Enrollment Management’s Sleeping Giant: The Net Price Calculator Mandate

by Mary A. C. Fallon
Enrollment managers will be watching to see how recruitment strategies change when higher education’s sleeping giant—net price calculators (NPCs)—wakes this fall. Some predict yield projections may be more difficult and reputations will be challenged as prospective students, their families, high school counselors, and independent college planners begin using NPCs to compare personalized estimates of aid, net price and out-of-pocket costs before choosing which schools are worth their application time and money.

“Colleges thought they were dealing with a compliance issue, but what they are really dealing with is the second wave of transparency about value,” said Kathy Dawley, president of Maguire Associates, a Concord, Massachusetts enrollment management company. “The very fact that net price estimates will be available before prospective students show their hands as applicants will really change the game.”

Faced with an October 29 deadline, undecided schools have little time left to select which strategy best meets their needs. Evidence that the federal free calculator template isn’t very accurate has prompted many private and public institutions to either build their own or choose from custom NPC providers—each with its own methodology of calculating costs and communicating affordability and education value.

Five years ago, private Arcadia University (PA) faced that “bleary-eyed look at sticker price” with a paper-based, early estimate but was only able to serve a few hundred interested students, said Elizabeth Rihl Lewinsky, Arcadia’s executive director of federal aid programs and financial aid systems. Today the university’s custom, online NPC provides accurate estimates to thousands of prospective students leaving its 35-member enrollment management team more time to assist students in other ways.

Financial aid and admission administrators across the country voice concerns about how NPCs might lead to students misunderstanding aid estimates. “There’s a little bit of fear of the unknown especially among private colleges because of the institutional aid variable and students’ academic information isn’t concrete because they are self-reporting,” Lewinsky said.

However, besides counteracting sticker shock, early adopters like Arcadia University find an NPC provides the strategic advantage of communicating early in the selection process with truly interested students. Arcadia’s NPC by Student Aid Services, Inc. offers a detailed computation and optional registration, which provides valuable insight about potential students a year or two before they apply, she said. “An NPC gives someone an immediate response and keeps them on the hook. If prospective students take themselves out of the game, the NPC lets them do it early enough (before applying) so we don’t spend our advertising dollars on them,” she said.

NPC Advocates and Detractors
Advocates and detractors of the mandate believe broad implementation of net price calculators on nearly 7,000 postsecondary institutions’ Web sites will significantly impact recruitment and college planning. “Right now most colleges messaging is: ‘Please apply. We’re affordable. We’ll make it work for you, come hell or high water,’” Dawley said. “NPCs will put that process on its ear. After NPCs are implemented, colleges will start with cost details and will have to communicate value—including graduation rates, employment outcomes and professional school placements.”

While acknowledging that NPCs have potential for helping “traditionally underserved populations,” Kent Barnds, vice president of enrollment, communication and planning at Augustana College (IL),
believes “the primary users of the NPC may be the 'let’s make a deal’ crowd, which also have been the primary users of early financial aid estimators. This group of families, who are typically upper-income and can afford to pay more for college, could use the results of the NPC to accelerate the financial aid ‘arms race’ and advance negotiations to the applicant stage. I can already envision the call from the parent of a high school sophomore volleying off the results of the NPC from one of my competitors and asking me to guarantee a similar net price.” Barnds further opines that NPCs may force more prospective students to “settle on a college” and not choose their “dream school.” “Focusing on price foremost clouds the idea that a ‘value gap’ exists between colleges,” he stated.

Although Barnds is not alone in his skepticism, colleges with online calculators before the mandate realized great value in offering personalized cost information to prospective students and their families. Created with no federal minimum requirements for cost and aid information, early aid estimators varied widely yet heralded the trend toward cost transparency. Some, including Princeton University (NJ), Bradley University (IL), Purdue University (IN), and The University of Texas System, relied on their financial aid administrators and information technology experts to craft algorithms that determined aid estimates. Other pioneers, including Amherst College (MA), Williams College (MA) and Yale University (CT), contracted with NPC provider ThinkAhead LLC (now part of Student Aid Services, Inc.).

“We wanted to counteract the overriding impression that colleges like Princeton are not affordable,” explains Robin Moscato, Princeton University’s financial aid director. Moscato said Princeton University’s primary motivation for building its Financial Aid Estimator in 1998 was to improve the economic diversity of its student body by communicating changes in aid policies that offered more generous awards. “Colleges like Princeton can be the most affordable for low-income students. Even students from families earning $100,000 can receive generous aid packages. You want to get reality out there,” Moscato said. She credits Princeton’s NPC for playing a significant role in increasing the university’s applicant pool from 10,000 10 years ago to 27,000 economically-diverse prospects today.

Aid-estimator innovator Matt Orem, director of college access initiatives for The University of Texas (UT) at Austin’s College of Education’s Institute for Public School Initiatives, shares Moscato’s view about the positive impact of providing net price estimates. The first basic financial aid estimator for UT’s nine institutions “was extremely effective with low-income students and parents in overcoming perceptual obstacles about the affordability of college,” Orem said. Today the majority of students applying to Princeton use its estimator and receive aid that is “at least as good as what the estimator showed they would receive,” Moscato said. “We were concerned about carefully crafting disclaimers, but in 12 years it has taken almost none of our staff energy to mop up the damage an incorrect estimate might incur.”

High calculator usage at Princeton is consistent with the experience at Purdue University, whose three-year-old online Financial Aid Estimator is used by about 10,000 students a month from August through April. “Maybe more than anything, transparency helps us to reduce unrealistic expectations...
families may have about the net cost of attending Purdue,” said Joyce J. Hall, Purdue’s financial aid director.

After 25 years of doing individual aid projections by hand, three years ago 5,000-student Bradley University tapped a talented campus IT expert to build an algorithmic-based calculator that became the centerpiece of its enrollment-management strategy. Each season the university runs about 900 simulations and shoots for 95 percent accuracy. “The lack of transparency in the industry was a great opportunity to make our university distinctive,” said David Pardieck, Bradley University’s director of financial assistance and associate director of enrollment management. “The better information families have, the better decision they’ll make.

Now we are concerned with the NPC mandate because we lose a competitive advantage.”

Forty percent of Bradley’s 2009 freshman class used its calculator to get an estimate before applying. Bradley University uses an approach Pardieck describes as “layered simplicity.” Its Early Estimator asks for a student’s academic profile and provides merit aid information. At that point, a student can log-off the estimator and return later, or move on to providing financial information to get a need-based grant estimate. The next step provides a breakdown of payment options. Bradley’s enrollment management strategy shifts families from a discussion about price to one of value and from affordability to “manageability,” or what Pardieck calls “bite-size monthly payments.”

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**FEDERAL CALCULATOR TEMPLATE**

**Advantages**

1. It meets the law’s minimum requirements.
2. It is free.
3. If peer institutions use it, then its net prices (based on prior-year data) are comparable.

**Limitations**

1. Does not consider some the key components in the Federal Methodology Expected Family Contribution (EFC) calculation, including assets, household size, a student’s and parents’ state of residency, parents’ age, and income exclusions (child support paid, education credits, etc.), when determining EFC to make need-based awards.
2. Calculates EFC using fixed, pre-determined parent and student contribution amounts hard-coded within it.
3. Does not ask merit-aid criteria questions. Its need and merit grant aid estimates are made using only need-based information so merit aid estimates are largely inaccurate.
4. Provides limited guidance on the often thorny question of what defines “income,” especially items that are classified in the FAFSA as untaxed income and are not included in adjusted gross income calculations, or items that are included in adjusted gross income (AGI) but may be excluded in determining EFC.
5. Does not account for education benefits available from the Post 9/11 GI Bill and Yellow Ribbon Program to reduce net price for veterans and active duty service members.
6. Does not accommodate display loans and work-study as ways to pay.
7. Displays in English only.
8. Limits customized output to students to adding a few lines of text to footnotes.
9. Offers no way for institutions to gain prospective students’ contact information.
10. Requires a “normalization” of data to remove outliers that skew aid results.
NPC Options

Today a plethora of technology options leave nonprofit and for-profit institutions evaluating the merits and tradeoffs of:

- building an NPC in-house
- using the free federal calculator template, which requires significant data analysis and normalization to create reasonably accurate aid estimates
- buying a self-service shell and adding data to pre-defined tables
- using a free NPC provided by a state or professional organization
- purchasing customized NPC technology.

After the mandate passed, the flagship University of Arkansas at Fayetteville was among the first to buy, not build, a custom NPC. “We did not want to reinvent the wheel and build one, which we thought would take us a year,” said Kattie Wing, the University of Arkansas’ financial aid director. “I didn’t want to take our technical people away from other responsibilities in the office and we didn’t want to have to do the updates every year.”

The University of Arkansas set out demanding criteria: total customization on questions asked, easy and quick for students to use, accurate estimates that included Post 9/11 GI Bill benefits and self-help, Spanish and English versions, no-hassle testing, no maintenance, and exclusive use of student information. Wing used cost savings generated by switching to email aid award notifications and scanning instead of faxing to purchase a customized NPC from Student Aid Services. Its service includes all nine federal and 605 state aid formulas along with an institution’s own aid logic and policies and uses dynamic help, skip logic and automated error checking so the users’ experience is intuitive and fast, she said.

Wing admits being nervous early last spring when prospective students of the University of Arkansas asked how much aid to expect. She wasn’t sure how students and their families would react to being directed to a new, online calculator, instead of a staff member, for an estimate. Although Wing took the precaution of basing the university’s custom calculator on conservative aid-packaging logic, it was the first time potential applicants typed in their information into the calculator and later were able to compare aid estimates against actual awards. “I was surprised,” Wing said. “We haven’t had one complaint. It is fabulous.”

The University of Arkansas’ NPC offers optional registration to gain data that could provide new insights and improve its ability to compete with state universities in Texas, Mississippi, Florida, Alabama, Iowa, Kansas, Oklahoma, and Missouri, she said, “I anticipate the usage reports will be a great pool of resources that provide insight into prospective students’ age, geography and other areas that could lead to changing our marketing publications and Web site.” At the same time, she wanted to protect students’ privacy and ensure the university is the sole owner of prospective students’ data. “Certainly we would not want individuals solicited in any way. That is extremely important in protecting trust and privacy.”

Many institutions are considering the least sophisticated NPC option: the federal template. This option has the attribute of simplicity and the drawback of inaccuracy. The Association for Institutional Research calls the federal template a “one size fits all” look-up table design that asks no merit aid questions and ignores several key components that the Federal Methodology (FM) uses to determine Excepted Family Contribution (EFC).

Defining accuracy as “offering students estimates based on assigning them to their correct FM EFC range,” a white paper, *Meeting the Federal Net Price Calculator Mandate*, by Student Aid Services showed the federal calculator template produces
the most accurate net price estimates when three conditions are met simultaneously:

- a student is from a low-income household
- the institution awards need-based aid strictly according to FM need analysis
- the institution does not discount tuition and offers little or no merit aid.

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Testing of the federal template’s EFC methodology using 145,490 actual dependent and independent students’ financial profiles found 70 percent fell outside their correct FM EFC range. Even when the federal template assigns a student to the correct EFC range, aid results can be inaccurate because need-based criteria are used to determine merit aid estimates. Regardless of whether an institution offers little or no merit aid, AIR recommends a careful analysis and “normalization” of need-based aid data by removing outliers.1

“The federal template is imperfect in how it estimates expected family contribution to determine aid. If you normalize aid data distribution, you’ll be approximately right, but if you don’t you’ll be precisely wrong,” said Lefter Daku, Ph.D., associate director of research and planning for Virginia Polytechnic Institute and State University (VA) and member of the Technical Review Panel that made recommendations for the design of the template. “By normalizing grant aid data, the template can be more effective at providing better estimates.”
Normalizing grant aid data requires addressing special circumstances and understanding grant aid patterns. “Data normalization is not a simple task and requires a technical expertise that many schools I doubt have,” he continued.

A specific concern about the template’s inaccuracy is that the EFC can be exaggerated, often making a college appear more expensive than it actually is. It also can greatly overestimate the amount of financial aid a student could receive. That possibility concerns Salem State College (MA), a major commuter college that offers 40 percent of its students Pell Grants. Salem State was one of the first institutions to post an NPC based on the federal template. Mary Benda, Salem State’s financial aid director, worries that many schools like hers lack funds to buy a custom NPC or the IT resources to normalize data, so “comparisons aren’t going to be fair. One will be accurate and others like ours will not be true estimates. Students are not going to get the comparisons that I think were the intent of the law.”

The question of who owns the data a calculator user submits to an NPC can be an important differentiation among technology providers. To learn an NPC provider’s approach to data ownership, ask the provider whether there are any circumstances that would allow a student’s personal information to be sold to other institutions or organizations for lead generation, and if there are any circumstances that would allow the NPC provider to sell other products and services to calculator users. For example, The College Board, which sells an NPC template and student leads to colleges and college-preparation exams and advance placement courses to students, ties NPC student registration to receiving solicitations for other services from the organization and its partners.

“Cross-selling is where you start getting into problems as we saw in the student loan industry in the past,” said Joe Pettibone, Texas A&M University’s (TX) assistant provost for scholarships and aid.

“We believe an NPC is a tool for families and not something they should be worried about who is going to use this information and how it will be used.” Unlike other states, Texas requires its 135 postsecondary institutions to link to its free, FM-based Texas Aid for College NPC that compares three Texas colleges at a time. The state also extends use of its NPC free to private, in-state colleges. Texas’ one-size-fits-all NPC is not designed to provide institutions with students’ contact information. Texas schools also may host another NPC on their Web sites to get the benefits of students’ registration information and the chance to provide them custom messages.

Another self-service NPC template is the Voluntary System of Accountability’s new version of its College Cost Calculator offered to its 330 public land-grant college members as part of its College Portrait service.
Looking Ahead

Available all year, NPCs may not only upturn the timing and focus of early student communications, but also staffing to meet family-care needs earlier in the decision cycle. NPCs also are expected to affect yield projections, institutional peer-to-peer competition and possibly even the long-time practice of buying students’ names for prospecting.

“Predictability will be less stable,” Dawley said. “Institutions will need to monitor trends in NPC data and use more statistical tools to accommodate the shift. Colleges will be monitoring NPC Web traffic help determine yield.” Whether NPCs repress or enhance yields depends, in part, on whether colleges drive traffic to them and neutralize the initial impact of net prices with value messages, Dawley believes. Arcadia’s Lewinsky does not foresee NPCs cutting deep into the institutional practice of buying thousands of non-exclusive student leads.

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However, optional student registration on NPCs could provide more valuable leads of truly interested students. “NPCs can help you know your targets better,” she said.

With 46 years financial aid experience, Joe Russo, director of student financial strategies for The University of Notre Dame (IN), reflects that while NPCs will cause significant disruption among institutions, the cost-transparency mandate affords “a much bigger opportunity for institutions not to simply compare themselves on price, but to talk with students and their families about outcomes like retention and on-time graduation rates, the satisfaction rate of alumni, loan-default rates, acceptance to graduate schools, average need-based indebtedness, and salary levels of alumni 10 years out. Should not the typical consumer be looking at these types of outcomes?” Russo’s “bigger opportunity” perspective is supported by the level of personalized information and content flexibility possible in the most advanced NPC technology offered today.

UT’s Orem sounds hopeful that NPCs can have a positive impact on one of the nation’s most fundamental higher education objectives: access. He speculates, “the more accurate NPCs that institutions are investing in now may have a policy outcome that could increase access over time. The more comfortable institutions, states and the federal government get with offering early estimates, the more comfortable they may be with making actual early awards. On balance, this may be the larger policy point of the whole movement behind NPCs.”

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The sample used for this analysis by Student Aid Services, Inc. consisted of 145,490 students. For the 102,353 dependent students, 35 percent had a Pell-eligible EFC. Thirty-three percent of the dependent student households had an income of $50,000 or less; 33 percent were between $50,000 and $100,000; and 34 percent had an income greater than $100,000. For the 43,137 independent students, 67 percent had a Pell-eligible EFC. Sixty-four percent of the independent student households had an income of $30,000 or less; 16 percent were between $30,000 and $50,000; and 19 percent had an income greater than $50,000. To determine the degree of inaccuracy for a particular institution, institutions may want to conduct their own testing based on income or EFC distribution ranges that are consistent with their applicant or enrolled student population.

MINIMUM NET PRICE CALCULATOR OUTPUT

Average Price of Attendance
+Tuition and fees
+Room and board
+Books and other supplies
+Other expenses (including personal expenses and transportation)
-Total Median Grant Aid
+Merit aid
+Need-based aid
=Estimated net price

Average Price of Attendance
+Tuition and fees
+Room and board
+Books and other supplies
+Other expenses (including personal expenses and transportation)
-Total Median Grant Aid
+Merit aid
+Need-based aid
=Estimated net price