community college issues among the oversight bodies—not to mention a new level of trust in the Chancellor's Office that these bodies may have developed.

The news media gave the ARCC reasonable coverage before and after the press conference that the Chancellor's Office held to announce the release of the 2007 ARCC Report. The articles seemed to have a neutral tone to them, and many reporters included comparisons of the relatively positive conclusions of ARCC to the relatively negative conclusions of the two preceding policy analyses. A number of researchers who work independently of the community colleges and of the Chancellor's Office have provided fairly positive assessments of the 2007 ARCC report and the ARCC system. Researchers for one of the earlier policy analyses did publicly criticize specific points in the ARCC report (as reported in some media), so there were some critics of the ARCC among the research community.

Future Developments

The Chancellor's Office has begun its work on the 2008 ARCC Report. This report may show numerous changes in the numbers for the performance indicators that the 2007 report contained. Why? The 2008 report will probably incorporate the effects of a recent data quality campaign to correct college-reported data, especially data related to ESL, basic skills, and noncredit courses. Given the anticipated changes to the college data, the Chancellor's Office will redo its peer grouping process (the regression modeling and the cluster analysis) along with adding a new year of data to the report.

Studies that go beyond the ARCC legislation will probably begin to use much of the data and findings that appeared in the 2007 ARCC report. The service area index, a custom variable developed by researchers at the Chancellor's Office, will gain additional use in other studies that need to include some measure of student socioeconomic background. Statewide studies that aim to discover effective practices may use the peer groupings to facilitate field studies that will focus upon distinguishing practices or institutions within a peer group (thus controlling for environmental contexts). To a large extent, individual colleges will begin to undertake local studies in response to the performance information that the ARCC report will communicate to college administrators and trustees. This latter development would fulfill part of the vision for local accountability so it is practically as important as the potential statewide studies that begin for non-ARCC purposes. In fact, the Chancellor's Office has begun the development of an ARCC data portal that on-campus institutional researchers can access for college-specific analyses. Whether or not a study occurs through local or state efforts, one expectation is that further development of causal models for specific performance indicators will happen.

Because the ESL data should have improved substantially from 2007, the ARCC 2008 report will include a peer grouping for the ESL performance indicator---something that the 2007 report omitted due to concerns about data adequacy. An updated analysis of the wage gains for completers of vocational degrees or certificates has an uncertain fate because the state employment/labor agency has yet to indicate how it will interpret new legislation that governs the sharing of wage data with the Chancellor's Office.

New legislation (SB 361) requires the Chancellor's Office to begin an accountability system that addresses specific noncredit courses and their students. The legislation specifies that the new reporting and analysis fall within the ARCC framework. Further research into the wage gain measure in the ARCC report will probably occur, resources permitting. Some input about the need for an evaluation of disparities in student outcomes across demographic categories may precipitate additional analyses. That input has already brought about a special data set for community college researchers who want to conduct more detailed analyses that both decompose a specific outcome (like the transfer, degree, or certificate indicator) and the demographics of the students involved.

Ironically, while the ARCC has avoided any linkage of college performance to state funding (ala performance funding or performance budgeting), third parties that want to recognize highly effective colleges (and/or their practices) may end up using some ARCC data to issue some form of recognition (like the award of some donated funds).

Lessons Learned

The experience of implementing ARCC may help other states that have plans to create or revise an accountability system for their own systems of community colleges. Considering ARCC as a case study with some unique environmental factors at play, an analyst may draw some useful conclusions. One conclusion is that the state must have a relatively developed standard database from which to calculate performance indicators. It also will help if that database also enables analysts to “level the playing field” by producing comparisons of between-college performance that account for, or “adjust” for, environmental factors that college administrators cannot control. Without any adjustment for environmental factors, the specter of unfair evaluations will cause college officials to reject (and vigorously oppose) an accountability plan.

A second conclusion involves the kind of accountability evaluation that state officials may strive to obtain. It appears that while a comparison of a college’s own performance for a series of years can be insightful, oversight bodies may only gain satisfaction if they obtain some kind of between-college performance. The ARCC experience indicates that a peer grouping approach may suffice in this respect. The peer grouping approach succeeds in identifying relatively questionable performances of specific colleges (a feature that oversight bodies tend to prefer), and it succeeds in avoiding oversimplified rankings (and hence gross evaluations) of college performance (a feature that college officials prefer). The ARCC also demonstrated that the application of statistical tools such as regression and cluster analysis, despite their technical nature, can gain wide acceptance among non-technical audiences.

A third conclusion concerns the administrative mechanism by which to implement an accountability plan. The implementation of ARCC probably owes much of its success to the placement of responsibility (and full authority) in the hands of the Chancellor’s Office vice-chancellor who controlled the data system and the research function. The resources that accountability systems demand most critically center on data and capacity for data analysis. The placement of the workload wholly within one administrative division (or large unit) allows a statewide office to make an intense, unified effort to effect this kind of complex change (the implantation of a new accountability system).

There are many other lessons that analysts and officials can learn from the ARCC experience, but the above three may hold the most relevance for officials in states that may consider the start or revision of an accountability system.