The Business Model Behind New ‘Recognition of Non-Institutional Learning’ Initiatives

What’s the Investment? What’s the Return? What are Promising Practices?

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The Business Model Behind New ‘Recognition of Non-Institutional Learning’ Initiatives

What’s the Investment? What’s the Return?
What are Promising Practices?

Introduction

Economic disparities between the education haves and have-nots have continued to rise across America, sowing divisions in our country. Now more than ever, the ticket to economic security is a ‘good job,’ although access to these jobs is increasingly out of reach for workers without college credentials. College certificates and degrees signify the price of admission has been paid, but higher education is not the only place that can deliver and certify learning.

Colleges are increasingly challenged to improve student access, affordability, and attainment goals. And new ‘recognition of non-institutional learning’ (RNL) models are exploring how to certify prior learning in ways that enhance the benefit to students, colleges, and employers.

Evolving RNL approaches validate learning that occurs outside the classroom using familiar, and sometimes novel, methods. College-level learning is frequently validated using prior learning assessments (PLA), standardized exams, portfolios, or through other evaluations that recommend credit for prior learning (CPL). But new recognition of learning approaches aspire to do more than just add academic credits to transcripts. These models stand apart because they are tightly connected to the workplace in their design and implementation. They are thoughtfully designed so that academic credit awards are aligned with relevant college credentials, which are similarly aligned with in-demand jobs.

Recognition of prior learning is widely viewed as beneficial to students. However, higher education and the broader prior learning community has not previously had research looking at the financial sustainability of RNL models. In the absence of this research, colleges and universities have expressed fears that certifying prior learning will negatively impact their business model.1 But what if these RNL models are actually financially beneficial to colleges as well as students?

Research suggests that students with prior learning credit typically complete more paid coursework than students without such credit.2 This study now indicates that RNL models can generate positive net revenue. These models also have the advantage of avoiding the redelivery or recertification of learning delivered or validated elsewhere.

Finally, RNL models may allow institutions to better tap into the market for adult students. Adult students already comprise a quarter of undergraduates at public colleges and universities,3 and often arrive on campus with substantive work experience. As such, these job-focused RNL models appear to be uniquely situated to address long-standing concerns in higher education around declining enrollments, value proposition, and financial sustainability.

1 Lakin, et al., 2015.
3 Snyder, de Bray, and Dillow, 2019.
This study examines three recognition of non-institutional learning models with strong orientations to work. It focuses specifically on the business model behind these programs—showing they can be financially beneficial for colleges when carefully designed. It considers how the structure of these programs impacts their financial sustainability, and identifies promising practices for colleges and their workplace partners.

**Emerging Best Practice**

What might an ideal RNL program look like? After reviewing the financial structures and program design of our three study partners, some key best practices have emerged. Without losing the north star of increased student attainment and employment, RNL approaches must be designed with financial sustainability in mind. Specifically, promising RNL models:

1. **Adopt designs that easily scale to large numbers of students** and intentionally plan for student recruitment.
2. **Align with strong student and labor market demand** and have the potential to generate paid credit hour activity.
3. **Benefit from less ‘active’ management** of ongoing operations to minimize costs.
4. **Capitalize upon technology, coordinated strategies, and routine processes** to create efficiencies that support sustainable business models.
5. **Recognize academic credits for prior learning at no cost or low-cost to students**, creating a “loss leader” that produces subsequent net revenue.

Financial modeling of anticipated program activity at our three study partners provides further insights into the business model behind the recognition of non-institutional learning.

- **RNL programs play an effective role as ‘loss leaders’** because they can generate more revenue for the college than is ‘lost’ by awarding credit hours for prior learning. But this requires careful consideration of each program’s features, including the number of credits awarded, the ability of certificate and degree programs to generate paid credit hour activity, and any RNL fees charged.

- **Financial sustainability prospects improve when net revenue is recaptured and redirected** to support these programs. By the fifth year of operations, some of these programs could generate as much as $300,000 in net revenue annually.

The RNL initiatives studied by rpk GROUP are not monolithic in their approach, design, or business models. Collectively, however, they indicate that higher education’s fear of financial loss from recognizing prior learning is unfounded. Indeed, RNL models may well represent a future road map toward achieving even greater financial sustainability.
Recognition of non-institutional learning models are designed to recognize and reward college-level learning, regardless of where it is acquired. Evolving RNL models validate learning in familiar ways, but differentiate themselves by incorporating deeper connections to academic programs and jobs.

Colleges have long operated programs that award academic credit for college-level learning acquired outside of campus settings. This learning often occurs through work, workplace training, the military or other experiences. Colleges use various methods to validate off-campus learning, and commonly award prior learning credit. Regardless of how it is evaluated, all prior learning credit is awarded at the discretion of individual colleges. Common methods used to determine whether students have acquired college-level competencies eligible for academic credit include:

- **Institutional student assessments**, such as subject-based ‘prior learning assessments’ (PLA) or ‘challenge exams,’ that are usually developed, administered, and graded by college and university academic departments.

- **Custom student assessments**, such as student portfolios or oral exams/interviews, that are administered and evaluated by campus faculty or staff.

- **Standardized exams** that are developed, administered, and graded by vendors; commonly recognized exams include the College Level Examination Program (CLEP) and Advanced Placement (AP) exams, but also include industry certification assessments.

- **Program evaluations** that review entire programs instead of students (e.g., workplace training, military education and training). Any individuals successfully completing one of these programs can request academic credit from their college.

Work-oriented RNL models are the 2.0 version of long-standing programs that award credit for prior learning. Rather than replacing established prior learning programs, they are typically offered alongside them. All of these programs: 1) recognize learners’ existing college-level capabilities; and 2) capitalize on that learning by turning it into college-level credit. But work-oriented RNL models go a step further. Instead of simply translating learning into credits, they ensure that credit is aligned to specific academic programs with labor market connections.

These re-envisioned RNL models offer a more tailored approach designed to create stronger educational pathways that lead to in-demand, job-related credentials. It is hoped that these models will move adults into jobs more quickly, increase advancement opportunities once on the job, and support learners’ continuing education.

**Background & Study Objectives**

Prior to this study, little was known about the business model behind the recognition of non-institutional learning. Existing research has focused primarily on the benefits to students. Those studies show that students earning prior learning credit enjoy costs savings, stronger completion rates, and shorter time-to-degree compared to students who do not have prior learning credit. Students typically earn about a semester’s worth of credit and enjoy savings ranging from $1,500 to $10,200.

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4 Lakin, et al., 2015.
5 It is possible that other student characteristics could be responsible for these stronger outcomes. Boatman et al., 2019; CAEL, 2010; Klein-Collins et al., 2020; Klein-Collins and Hudson, 2018; Kuang and McKay, 2015; Lakin, et al., 2015.
6 Klein-Collins et al., 2020.
But what about the potential financial benefits for employers? Companies spend $83 billion a year on workforce training and 85% of employers already offer tuition assistance programs for their workers.\(^7\) Recognition of prior learning offers a way for companies to avoid paying twice to credential duplicative learning activities—first for workforce training, and then again for workers to earn college credit through tuition assistance programs. Tuition assistance programs also boost employee retention and promotion rates, reducing companies' talent management costs associated with worker turnover.\(^8\) Cost effective RNL programs could potentially allow existing tuition assistance to reach more employees, extending their impact.

Finally, there is the financial impact on institutions to consider. Could RNL approaches contribute to more sustainable higher education business models?\(^9\)

Existing studies have shown that students enrolling with prior learning credit take about 18 more credit hours of coursework than other students. Those additional credit hours, along with the fees sometimes charged, represent a revenue source to support prior learning models.\(^10\) A more holistic understanding of total revenue and total costs is required, however, to determine if RNL models can generate positive net revenue.

This is the first study to deeply examine the business model behind the recognition of non-institutional learning; it is organized around three objectives:

1) **Develop a financial sustainability framework**
   that broadly reflects how RNL approaches operate, identifies key questions to consider, determines units of analysis and definitions, and creates key financial metrics.

2) **Share findings from an RNL financial modeling tool** that rpk GROUP developed to help colleges create and test approaches to building sustainable RNL business models.

3) **Identify promising RNL** practices that support sustainable innovation around different RNL approaches.

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9 Desrochers and Staisloff, 2019.
Study Partners & Projects

Mi Casa Resource Center (MCRC), Community College of Aurora (CCA), and Metropolitan State University of Denver (MSU Denver) partnered in 2019 to build a stackable credential that strengthens participants' education and career opportunities in the metro Denver financial services industry. They built a Financial Services Pathway that incorporates workforce training opportunities, prior learning assessment (PLA) options, and certificate and degree credentials in banking-related fields at local 2-year and 4-year colleges.

SUNY Empire State College (SUNY Empire) partnered with several employers in 2019 to conduct evaluations of college-level workplace learning for select career pathways at those companies. These Professional Learning Evaluations (PLEs) examine the competencies workers must demonstrate to successfully complete their workplace education and training programs. SUNY Empire translates the competencies learned through these programs into equivalent credit hours and courses. Participating employees enrolling at the college can then apply those credits towards a certificate or degree program, or affiliated micro-credential.

Virginia Community College System (VCCS) is expanding opportunities for prospective students to translate industry-verified certifications into academic credit and credentials. VCCS is engaging constituent colleges to evaluate existing industry certifications aligned with job training programs offered in five in-demand career areas. Simultaneously, VCCS is expanding its online Credits2Career (C2C) portal to incorporate credit for prior learning recommendations in these areas, which will serve as the primary resource for identifying CPL opportunities across Virginia’s public community colleges. VCCS colleges are collaborating to develop new policies and procedures to streamline the administration of CPL across the system.

A summary of each study partner's initiative is available in Appendix A. Complete case studies are also available at http://rpkgroup.com/creating-sustainable-student-success/.

Study Partners

Mi Casa Resource Center (MCRC) is a non-profit community-based organization that has provided opportunity pathways for economically disadvantaged families in metro Denver for over 40 years; they served more than 2,000 families in 2019.

Community College of Aurora (CCA) is a Hispanic-serving institution that enrolls about 8,000 students at its campuses in Aurora and Denver, Colorado.

Metropolitan State University of Denver (MSU Denver) is a comprehensive baccalaureate and master's degree granting institution serving about 20,000 students, many of whom are first-generation students, students of color, or low-income.

SUNY Empire State College is part of the State University of New York (SUNY) and provides services to 10,000 students across 34 educational centers; it has a strong focus on adult learners.

Virginia Community College System maintains a system office and 23 constituent community colleges located on 40 campuses across Virginia; the system serves more than 280,000 students each year.
By design, our study partners’ initiatives represent a variety of approaches to recognizing non-institutional learning:

**Sector.** The partners include public two-year and four-year institutions, a system office representing a statewide two-year college system, and a community-based organization. Several of these partners have strong histories serving adult workers, low-income adults, and/or Hispanic students.

**Partnership Model.** Each partner has a unique organizational model. Those models include a public/private partnership, a college-workforce ‘client’ model that engages local, regional, and national employers, and a community college system-led initiative.

**Evaluation Approach.** The partners employ three distinct evaluation approaches. One model assesses individual students using prior learning assessments, while two of the models evaluate programs instead of students—one of which evaluates workplace training, and the other evaluates industry certification programs that typically offer standardized exams (see Figure 1).

**Academic Credentials and Programs.** All the models offer access to different length credentials, ranging from micro-credentials to bachelor’s degrees. Most provide flexibility in the type of academic program students can pursue, although one program is designed for a specific industry-related academic program.

Each program in the study is focused on different sectors of the economy:

- The MCRC/CCA/MSU Denver program addresses talent needs in the financial services industry.
- The VCCS initiative is examining certification exams in five in-demand industries: emergency medical services, healthcare, information technology, advanced manufacturing, and welding.
- SUNY Empire is conducting its workplace training evaluation across a variety of employers, but our study focused exclusively on their activity in the retail health sector.

We hope these models shine a light on ways we might reimagine one part of the education ecosystem to improve the financial outlook of workers and institutions.
<table>
<thead>
<tr>
<th>State</th>
<th>Colorado</th>
<th>New York</th>
<th>Virginia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sector</td>
<td>Community-based organization (CBO), public two-year college, and public four-year university</td>
<td>Public four-year college</td>
<td>Public two-year college</td>
</tr>
<tr>
<td>Partnership Model</td>
<td>Public/Private Partnership</td>
<td>College &amp; Employers (local, regional and national)</td>
<td>System Office &amp; Campuses</td>
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<td>Initiative Focus Areas</td>
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<td>Employer specific</td>
<td>Emergency medical services Healthcare Information technology Advanced manufacturing Welding</td>
</tr>
<tr>
<td>Program Name</td>
<td>Financial Services Pathway</td>
<td>Professional Learning Evaluations (PLE)</td>
<td>Credits2Careers</td>
</tr>
</tbody>
</table>
The ROI framework captures a comprehensive accounting of all costs regardless of how they are funded. Program costs are often organized around three main expense categories: compensation (salaries & benefits); stipends or release time; and operating expenses.

The most significant cost of new initiatives is usually time, which is captured through compensation. Even without new hiring, there is still a cost associated with staff time redirected to new RNL initiatives and away from other activities.

Direct program costs are the primary focus of this study, but we also consider the additional instructional delivery costs associated with enrolling new students. Colleges may initially have the capacity to quickly integrate new students emanating from these programs, but eventually may need to add capacity (course sections and instructors) as enrollment grows.

1) How much does the program cost?

2) What is the potential return on investment? Does the initiative generate revenue in excess of the foregone revenue from prior learning credits awarded?

3) Is it financially sustainable over time?

The framework is limited to financial benefits that accrue to colleges and universities; it excludes potential benefits to students, employers, other partner organizations. Similarly, the framework does not attempt to measure those nonfinancial benefits that may be important to colleges or other stakeholders (e.g., graduation rates; employment rates; workplace retention).

Capturing financial and non-financial benefits is certainly important to understand the full impact of RNL programs. However, the narrow focus adopted for this study's framework originates from the belief that financial sustainability provides the foundation for continued operation of these programs. Once the programs are financially secure, they are better positioned to continue serving and benefiting students.

Framework Components

The financial sustainability framework is organized around the four primary components shown in Figure 2.

Program & Instructional Costs. Program costs provide critical information on the level of resources required to develop and run programs, including start-up investments and ongoing operational expenses. A more detailed accounting of that top-line spending reveals cost drivers, and areas where efficiency improvements could potentially lower costs.

The ROI framework captures a comprehensive accounting of all costs regardless of how they are funded. Program costs are often organized around three main expense categories: compensation (salaries & benefits); stipends or release time; and operating expenses. The most significant cost of new initiatives is usually time, which is captured through compensation. Even without new hiring, there is still a cost associated with staff time redirected to new RNL initiatives and away from other activities.

11 The sustainability framework was developed using information gathered through partner interviews and documents, and an ROI model developed by rpk GROUP that study partners populated using their own data (see Appendix B for study methods).

12 Programs that benefited from prior investment in activities directly related to the current project are captured as appropriate (e.g., technology investments).

13 Stipends typically reflect an ‘incentive’ paid in addition to the time spent on the RNL activity; some stipends may reflect ‘payment’ for actual hours worked. Operating expenses include any non-personnel costs, such as marketing, recruitment, technology, and other program activities.
The sustainability framework also considers another measure unique to RNL programs, which we call ‘RNL value.’ This metric addresses a frequent concern about the financial impact of these programs: Does the tuition and fee revenue these programs generate exceed the financial value of the credits they award? This metric evaluates whether providing credits at no- or low-cost is financially advantageous to colleges as a ‘loss leader’ strategy.

Practically, the RNL value metric represents the gross revenue from the initiative relative to the forgone tuition and fee revenue from the RNL credits awarded. These forgone earnings also represent the savings to students benefiting from these programs.

### Table 2: Financial Return for RNL Initiatives

<table>
<thead>
<tr>
<th>Formula</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross Revenue</td>
<td>Total credit hours x tuition &amp; mandatory fees + RNL Fees</td>
</tr>
<tr>
<td>Net Revenue from Initiative</td>
<td>Gross Revenue - RNL program costs - Additional instructional delivery costs</td>
</tr>
</tbody>
</table>

1. Option to include state & local appropriations per credit hour

### Financial Return: Net Revenue, ROI, and RNL Value

Net revenue and ROI are standard metrics used to evaluate the viability of any new initiative. Simply put, net revenue shows whether a program generates more revenue than it costs. Dividing that net revenue by the RNL program costs yields the ROI (see Figure 3).

Programs ‘break even’ when the ROI turns positive—in other words, when annual revenue equals annual cost. If development costs are frontloaded, it may take longer to recoup, or ‘pay back,’ the initial investment and ongoing costs.

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14 Research studies suggest that students awarded credits for prior learning may complete degree and certificates at higher rates, and persist further down the pathway even when they do not earn a credential (see CAEL, 2010; Kuang and McKay, 2015). The research findings from these studies are used in rpk GROUP’s financial modeling tool, producing estimates of multiyear student credit hour activity arising from programs that award credit for prior learning.

15 Public colleges and universities funded with enrollment-based funding formulas also may receive additional state and local appropriations when enrollments increase.

16 Conceptually, ROI and the RNL value metrics reflect identical gross revenue. But RNL value does not account for any program or additional instructional costs; therefore, it should not be interpreted as a return on ‘investment.’
The findings below summarize key lessons learned from the three study partners’ anticipated business models. The financial analyses of these RNL programs includes actual and projected data on costs, funding, enrollments, and the anticipated number of RNL credits awarded by these programs (see Appendix B for study methods).

**Program Costs**

**Wide disparities exist in program development and operating costs.** Program development costs ranged from about $100,000 to $450,000 among the study partners—averaging almost $325,000 over two years (see Figure 4).  

Two of the partners expect development efforts to continue even after the first year of operation. Operating costs incurred in the post-launch years vary just as widely and are heavily dependent on program structures. These ongoing costs are estimated to range between $1,500 and $285,000 annually; in some instances, costs are expected to occur intermittently.

**Net Revenue & ROI**

**RNL initiatives can generate a positive net revenue within two years of launch, but financial returns depend on program costs, utilization, and pricing.** Two of the three initiatives observed are projected to have net revenue exceeding $250,000 in the fifth year of operation (see Figure 5). The likelihood that RNL programs provide colleges with a positive return on investment is influenced by program expenses and the revenue associated with student enrollments, tuition prices, and RNL fees.

Among our study partners, the initiative with the fewest ongoing operating costs is expected to achieve annual profitability, or ‘break even’ in the first year of operation because its costs were frontloaded during the pre-launch development period. A second initiative is expected to become profitable in the second year of operation. Once initial start-up investments are included, that second initiative is expected to need five years to fully recoup, or ‘pay back,’ its initial investment and ongoing annual costs. The third initiative is not projected to generate a positive net revenue during the period studied.

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**Approaches that certify programs appear less costly to maintain than those built to actively recruit and assess students.** One of the study initiatives that adopted the former approach had few ongoing costs aside from marketing expenses, until a five-year program refresh was planned. Another initiative anticipated that operating costs totaling about $60,000 a year would provide program support. The third program expected operating costs of about $280,000 a year by its fourth year of operation, after sustained program development investments concluded.

**Program costs are largely determined by compensation expenses.** In total, the full six-year projected cost of these programs ranged from almost $200,000 to more than $1.8 million. Compensation averaged about two-thirds of the total costs across the projects (see Appendix C for supplemental analyses).
Examining the ROI across the full study period shows that two of the three programs are expected to have a positive ROI overall. One initiative is expected to provide more than $7.00 in net revenue for every dollar spent on program activities during the six-year period examined; a second initiative is expected to generate $0.36 for every dollar invested (see Appendix C).

RNL Value

RNL programs can generate revenue in excess of the foregone revenue from prior learning credits awarded (RNL value). From an institutional perspective, the revenue advantage generally increases when students pursue longer certificate and degree pathways and/or bring fewer transfer credits. Tuition prices and RNL fees also impact the 'value' measure. When RNL fees are low (or tuition prices are high, relative to fees), then recouping the foregone revenue from awarded prior learning credits will depend more on students' subsequent credit hour activity than upfront fees.

These program design considerations can create tensions with overarching program goals focused on reducing student's time and cost to a credential. At a minimum, a financially sustainable program will deliver credit hours in excess of the no-cost or low-cost credits awarded, but without generating excess credits to obtain the credential.

Programs that engage students in more credit hour activity, by balancing—rather than maximizing—RNL and transfer credits are likely to generate more revenue than they forfeit. Each of the study partners designed programs to provide students with access to multiple credential pathways. Five of the six credential pathways provided a strong positive RNL value for the colleges, while one did not (see Figure 6). Satisfying a large proportion of degree requirements with prior learning credits reduces the 'value' measure.
Figure 6: Gross Revenue in Excess of Forgone Revenue from RNL Credits Awarded (RNL Value; Years 1-5)

Notes: ‘Value’ equals gross revenue from enrollment/retention tuition & fees and RNL fees, less the forgone tuition and fee revenue associated with the RNL credits awarded.
Source: rpk GROUP analysis of study partner data.

Funding & Financial Sustainability

Sustaining these initiatives and the revenue they create requires that colleges reinvest in these programs, using revenues they generated earlier. By the fifth year of operation, two of the initiatives are expected to have sufficient activity and net revenue to cover their costs. To continue as economic engines, programs may need to increase scale, reduce costs or adjust their tuition and fees.

RNL fees can diversify revenue streams, but are not a strong strategy for financial sustainability. Charging RNL fees—either to students or when evaluating industry-related programs—provides a source of financial support, but their importance declines as programs mature and tuition revenue grows. Of the single initiative that charged fees, those fees are projected to initially represented one-third of the program’s gross revenue, before declining to 10% or less after three years of operation.

Study partners can best improve their sustainability prospects by reducing operating expenses or scaling enrollment. The anticipated enrollment in each of these programs is quite modest, and deliberate marketing and recruitment strategies could help boost enrollment and accelerate the financial investment already made. Reducing a reliance on RNL fees further supports initiative goals of improving student affordability.

18 The study partners anticipated enrolling 35 to 65 students through these initiatives during the initial launch year, with enrollment growing 12% to 25% annually.
The RNL initiatives launched by our three study partners demonstrate that there are many ways to recognize college-level learning that leads to credentials and careers. As we studied these various models and approaches, we looked to surface promising design and implementation features that strengthened the sustainability of these programs.

In other words, we consider the features of an ‘ideal’ program. Such a program would: 1) expand college access and affordability; 2) become financially sustainable for colleges (without students generating excess credits to obtain their credentials); and 3) exhibit scalable and efficient design qualities.

While this study focused exclusively on the business model behind RNL programs, institutions adopting these promising practices will want to further assess the impact on student success. Both are important, because programs that are financially unsustainable are more difficult to preserve in financially challenging times.

Lessons drawn from the financial and design attributes of our study partners’ three models suggest that when viewed from an institutional perspective, promising RNL models:

- Adopt designs that can easily scale to large numbers of students
- Align with strong student and labor market demand and have potential to generate paid credit hour activity
- Minimize ongoing costs by requiring less active management
- Capitalize upon technology, coordinated strategies, and routine processes
- Offer credit for prior learning at no cost or low-cost to students

Each of the programs in our study adopted promising practices, which are organized around: 1) program design features; 2) implementation; and 3) financially sustainable approaches.

Program Design

RNL programs can be designed in ways that reduce costs by utilizing existing degree pathways, verifying rather than assessing learning, and/or minimizing operational management.

Evaluate programs, not students. Initiatives that evaluate programs typically frontload their investment into the initial evaluation process, and are designed to minimize ongoing operational expenses. Program-based approaches may require some ongoing oversight, but appear to require less ‘active management’ of students and the program; they also usually only require periodic reevaluation.

Evaluating and certifying workplace training or certification programs eliminates the variable costs associated with student-centered approaches that administer PLA exams and/or portfolio reviews on an ongoing basis. These individual student assessment models must continually administer and grade exams and conduct individual portfolio reviews. In MCRC’s program, staff were also needed to manage partnerships, actively recruit students, and help them navigate the multi-institution stackable credential pathway.

Borrow—don’t build—new degree pathways. Building new degree pathways can be an expensive, time consuming process. The most efficient approach is to connect adult learning with existing degree pathways. VCCS is using its online portal to connect individuals to available degree pathways across its 23 community colleges. SUNY Empire is creating new degree maps for each of its workplace evaluations, to help students navigate their options among existing course offerings.

Validate existing competency measures. Colleges and universities can expand credit for prior learning opportunities by recognizing that they can serve as the arbiters of college-level learning rather than directly assessing it. Colleges do not need to re-deliver or reassess college-level learning to ensure it is valid. Instead, they can tap into employers’ and industries’ longstanding expertise in evaluating competencies.
Leveraging industry-developed competencies by mapping them to competencies in higher education can save students time and money. But it can also help colleges reduce duplicative instructional activity, by reducing course sections no longer needed, and redirecting those resources to other areas. Models that shift the evaluation of student learning from postsecondary institutions to companies and industry rely heavily on trust—and acknowledging that companies and industry can effectively evaluate individual learning. For example, SUNY Empire’s new approach to evaluate on-the-job learning includes validation of companies’ learning rubrics. But they must trust that supervisors are forthright in assessing their store managers’ skills demonstrated on the job, because supervisors are invested in having skilled managers in their stores.

**Efficient Practices**

*Programs can generate efficiencies by leveraging technology, creating standard policies and routine practices, and coordinating among related initiatives.*

**Build upon existing technology, strategic priorities, and processes.** Programs can operate more leanly and reduce resource investments when they take advantage of existing approaches and momentum. Coordinating strategies and initiatives across partners, systems, and even the broader CPL field minimizes duplication of work, decreases development time and costs, and focuses attention on new and innovative practices.

For example, VCCS leveraged its prior technology investment in an online web portal to add in new capabilities for adult workers. Also, coordination at the system-level helped build upon the system’s current workforce training strategy and other investments in new stackable credentials. Other coordinated approaches like the stackable credential model at MCRC/CCA/MSU Denver lowers barriers to institutional transfers by building a pathway from industry training towards bachelor’s degrees.

**Create routine program evaluation processes.** Establishing standard processes and procedures makes it easier to expand programs into new industries or employer training programs. These standardized practices provide greater transparency around the cost of expanding such programs. SUNY Empire, for example, has developed standard protocols they apply to workplace training program across industries and with little variation in costs by employer. Replicating a model like the MCRC/CCA/MSU Denver approach in a program area with established certificates and degrees would eliminate the need to create new degree pathways.

Applying standard processes to diverse program and content areas can still produce custom results, just more efficiently. When program costs are standardized, financial margin for programs depends on other factors such as the length of the degree/certificate program affiliated with the RNL initiative; the number of credits awarded for prior learning; the number of transfer credits students bring with them; the number of students that enroll, and their persistence rates and patterns.

**Coordinate RNL strategies across institutions and/or systems.** Pooling resources and aligning strategies reduces the time (and expense) individual colleges must devote to evaluate credit awards and minimizes duplication of effort. Coordinated approaches like those demonstrated by VCCS mean that the same credentials no longer need to be validated multiple times at multiple institutions, creating operational efficiencies.

Developing system-wide policies and procedures provide colleges with confidence that the recognition of learning credits awarded by other colleges are equivalent to the academic expectations at their institution. Transparency in the evaluation process is critical, ensuring all colleges understand the rationale for credit recommendations, have access to the supporting materials for the recommendation, and retain final decision-making authority.
Financial Sustainability

Financial sustainability is enrollment driven, and attention to enrolling and retaining students will produce a larger return on investment than RNL fees—which can have unintended consequences for affordability.

Scale enrollment to accelerate financial return on investment. Clear strategies around student communication and recruitment are essential to boost awareness and enrollment. The modest enrollment anticipated among the study partners suggests the ‘if you build it, they will come’ approach may not be adequate.

MCRC has hired a recruitment coach to work across the programs, but each institution is ultimately responsible for enrolling students in their programs. VCCS will roll out a marketing campaign for its online portal. SUNY Empire’s approach is more hands-off once the program has launched. It relies on employers to advertise opportunities to employees; the college’s enrollment specialists also seek to identify new students who may be eligible for workforce training program credits during the regular student intake process.

In partnerships models, partners should be transparent about recruitment and enrollment responsibilities. Clarifying expectations around recruitment efforts and setting enrollment targets to achieve a positive ROI will strengthen the financial sustainability of these programs.

Reduce reliance on RNL fees. RNL fees can provide a sustainable source of funding for ongoing operations but are less important than other sources of revenue. Fees often fund the direct costs of grading exams or performing program evaluation. But soon after programs launch, fees quickly become a diminishing share of overall revenues as tuition revenues from course taking grow.

Set RNL fees to reflect true costs. The pricing of fees should be transparent, and reflect the actual costs they are intended to cover, whether that is for exam grading or program evaluations. Fees charged to students should be carefully weighed because they can have unintended consequences on access and reduce affordability.

Exam fees are typically nonrefundable and students who fail the exams are not awarded credit. In other instances, students pay and pass the exam but decide not to enroll in a certificate or degree program. Also, students who would otherwise use Pell Grants to pay for traditional courses cannot use those funds to pay for these fees and instead must pay out of pocket. In each of these cases, fees jeopardize college affordability.

Conclusion

The ‘ideal’ RNL model is the one that best meets a college’s objectives, market demand, and students’ needs. Each of our study partners are implementing a program that meets their unique needs.

Colleges looking for a lean, efficient approach to certify prior learning may favor SUNY Empire’s Professional Learning Evaluation method to evaluate workplace training. Others looking for scalable technology-based approaches that benefit from standardized processes may prefer VCCS’s online portal, which incorporates credit evaluations of industry-recognized certifications. Or colleges seeking a custom approach with flexible pathways that serve specific worker populations may prefer the stackable credential model implemented by Mi Casa Resource Center, the Community College of Aurora, and Metropolitan State University Denver.

Whichever approach is preferred, creating positive ROI is an important data point in demonstrating the financial viability of these programs. It provides campus leaders with decision-making information that is increasingly needed as college invest in sustainable student success initiatives.

Effectively sustaining programs involves not only good data, but also good communication. Programs that provide a positive financial value for students and colleges are an important part of myth-busting for campus skeptics.

This information may persuade the campus community that a ‘loss leader’ strategy to recruit new students can be a win-win-win—students’ costs are reduced, colleges generate new revenue, and employers can hire and retain workers with college-level credentials in industry-aligned fields.
References


Appendix A: Case Studies

Financial Services Pathway: Leveraging Partnerships & Prior Learning to Build a Stackable Credential in Metro Denver

Mi Casa Resource Center, Community College of Aurora, and Metropolitan State University of Denver

Mi Casa Resource Center (MCRC), the Community College of Aurora (CCA), and the Metropolitan State University of Denver (MSU Denver) partnered in 2019 to build a stackable credential that strengthens participants’ education and career opportunities in the metro Denver financial services industry. They built a Financial Services Pathway that incorporates workforce training opportunities, prior learning assessment (PLA) options, and certificate and degree credentials in banking-related fields at local two-year and four-year colleges.

The Financial Services Pathway was created in response to talent development needs within the banking industry around metro Denver. MCRC learned that many of its job training participants reached a career ceiling after about three years of work because of the banking industry’s career advancement educational requirements. A local banking industry association revealed a shortage of well-qualified job candidates in various banking fields.

The partnership’s Financial Services Pathway provides multiple entry and exit points to credential learning, including: 1) job training from MCRC, which includes a national sales and customer service certification; 2) two CCA certificates in banking essentials and banking supervision fundamentals; 3) a B.S. in banking at MSU Denver, and 4) assessments administered by CCA and MSU Denver that provide an opportunity for students to translate their banking-related job training and experience into college credit.

The creation of the stackable financial services credential began with CCA’s development of two new banking certificates. CCA mapped MCRC’s job training curriculum to its existing courses and determined that up to nine prior learning credits could be earned. MCRC clients can elect to take the CCA assessment at the end of their job training; however, the exams are accessible to anyone. Students can apply their nine credits from CCA to the banking essentials certificate and/or transfer the credits directly to MSU Denver’s B.S. in banking degree.

MSU Denver is developing its own prior learning assessments (exams, portfolios, and interviews) that will award up to 18 college credits by the end of 2021. MSU Denver and CCA are both transitioning their respective degree and certificate courses to online and/or hybrid formats to attract additional students to the Pathway. MSU Denver is also planning to develop 42 credits of online courses.

The PLA exams at CCA and MSU Denver provide an opportunity to reduce students’ time to degree and educational costs, when compared to those of traditional courses. But at both colleges, students must pay the standard PLA exam fee set by the institution, which at CCA was $45 per credit hour in 2019-20 and at MSU Denver was $122 per course.

A stackable credential that recognizes and validates prior learning allows students to improve their employment and educational opportunities. But recouping investments in these programs and ensuring they are financially viable depends on enrolling many adult workers that otherwise may not pursue higher education.

SUNY Empire State College partnered with several employers, including CVS Health, in 2019 to conduct evaluations of college-level workplace learning for select career pathways at those companies. These Professional Learning Evaluations (PLEs) examine the competencies workers must demonstrate to successfully complete their workplace education and training programs. SUNY Empire translates the competencies learned through these programs into equivalent credit hours and courses. Participating employees enrolling at the College can then apply those credits towards a certificate or degree program, or affiliated micro-credential.

SUNY Empire’s corporate partners indicated they are motivated to participate in these programs for several reasons, including: to leverage existing investments in their education and training programs, further develop their workforce, retain workers, and provide employee access to new roles within the company.

As industry training approaches incorporate more on-the-job training (OJT), SUNY Empire is expanding its current evaluation of workplace training to include OJT programs. This new approach accompanies well-established methods for evaluating formal training offered in classrooms or online. These OJT-focused PLEs are competency-based and rely upon employers’ assessments of their workers’ competencies.

When engaging in a workplace training evaluation, the College's Center for Leadership in Credentialing Learning forms an academic review team which conducts an initial meeting with the company. It then reviews and assesses the course materials, instructor materials, assessments, and grading or evaluation rubrics provided by the company. The team typically conducts an on-site visit to assess learning activities and delivery. The PLE process is free for partner companies to avoid conflicts of interest around the credit recommendations.

At CVS Health, traditional evaluation methods that compare curriculum and learning objectives were used to evaluate the formal training administered online. The evaluation of the on-the-job portion of the training used a rubric that managers use to evaluate employee competencies. The faculty team recommended that the Store Manager in Training (SMIT) completers earn 32 college credits, while the Store Supervisor training recommendation was five credits. Students can obtain the PLE credit at no cost or risk, making it less expensive than traditional courses and the current portfolio review process previously used for OJT training which assesses a $700 fee.

As part of this process, faculty teams build a sample degree pathway for each PLE review by mapping the PLE credits to the College's area of study guidelines. The College is also developing topical micro-credentials (e.g., a human resources micro-credential) that students may earn along a degree pathway.

A Professional Learning Evaluation (PLE) model which recognizes and validates prior learning for competency-based on-the-job training can provide students with a way to improve their educational opportunities and employment options. Such an approach can be financially beneficial to colleges and universities, as well, by enrolling adult workers with prior training who otherwise may not pursue higher education.
Credits2Career Portal: Recognizing the Value of Industry-Certified Learning at Virginia Community Colleges

The Virginia Community College System (VCCS) is expanding opportunities for prospective students to translate industry-verified certifications into academic credit and credentials. VCCS is engaging constituent colleges to evaluate existing industry certifications aligned with job training programs offered in five in-demand career areas. Simultaneously, VCCS is expanding its online Credits2Career (C2C) portal to incorporate the credit for prior learning (CPL) recommendations in these areas, which will serve as the primary resource for identifying CPL opportunities across Virginia’s 23 public community colleges.

The initiative also is expected to streamline the administration of credit for prior learning. VCCS colleges are collaborating to develop new policies and procedures reflecting best practices across the system which can be adopted by individual colleges. It also provides an opportunity to build upon the system’s existing technology-based capabilities (Credits2Careers), current workforce training strategy (FastForward program), and investments in new stackable credentials (Get Skilled, Get a Job, Give Back, or ‘G3’ initiative).

VCCS’s initiative is evaluating whole certification programs and exams, rather than using prior learning assessments (PLA) or portfolio reviews to determine competency for individual students. Certifications are prioritized in five high-demand career areas identified in the FastForward initiative—emergency medical services, healthcare, information technology, advanced manufacturing, and welding.

The project consists of three main workstreams: 1) identifying and evaluating credit for prior learning; 2) developing best practices around campus CPL policies and procedures; and 3) expanding and marketing the online C2C portal.

- A steering committee with senior-level campus staff provides oversight on the direction and strategy of the initiative and progress of the work;

- Five faculty teams are reviewing, certifying, and cross-walking industry-based CPL assessments to existing credit-based courses and programs. They are confirming the validity of credits previously equated by various colleges, identifying potential revisions, and searching for new industry certifications to equate to college credits. Credit determinations are made after reviewing the credentialing authority, the formal assessments, learning objectives, curricula, exam difficulty levels, and instructional hours required, and applicability to VCCS academic programs.

- An administrators committee with representatives from each of the 23 VCCS colleges is developing standard CPL policies and procedures that colleges can adopt to promote more consistent and predictable credit awards.

Once the portal is operational, prospective students can search for certifications and instantly learn which credits they may be eligible to request. Associated academic programs and degree maps in the portal also illustrate how the credits could be applied to various certificate and degree programs. Students using the portal to access academic credit recommendations are not required to pay any fees to access the information or when receiving the credit hours requested.

Recognizing and translating industry-verified learning into academic credit and credentials can be financially beneficial for students and colleges. These benefits are multiplied when system investments and initiatives around technology, recognition of non-institutional learning frameworks, and stackable credentials are coordinated to provide students with flexible pathways to training, careers, and degrees.
Appendix B: Study Partner Selection & Methods

Study Partner Selection

This study was conducted as part of a broader Lumina Foundation-funded effort that is supporting nine grantees as they build and implement new RNL models. rpk GROUP’s work focused solely on the business model supporting three of these new RNL initiatives and lessons learned from programmatic and financial analyses of that work. It was conducted apart from a separate multiyear evaluation of the full grant program.

When selecting potential partners, we considered Lumina grantees as well as non-grantee institutions considered leaders in the credentialing of non-college learning. We intentionally sought partners that represented a diversity of RNL approaches, higher education sectors, partnership models, academic credentials and program areas, and geography; we also considered the financial and programmatic data they had available.

rpk GROUP initially identified five candidates and introductory interviews were conducted with each candidate team. Three candidates were selected and agreed to participate in the study: Mi Casa Resource Center and partners Community College of Aurora, and Metropolitan State University of Denver; SUNY Empire State College, and the Virginia Community College System office.

Study Methods

rpk GROUP conducted nine phone interviews with 14 members of the study partner teams and partners during March and May 2020. Interview participants included project directors and coordinators, Deans/Chairs/faculty, campus leadership (VP for Academic Affairs; Registrar), system office staff, and employers. Interview protocols were provided to participants in advance of the calls and included questions on project approach and motivation; CPL evaluation process; financial resources; student impacts; sustainability, and key learnings. Grantees also were asked to provide any existing documents on project descriptions/marketing, student charges, budgets, and program enrollment.

Information gathered from interviews and documents received were used to develop the ROI framework for RNL programs. The information helped determine the types of costs the programs incur, funding streams supporting development and operations, and the mechanisms through which the colleges generate revenue from these programs.

ROI Model Design. The ROI framework and study research questions guided the development of an Excel-based ROI modeling tool. This tool, which was designed to accommodate multiple types of RNL initiatives, lets program managers model the financial implications of their programs and make data-informed decisions about its structure and operations.

The financial model captures program costs (staffing and operating), program funding support, annual enrollment expectations, and projected revenue generated by students that enroll and persist in college as a result of these programs. The model accounts for credits awarded by RNL programs as well as other transfer credits. The tool lets users distinguish between development costs and ongoing operational costs.

The revenue estimates generated by the model rely on enrollment and pricing trends across the colleges. Projected enrollments are translated into estimates of multイヤear student credit hour activity arising from programs that award credit for prior learning. The model uses completion, progression, and retention rates from two studies that examined the college-going patterns of students with PLA credit. These students enrolled in two- and four-year colleges to pursue certificates, associate degrees, and/or bachelor’s degrees.

Our enrollment-based progression model first applied completion rates (by type of credential) to projected new enrollments associated with the RNL programs; this created separate ‘completion’ and ‘non-completion’ cohorts. Both cohorts were progressed forward year-by-year by applying annual retention and/or progression rates (specific to each credential type); the same process was applied to new enrollment projections in each subsequent year.

19 One non-grantee candidate with longstanding work in evaluating credit for prior learning with national employers declined an invitation to participate because of the project timeframe and time requirements.
20 The ROI modeling tool is available at http://rpkgroup.com/creating-sustainable-student-success/.
21 CAEL, 2010; Kuang and McKay, 2015.
Projected enrollments were multiplied by the expected average student credit hour load; credit hours were then summed to an annual total for each year (e.g., summing activity across multiple cohorts each year). The average student credit hour load was calculated using the number of credits the credential required, the number of RNL credits awarded by the program, and the average number of transfer credits students typically carried. Tuition and fee prices were then applied to the credit hour totals to estimate gross revenue each year.

The model only accounts for the financial revenue generated at postsecondary institutions. It does not capture the possible benefits to employers, other partner organization, or students, nor does it examine the nonfinancial benefits to colleges or these other stakeholders. The impact of these programs on student retention, completion, employment, and earning are topics that could be considered in a full program evaluation.

ROI Model Population. The study partners were introduced to the ROI model and asked to populate and test it. Feedback provided during the testing phase led to iterative improvements. rpk GROUP used the results from these populated models to inform the financial findings in the study.

Our study partners completed the templates during the first year of a three-year grant initiative, when they were still in the development phase of the work and/or early launch period. The study partners had a broad understanding of expenses and funding for the grant-supported portion of the work. But they were asked to project operating activity and resources for three additional years, totaling six years (three years of grant supported funding, plus three years beyond the grant period). In the model, this is reflected as an initial development year, and five years of program operations.

All projects were still in development, but two had recently launched and were attempting to recruit students; as a result, partners were asked to project student enrollment for five years. In some models, the number of anticipated RNL credits awarded reflect program averages and/or estimates.
Appendix C: Financial Supplemental Analyses

Additional analyses on cost drivers, unit costs, and ROI that influenced the study findings are shown below.

**Total costs are largely determined by the compensation expenses for the project team.** Projects involving greater numbers of faculty, staff and administrators—or their time—were more costly to develop and maintain. Generally, compensation-related expenses (including time reallocated from other activities) accounted for an average of two-thirds of the total program costs over six years (see Figure C1). Stipends represented no more than 12% of the total cost for any single program. Operating costs ranged from 12% to 46% of costs and are heavily dependent on technology needs and marketing plans.

![Figure C1: Projected RNL Program Costs: by Spending Category (6 years)](image)

Notes: The initiative representing SUNY Empire includes three PLEs for one employer. Individual initiatives are unidentified and presented in random order to preserve confidentiality. Source: rpk GROUP analysis of study partner data.

**The cost per student enrolled is heavily influenced by the scope and complexity of the project.** Program costs were largely unrelated to the number of students they planned to serve. The most- and least-expensive of the three programs expect similar numbers of students to enroll over five years (see Figure C2). As a result, the most expensive program is projected to cost more than $6,700 per student and the least expensive about $800 per student.

Scaling enrollment is essential to reduce the per student cost of these programs. Each of the partners initially expect between 35 to 65 students to enroll at their colleges as a result of these RNL initiatives, and grow 12% to 25% each year. Driving down the cost per student requires either significantly increasing student enrollment or reducing expenses.

![Figure C2: Projected RNL Program Costs per Student (6-year Average)](image)

Notes: Cost per student includes RNL program expenses over six years, including the start-up investment and operating costs. The initiative representing SUNY Empire includes three PLEs for one employer. Individual initiatives are unidentified and presented in random order to preserve confidentiality. Source: rpk GROUP analysis of study partner data.

Two of the three programs project a positive ROI, overall, when a six-year timeframe is considered. We examined the projected ROI over three- and six-year time periods. One initiative is expected to demonstrate a positive ROI across a three-year period, generating $2.00 in net revenue for every dollar spent on program activities during this period; this grows to more than $7.00 over six years because ongoing costs are minimal (see Figure C3).

A second initiative is also expected to produce a positive six-year ROI, generating $0.36 in net revenue for every dollar spent on program activities. The third initiative, which did not exhibit positive net revenue across the period, also shows a negative ROI overall.

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22 The additional instructional costs are dependent upon the number of students served.
23 The three-year analysis coincides with the conclusion of the primary grant funding supporting program development and launch; six-years reflects five years of operation and the initial start-up investment year.
Figure C3: Three- and Six-Year Projected ROI

3-year ROI (Years 0 - 2)
- $0.64
- $1.32

6-year ROI (Years 0 - 5)
- $0.36
- $1.14

$2.03
$0.36
$7.34

Notes: ROI equals cumulative net revenues divided by cumulative RNL program expenses; it shows the net revenue generated for every dollar spent on RNL program activities. Both metrics include initial start up investments. The initiative representing SUNY Empire includes two PLEs for one employer; the credits that will be awarded for the third PLE are unknown. Individual initiatives are unidentified and presented in random order to preserve confidentiality. 
Source: rpk GROUP analysis of study partner data.