COLLEGE SPARK WASHINGTON

Post-Achieving the Dream Study Issue Brief on Large Scale, Strategic Professional Development

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Two cohorts of 16 Washington community and technical colleges participated in Achieving the Dream: Community Colleges Count (AtD) from 2006 through 2015, with the goal of increasing student success and closing equity gaps. Funding for these cohorts was provided by College Spark Washington. As part of the initiative, we conducted an independent, third party evaluation, also funded by College Spark Washington, to document and evaluate the impact of AtD on participating colleges, provide timely feedback to the colleges to help inform their efforts, and document lessons learned and their implications for policy, practice, and systems. This included conducting regular college site visits and structured interviews, analyzing Student Achievement Initiative (SAI) data provided by the State Board for Community and Technical Colleges, participating in statewide meetings of the colleges, and reviewing AtD reports and other documents.

This issue brief is part of a post-AtD study funded by College Spark Washington that takes a deeper look at the impact of AtD on the participating colleges and their implications for efforts to increase student success and close equity gaps moving forward. It focuses on professional development and profiles three AtD colleges' interventions that took a large scale, strategic approach to professional development; and assesses the lessons learned and their implications for policy, practice, and systems.

This issue brief draws on evaluation work done over the years of the initiative, additional college site visits and interviews, surveys, and focus groups with those involved in these AtD interventions, and a review of research in the field.

About this series:

This is the third in a series of issue briefs analyzing the impact of Achieving the Dream: Community Colleges Count on two cohorts of 16 Washington community and technical colleges that participated in AtD from 2006 through 2015, with funding support from College Spark Washington; and the implications for efforts to increase student success and close equity gaps moving forward.

The first issue brief focused on institutional change and assessed the overall progress made by colleges in achieving broad institutional changes; the factors affecting this, positive and negative; and the lessons learned about institutional change at community and technical colleges. The second issue brief focused on efforts to transform advising and reviewed AtD colleges' advising interventions, profiled two AtD colleges' advising interventions that took a systems approach and built an enhanced, proactive advising model; and assessed the lessons learned from AtD colleges' advising efforts and their implications for policy, practice, and systems. Future issue briefs will focus on precollege reforms. Additional years of college level student outcome data will also be analyzed.

Professional Development and Its Connection to Student Success and Equity

What happens in the classroom—teaching and learning—matters. It is critical to increasing student success and closing equity gaps. "Study after study demonstrates that students' experiences in the classroom and with faculty are one of the most important factors in student outcomes ranging from persistence, graduation, sense of belonging, and academic self-efficacy," according to Adrianna Kezar. However, the connection between faculty and student success "has been largely overlooked in efforts to support student success that typically focus on… out-of-classroom experiences and supports."[1]

Professional development is one way to address what happens in the classroom, especially professional development that is large scale and strategically targeted to institutional priorities; and, as reported in a series of American Council on Education white papers, research shows positive connections between faculty, professional development, instruction, and student success.[2]

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>
> -Adrianna Kezar

Elements of effective professional development—based on a review of 35 methodologically rigorous studies showing a positive connection between school teacher professional development, teaching practices, and student outcomes, conducted by Linda Darling-Hammond, et al.—include:

- Active learning, engaging teachers in interactive, hands-on activities.
- Collaboration, creating space for teachers to share ideas, collaborate in their learning, and create communities to affect broader change.

1. Adrianna Kezar, Forward in Catherine Haras, et al., editors, Institutional Commitment to Teaching Excellence: Assessing the Impacts and Outcomes of Faculty Development, p. vii; available at http://www.acenet.edu/news-room/Documents/Institutional-Commitment-to-Teaching-Excellence.pdf.

2. Catherine Haras, et al., editors, Institutional Commitment to Teaching Excellence: Assessing the Impacts and Outcomes of Faculty Development, available at http://www.acenet.edu/news-room/Documents/Institutional-Commitment-to-Teaching-Excellence.pdf; Jessie Brown and Martin Kurzweil, Instructional Quality, Student Outcomes, and Institutional Finances, available at http://www.acenet.edu/news-room/Documents/Instructional-Quality-Student-Outcomes-and-Institutional-Finances.pdf; and Natasha A. Jankowski, Unpacking Relationships: Instruction and Student Outcomes, available at http://www.acenet.edu/news-room/Documents/Unpacking-Relationships-Instruction-and-Student-Outcomes.pdf

- Use of models and modeling, providing teachers clear examples of effective practices.
- Coaching and expert support, providing teachers supports such as one-on-one coaching, classroom visits, and facilitated group workshops.
- Feedback and reflection, providing teachers the time to reflect, get feedback on, and make changes to their teaching practices.
- Sustained duration, engaging teachers over time.[3]

Professional development requires institutional leadership, resources, and infrastructure. According to Kezar, "without institutional leadership to provide appropriate incentives and rewards for teaching excellence and faculty development to help faculty learn about new evidence-based teaching approaches, faculty are unable to play this important role in assisting in student success. Creating the appropriate environment for teaching excellence requires overall support from the institution." [4]

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Half of the 16 Washington community and technical colleges that participated in AtD from 2006 through 2015, with funding support from College Spark Washington, incorporated some form of professional development as part of their AtD work. These interventions were most often tied to efforts to increase student success in basic skills, precollege, and college level courses with high-enrollment, low-completion rates; to improve faculty-student engagement; and to close equity gaps. A few had large scale, strategic professional development interventions. Of these, several focused their efforts on two teaching and learning related approaches: active learning and Reading Apprenticeship.

3. Linda Darling Hammond, et al., Effective Teacher Professional Development, available at https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_BRIEF.pdf.

4. Kezar, op. cit.

Active learning engages students in the learning process through structured in-class discussion, exercises, group work, and problem solving activities. An example of an active learning technique is "Think-Pair-Share," which asks students to think individually about a given question or idea, pair with another student to discuss their thinking, and then share their conversation with the group.[5] With active learning, the emphasis is on engagement, interaction, and feedback. All of this is in contrast to traditional lecturing.

Active learning has been shown to increase student success. For example, Freeman et al. conducted a meta-analysis of over 200 studies comparing active learning to lecturing in science, technology, engineering, and mathematics (STEM) courses and, as reported in the *Proceedings of the National Academy of Sciences*, found that active learning resulted in improved student performance as measured by exam scores and course failure rates.[6]

Research also shows that active learning has equity implications, helping to close equity gaps for students of color, women, and low income and first generation students. For example, Eddy and Hogan, in their analysis of introductory biology courses, found that moderate-structure courses using active learning techniques benefited all students, but they worked disproportionately well for specific populations – cutting in half the black-white achievement gap and closing the gap between first generation and continuing generation students.[7] Other studies have found similar patterns.

Reading Apprenticeship teaches students how to analyze and think about what they read and its meaning by incorporating social, personal, cognitive, and knowledge building dimensions into reading and writing. Using this framework, teachers model and build literacy skills, engage students in adding knowledge by helping them connect it to their prior knowledge and life skills, create a collaborative classroom where they problem solve and build reading comprehensive strategies, and teach students to think and talk about how they think and how they can best use, analyze, and learn from their academic discipline texts. An example of a routine is "Talking to the Text," which has students

5. https://teaching.berkeley.edu/active-learning-strategies.

6. Scott Freeman, et al., "Active learning increases student performance in science, engineering, and mathematics," available at http://www.pnas.org/content/pnas/111/23/8410.full.pdf.

7. Sarah L. Eddy and Kelly A. Hogan, "Getting Under the Hood: How and for Whom Does Increasing Course Structure Work?," available at http://www.lifescied.org/content/13/3/453.full.pdf+html.

read text, interact with it by writing in the margins their thoughts on it, and then discussing it with other students in the class. [8]

Reading Apprenticeship shares with active learning a number of features, including engagement; structured, in-class exercises and discussion; and collaborative work. It also has a strong research base. As noted by WestEd, large scale, randomized controlled studies conducted at the high school level show that professional development in this approach is connected with teachers making significant increases in classroom practices that support disciplinary literacy; and their students making gains in reading comprehension and/or subject area achievement on standardized tests. In addition, case studies point to its effectiveness. [9]

There is also some evidence to suggest that Reading Apprenticeship helps close equity gaps; however, in at least some cases, it is hard to disentangle the effects of this from other simultaneous interventions.

Bellingham Technical College, Lower Columbia College, and Renton Technical College are three AtD colleges in Washington that undertook large scale, strategic professional development interventions, with Renton and Bellingham focusing on Reading Apprenticeship and Lower Columbia on active learning.

8. Ruth Schoenbach, Cynthia Greenleaf, and Lynn Murphy, Reading for Understanding: How Reading Apprenticeship Improves Disciplinary Learning in Secondary and College Classrooms (Jossey-Bass, 2012).

9. https://readingapprenticeship.org/research-evidence/our-evidence-base/randomized-controlled-studies and https://readingapprenticeship.org/research-evidence/our-evidence-base/other-studies

College Profiles

Renton Technical College: Reading Apprenticeship

RTC's professional development intervention has been led from its inception by Michele Lesmeister, a long-time College and Career Pathways (ABE/GED) instructor at RTC, with support from a core team of trained faculty and staff. It was inspired by a presentation on WestEd's Reading Apprenticeship seen by several of its AtD team members at the 2008 AtD Strategy Institute in Atlanta, including Lesmeister, who had long been looking for a way to help adult students use their existing skills to better understand and use what they read in their workforce training programs. That summer, RTC sent four faculty to a weeklong intensive seminar at WestEd in leading professional development in Reading Apprenticeship, and sent another four the following summer.

Reading Apprenticeship Training at RTC

This professional development intervention began in fall 2008 as a pilot targeting reading and math classes in ABE. As faculty interest grew, RTC worked with WestEd to design an online class targeted to community college users. In spring 2011, 25 faculty enrolled in and completed this 30-hour, six-week pilot course, which included videos modeling the routines, classroom visits and demonstration lessons, and consultation. The course is now offered by WestEd nationwide.

RTC also has provided numerous faculty inservices on Reading Apprenticeship as well as customized training on request, including tailored workshops for math, science, nursing, and the Learning Resource and Career Center.

Over the last decade, more than 100 RTC faculty and staff have been trained in Reading Apprenticeship, including about 50 current faculty. Completers have included instructors from a wide range of departments and programs, including construction management, early childhood education, phlebotomy, anesthesiology technology, biology/anatomy/physiology, major appliances and repair, accounting, and library science.

RTC provides stipends and continuing education credits to those who complete training. Also as part of the AtD intervention, Lesmeister received release time to help instructors apply the framework and routines to their content materials, and to go into classrooms to observe, demonstrate and coach.

Dissemination

RTC created an extensive set of resources for Reading Apprenticeship, including newsletters, tip sheets, posters, a website, and a shared drive. There is also a comprehensive Library Guide webpage that includes general information, get-started guides, references, specific routines and topics for classroom use, library materials purchased by the AtD grant, information on related professional development, coaching, faculty learning community, document cameras for use, and consulting on a wide variety of routines (http://libguides.rtc.edu/c.php?g=110008&p=712821).

Their Reading Apprenticeship work has gone well beyond its own campus. RTC has held four annual Reading Apprenticeship-focused conferences, with the March 2018 conference attended by hundreds of faculty from the Northwest. Lesmeister has also researched and written curriculum and articles for WestEd, and she and her team have done numerous presentations, including the 2015 AtD DREAM Institute in Baltimore.

Also in 2015, the State Board for Community and Technical College's Basic Education for Adults office sponsored five day-long trainings (http://raprojectwa.org/). Lesmeister, as the state's Reading Apprenticeship coordinator, developed the materials and facilitated the trainings along with colleagues from other colleges. The trainings were attended by over 170 faculty and staff from 28 of the state's 34 colleges.

RTC's Center for Innovative Teaching and Learning encouraged faculty in 2016-17 to complete both Reading Apprenticeship and Universal Design for Learning (UDL), along with one additional quarter of activity. (UDL is a teaching and learning framework that focuses on using a variety of means to engage students, present lessons, and express what's been learned). Participating faculty were designated as RTC Teaching Experts in the online catalog and syllabi; costs were covered and stipends provided. About 30 faculty have completed both trainings.

Results

Lesmeister began implementing Reading Apprenticeship in her ABE classes in fall 2008, and carefully tracked the effects she saw over the next five quarters. One of the measures she looked at was retention—here, defined as course completion rates per quarter. Lesmeister reported that before 2008, ABE retention rates were a little over 50%, and that with the incorporation of Reading Apprenticeship, class retention rates rose to 85% in 2009 and have remained at about that level ever since.

Lesmeister also looked at her students' CASAS gains (Comprehensive Adult Student Assessment Systems) in 2008-2009. The CASAS is a nationally accepted test for measuring basic skills gains for adults, including functional reading, math, listening, writing, and speaking. According to Lesmeister, these CASAS scores indicated that students were making progress at about twice the rate of state and national averages. She also noted that students with reading gains also had math gains; were reading more difficult materials and for longer time periods; and were more engaged and collaborative in the classroom.

Reading Apprenticeship's ultimate value is thought to be its impact on student learning and completion in their programs; however, it is challenging to find valid ways to assess that connection. One way that might merit further exploration is a qualitative inquiry that produces structured, focused feedback from program faculty about its impact on content mastery.

Key Success Factors

A faculty champion.

Michele Lesmeister's personal energy, drive, and investment in Reading Apprenticeship—not only at RTC but throughout the state—has been a primary factor in its spread here. With participation and support from a strong core of trained colleagues, she has collaborated with other colleges and with the State Board for Community and Technical Colleges to create real momentum in Washington.

Grass roots, faculty driven.

This intervention was spearheaded and implemented by faculty at RTC. They have invested time, energy, and resources into it.

A robust dissemination framework.

Reading Apprenticeship at RTC has been taken far beyond its initial pilot intervention status. The volume and range of materials created and trainings provided, the outreach to other colleges, the leadership of the statewide work, and the creation and continuation of the annual conference have created a professional development infrastructure that could be used to great effect going forward with student success initiatives.

Next Steps

Lesmeister is working on creating online training modules for local use that would allow participants to complete self-paced training. There is also interest among the Reading Apprenticeship community at RTC in going beyond the initial online training to deepen Reading Apprenticeship skills and use; in engaging deans and administrators in its dissemination; and in building a strong, broad team structure to support and spread this work at RTC.

One possible next step would be to incorporate Reading Apprenticeship into its forthcoming Guided Pathways work. Examples of this might include infusing it into the college success classes that will be part of their Guided Pathways practices, or into pathways on-ramp courses and contextualizing by pathway. Reading Apprenticeship is also considered to promote an equity framework through its emphasis on students' prior knowledge, engagement, collaboration, and critical thinking. RTC could consider building off its 2016-17 Reading Apprenticeship-plus-UDL professional development to support its design and implementation of Guided Pathways with an equity focus.

Bellingham Technical College: Reading Apprenticeship

During its AtD planning year in 2011, BTC took an extensive look at multiple sources of student data and identified some key leakage points in their success rates for pre-college classes, gateway pre-program classes, and transition from pre-college to college. They wanted their AtD interventions to target these pre-college leakage points.

BTC's leadership came back from their first Achieving the Dream Institute excited about the potential that Reading Apprenticeship held for this goal. With encouragement from their Vice President of Instruction, several faculty went to Renton Technical College to learn more. Caren Kongshaug, adjunct faculty in English and Transitional Studies, took RTC's online workshop and followed it up with more training at WestEd, including their weeklong train-the-trainer workshop. Kongshaug became the faculty lead for this work, which began in 2012 and continues currently.

The goal of BTC's Reading Apprenticeship professional development intervention was to infuse best practices in reading comprehension into curriculum and instruction. It was initially aimed towards instructors in ABE, pre-college, and some programs that had higher attrition rates for students who transitioned in from pre-college. The plan was to train 10 faculty a year with continued professional development support and the provision of stipends or release time to encourage faculty participation.

Reading Apprenticeship Training at BTC

BTC's training model starts with an introductory three-hour workshop for beginners. For those who opt to go further, this can be followed by participating in six training sessions over winter and spring quarters, which faculty go through as a cohort. Initially, these sessions were presented by Kongshaug and covered a variety of topics on Reading Apprenticeship use: math; digital reading; diversity; deeper understanding and application of its framework and routines, etc. In its current iteration, participating faculty and staff will be responsible for presenting their own topics to their peers.

Once these follow-on sessions are completed, participants receive a stipend. The workshops are done using the Reading Apprenticeship framework and routines, much as active learning is taught using and modeling its own techniques. Every workshop and all its materials are available on Canvas, as are many of the lesson plans done by trained faculty. Kongshaug also provides many other supports such as coaching, consulting, and classroom observations.

Almost all instructors in English, transitional studies, GED, and math have completed the training and use Reading Apprenticeship in their classes. These instructors have early contact with many students; thus, their students gain skills that they can apply later on in their programs. BTC has also trained faculty and staff in other areas, including student services, instrumentation, culinary, eLearning, and library sciences. The director of BTC's nursing program recently expressed interest in employing Reading Apprenticeship strategies with first-year nursing students—notable because of the program's heavy academic and licensing exam requirements.

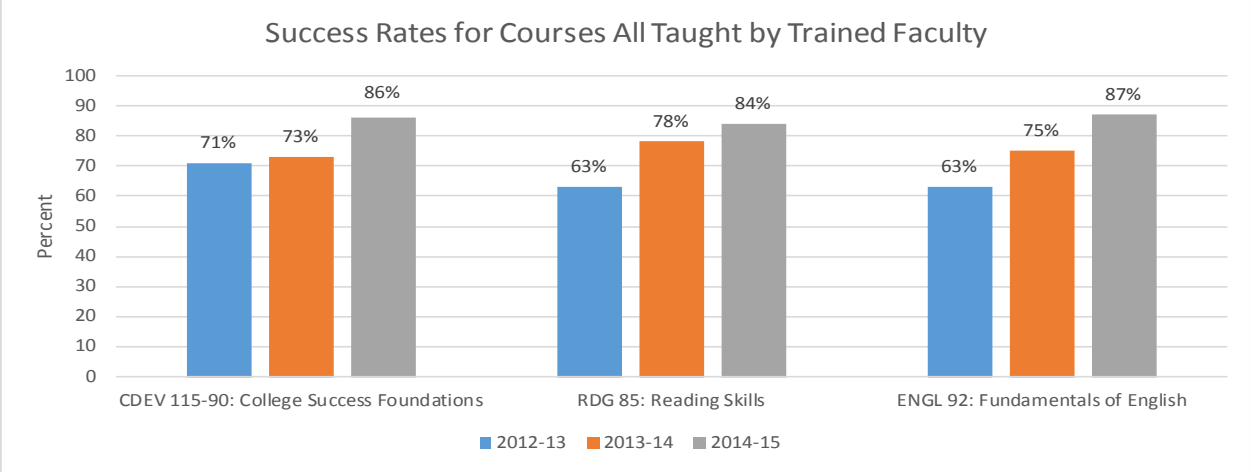
Reading Apprenticeship has taken root in some interesting places at BTC, including college success classes and math. For example, college success instructors apply its metacognitive practices to help students understand how they are thinking and how to understand the impact of that on their decision-making and behavior. Trained faculty and staff are in a professional development network where they can work together to use these strategies with students they have in common.

A team of BTC math instructors—"Team Math"—are working to convert all precollege math classes to flipped classrooms, with lectures to be viewed online and class time used for problem solving, assistance, and small group work. Team Math includes eight instructors working together from ABE Math 50 all the way to calculus—almost all are trained in Reading Apprenticeship and using the same materials and approach. As part of this College Spark Community grant, Team Math has created a bank of Reading Apprenticeship-infused story problems and videos that show the use of the routines in solving story problems. Examples of its application in math include using the personal and social dimensions to help students explore how they think about themselves as math learners—a factor that is thought to influence whether students persist at math; and incorporating metacognitive practices into calculus classes.

Results

As of early 2018, 65 faculty and staff had completed Reading Apprenticeship training at BTC—54 faculty, including adjuncts, and 11 staff. With the current faculty count at BTC at 168, that represents about a third of the faculty. (Given normal turnover rates, some of these people may no longer be there). According to BTC's Office of Institutional Effectiveness, almost 4,000 students have taken classes with trained instructors.

BTC has tried a variety of approaches to evaluating the effectiveness of Reading Apprenticeship for students, both quantitative and qualitative. Their most recent data looks at course success rates for classes that are all taught by trained faculty. These data show significant increases in those rates over several years.



BTC's focus in assessment is starting to shift towards using course learning outcomes. For example, the calculus instructor is creating metacognitive learning outcomes. Faculty also believe that observing changes in student engagement and participation, application of Reading Apprenticeship techniques, and classroom work quality will give them valuable assessment information.

Qualitative data includes focus groups and other similar sources of feedback. As part of the work for this brief, we conducted several focus groups with faculty and staff at BTC in early 2018. BTC also held faculty and staff focus groups in 2015 and 2016 and has solicited student feedback as well. These participants reported:

- Increased student engagement in the classroom—collaborative group work, learning from each other, feeling safer to make mistakes and ask questions.
- Increased personal and social skills—a sense of belonging, relationship-building, greater confidence, stronger social connections with their group partners.
- Increased sense of empowerment and control over their own learning. Students become less dependent on instructors to provide answers, leave feeling more prepared for their next classes.
- Reading Apprenticeship helps teach critical thinking—a common collegewide learning outcome.
- Students can read much more challenging texts when reading is accompanied by Reading Apprenticeship tool use and discussion.
- Higher class completion rates.
- Reading Apprenticeship is informing and changing curriculum—math, English, comprehension in digital reading, hybrid and online courses.
- Faculty continue to be inspired and energized by their peer interactions in this work and by the community of colleagues that has developed.

Some individual comments from the 2018 focus groups and interviews include:

- "This is the most valuable PD I've gotten in 30 years of teaching math."
- "We wouldn't keep doing this if it wasn't working—teachers know when something is working or not working."
- "Getting paid to participate is EVERYTHING. For people who work at community/technical colleges, money is respect."

- "Getting paid to participate is EVERYTHING. For people who work at community/technical colleges, money is respect."
- "Seven years later, this is still going—unlike plenty of other initiatives."
- "We've built a faculty community in this training—a structure that lets us talk about real ways to help students. The collegiality among faculty makes this a creativity cauldron here."

Key Success Factors

Leadership support.

According to Caren Kongshaug, active support from top administrators—presidents and vice presidents, even as people in those positions changed—and funding, first from College Spark for AtD and more recently from Title III, have been key elements in Reading Apprenticeship's success at BTC. She was given the creative freedom to shape the intervention over time, has been paid for her time, and has been able to provide stipends to faculty and staff who complete the training.

A faculty champion.

Kongshaug's own role as faculty lead has been an important factor in the spread of Reading Apprenticeship at BTC. Said one focus group participant: "Caren is very inclusive. She invites everyone—people from Student Services, Financial Aid, culinary, advising, diesel—you name it. She champions in these folks, makes personal invitations, asks for recommendations for more people to invite. And so lots of them have participated and use it in whatever their work is." Kongshaug has also worked on Reading Apprenticeship beyond BTC, teaching the online course for WestEd, helping develop curriculum, and contributing to the state and regional Reading Apprenticeship events.

The community of colleagues.

There is a solid cadre of trained faculty and staff at BTC who support and help spread this effort. One critical element of this intervention's success is the underlying community of colleagues that has been built and is being sustained with ongoing support. They want a continuing structure of intentional, targeted professional development that supports broadening and deepening the work over time. Recognizing the value of this—and seeing another AtD intervention flounder without this community-building—led Kongshaug to request and receive support and funding for follow-up participation after participants completed their initial training.

Next Steps

There is an interest in continuing to expand and develop Reading Apprenticeship at BTC. Aware that program faculty at a technical college have limited time for training because of the length of their teaching day, some suggested providing a couple-hour training session in their all-faculty inservice day as a way to continue spreading it into the college. Several focus group participants mentioned cross-classroom observations by trained peers as a way to develop their skills further. And some are interested in developing a Reading Apprenticeship leadership team to better support and strengthen its infrastructure and make sure that it is sustainable.

Lower Columbia College: Active Learning and SCALE Institute Training

LCC targeted professional development as one way to strengthen faculty-student engagement, which was identified as a priority through its AtD planning efforts. Qualitative research found that many students felt anxious or fearful about approaching faculty. Also, in focus groups conducted as part of the AtD evaluation baseline assessment, students spoke to the need to increase engagement both in and out of the classroom. For many, the issue was that of building relationships and creating a sense of community, not only with faculty, but also other students, and the importance of this to student success.

LCC's AtD professional development on faculty-student engagement intervention—which included the SCALE Institute training on active learning—aimed to address this issue.

SCALE Institute Training

LCC brought the SCALE Institute training on active learning to campus in fall 2013, after having been exposed to it at AtD's DREAM Institute. The two day workshop was conducted during fall in-service week and provided participants a conceptual framework and hands on experience in planning and implementing active learning strategies in the classroom. [10] About 90 faculty and staff participated, including 64 out of the college's 65 full time faculty.

Positive aspects of the SCALE training included its hands-on, interactive nature and the focus on practical active learning strategies and tools that could be used in the classroom, according to faculty who participated in the training. This information is from several focus groups we conducted with LCC faculty in early 2018 to inform this brief. Focus group participants represented most of the college's program areas, including art and communication, business, English, healthcare, math, natural science, and performing arts. Respondents to a 2017 faculty survey on the impact of SCALE training also reported that it provided them more techniques and tools to actively engage students in learning.

LCC followed up the SCALE Institute training on active learning with an On Course workshop on learner centered principles and strategies in fall 2014. [11] The On Course training involved about 50 faculty and staff.

Results

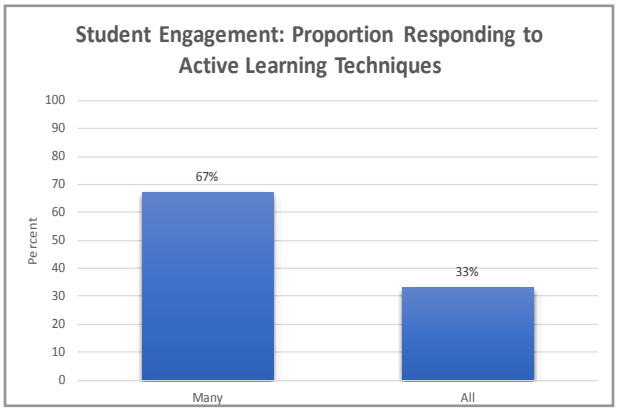
The 2017 survey of faculty who participated in the fall 2013 SCALE Institute training showed that almost 80% of respondents tried the active learning techniques from SCALE training (or something derived from what was learned in the SCALE workshop) in their classroom within a year following the training, and about 70% were still using these techniques. [12]

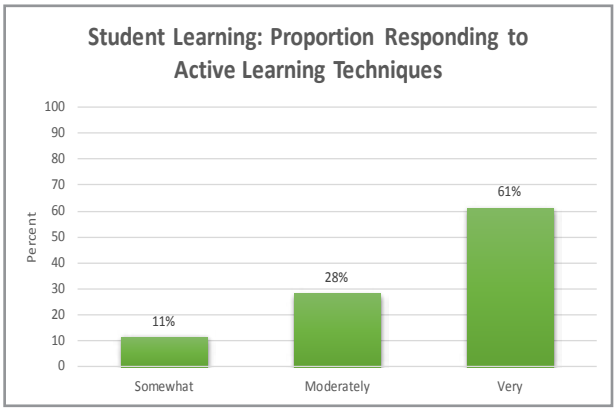
10. More information on SCALE Institute training can be found at http://scaleinstitute.com.

11. More information on Course training can be found at http://oncourseworkshop.com.

12. Twenty-eight faculty responded to the survey out of 63 faculty who had attended, a 44% response rate. Eighteen of those respondents continued on in the survey to answer more detailed questions about student engagement and learning.

When asked whether their students showed greater classroom engagement when active learning techniques were used, a third of the respondents who answered this question reported that all did; two-thirds responded that many students did. In our 2018 follow up focus groups, faculty reported seeing and feeling the difference in student engagement in their classes.





With respect to improving student learning, about 60% of the respondents to this question reported the techniques tried were very effective; almost 30% reported they were moderately effective; and about 10% reported they were somewhat effective.

Respondents observed impacts such as:

- Greater engagement in the classroom and with the material
- Higher level, critical thinking
- Greater sense of community, collaboration, and peer support in the classroom
- Greater overall comfort in the classroom
- Increased persistence and retention
- More accountability for their own learning

Individual faculty responses included:

"Students are much more engaged in the material when active learning is occurring. They are using higher level thinking…and interacting with course content in a way that promotes development of critical thinking."

"Helps to build a stronger community within the classroom so that peers are encouraging one another to succeed. Students stick around later in the quarter rather than bailing when things get challenging...[They] get more comfortable in the classroom earlier on in the quarter and more relaxed to learn."

"I've seen greater persistence and retention since I've employed the SCALE training. For example, I use base groups and the idea that competition between groups cements a community identity. Students are now accountable to each other, and they feel missed when not in class.... There are so many more examples that I use... It really mixes up how the content is delivered and makes students much more accountable for their learning."

Survey responses about frequency of use of active learning techniques ranged from every day to at least once a quarter.

Survey respondents also reported seeing active learning strategies being used at LCC in places other than the classroom such as department meetings, work group sessions, and designated assessment days.

LCC also reports that data from the Community College Survey of Student Engagement (CCSSE) indicate an increase in student-faculty interaction and active and collaborative learning since 2010.

Key Success Factors

Factors that were key to the success of the SCALE Institute training, according to faculty who organized and took part in the training, included:

Strategic Focus

Prior to the SCALE Institute training, there had been a big push around active learning; it had been the focus of faculty discussions and conferences. Data also pointed to its effectiveness. In addition, LCC had just joined Achieving the Dream and there was a focus on increasing student success. All of this helped set the stage for and generate interest in the SCALE training.

The training itself

The SCALE Institute training was hands on and interactive, modeling active learning. Faculty worked in cross-discipline groups and learned with their colleagues. It also provided them practical active learning techniques and tools that could be applied in the classroom. Another positive aspect: the trainers and their credentials and experience. They knew community colleges and had teaching backgrounds. In addition, the length of training was right – two days.

Faculty driven

Faculty drove the effort to have the SCALE Institute training on campus. This is consistent with LCC's approach to institutional change, which emphasizes leading from the middle. Also key was a faculty champion who had strong credibility among the college's faculty.

Reach

Given the large number of faculty taking part in the SCALE Institute training and their representation from most, if not all, disciplines, faculty across the board applied active learning techniques and tools in their classes. It was a united front. And students engaged in active learning not just in one class, but multiple classes. As a result, active learning permeated the college.

Next Steps

Faculty who participated in the 2018 focus groups expressed a strong interest in additional training to reinforce and deepen what was learned in the initial SCALE Institute training and to provide them with additional tools they can use in the classroom. The inoculation approach—get a shot and you're good—doesn't work, according to Brad Benjamin, math faculty at LCC, an early champion of bringing SCALE training to the college, and now president of the faculty union, the Lower Columbia College Faculty Association of Higher Education. Focus group participants remained enthusiastic about active learning and stated clearly their preference for developing it further rather than bringing in a new training topic.

LCC is planning to bring an advanced SCALE Institute training on active learning and student engagement to the college during the 2018-19 academic year.

Faculty were also very interested in continuing to engage with their colleagues around active learning—for example, being able to take the time to participate in ongoing discussions about the use of active learning techniques and tools in the classroom, and to institute cross-colleague classroom visits to get feedback on their uses of active learning and how they could augment what they are doing in this area. It's important to carve out time and space for improving teaching and learning, said one faculty.

Lessons Learned and Their Implications for Policy, Practice and Systems

The Renton Technical College, Bellingham Technical College, and Lower Columbia College profiles demonstrate the value of taking a large scale, strategic approach to professional development and the impact it can have on faculty, students, and the colleges themselves.

In terms of the strategic nature of these interventions, the colleges targeted professional development to key institutional priorities such as increasing success rates for students starting at the basic skills and precollege levels and strengthening faculty-student engagement, and engaged faculty in helping to achieve these priorities. And with respect to large scale action, the colleges engaged sizeable portions of their faculty in this professional development, the benefits of which are several: faculty learn and apply new instructional approaches together and build a sense of community; and students are exposed to these new practices not just in one class but multiple classes, which further reinforces them.

The case studies also provide some evidence of the impact of large scale, strategic professional development, including lasting changes in the instructional approaches of participating faculty, increases in course success rates for classes taught by Reading Apprenticeship trained faculty; and increases in faculty-student engagement. In addition, research in the field shows the positive connections between faculty, professional development, instruction, and student success. This is especially the case for Reading Apprenticeship and active learning.

Key elements of successful efforts in large scale professional development work include:

Faculty driven.

It's important that large scale, strategic, professional development efforts be faculty driven and that there be a faculty champion, especially early on. And there is an additional need to develop a supporting team or otherwise build the infrastructure to grow and sustain the effort so that its continuation does not rest on the shoulders of one person.

Active commitment from top leadership and shared /distributed leadership support.

This kind of professional development is more likely to be scaled and sustained if it is backed by a strong, long-term commitment from college leadership that includes vocal buy-in and engagement from the top, identifies it as an institutional priority, and ensures that it has comprehensive, continuing support in both time and resources. Likewise, active engagement and support from deans, department chairs, and other parts of the college help legitimize and spread these efforts.

Institutional supports.

This work requires institutional commitment, dedicated staff, and resources (e.g., faculty stipends and release time). As noted by Kezar, institutionalizing a culture of teaching excellence "requires leadership commitment, resource reallocations toward instructional processes, alteration of incentives and rewards, development of teaching infrastructure such as centers for teaching and learning, improved classroom spaces and more robust technology, and encouragement for faculty to create student learning outcomes, adopt evidence-based teaching practices, alter curriculum, and engage in the process of continuous improvement around teaching." [13]

Continued faculty engagement and follow up activities.

It's important that there be continuing activities and support, not just one-time training. As noted by Brad Benjamin, LCC's champion for bringing SCALE Institute training to campus, the inoculation approach—one shot and it's good—doesn't work.

At all three colleges highlighted in this brief, faculty were vocal about their desire for additional training on the same topic, rather than switching to a new topic. For example, LCC faculty who participated in the SCALE Institute workshop wanted more training on active learning to reinforce what they learned in the initial sessions, to get additional techniques and tools, and to deepen and broaden their application of active learning in their classes. Similarly, RTC and BTC faculty trained in Reading Apprenticeship wanted additional training and support to take their work further. Several pointed out that this would help prevent initiative fatigue at colleges.

Faculty also expressed interest in continuing to engage with their colleagues around active learning in the instance of LCC and Reading Apprenticeship in the instance of RTC and BTC (e.g., ongoing discussions with other faculty taking part in training, coaching/mentoring, classroom visits, etc.). These large scale professional development opportunities enabled them to interact with their colleagues on matters related to teaching and learning and to engage with faculty from across the college, not just their own discipline. This is the kind of faculty community-building that can create the foundation for engagement in other college reform work and participation in the kind of sensemaking that helps drive transformative change.

13. Kezar, op.cit.

The importance of including adjunct faculty.

There's the need to make adjunct, part time faculty part of this work, and this requires compensating them for their participation. Given the large proportion of adjuncts at most colleges, especially in general education, it is essential to provide the means to include them in large scale, strategic professional development.

Documentation and evaluation.

There's the need to further document and evaluate the impact of professional development. As noted by Haras, et al., this can include assessing its impact on faculty (e.g., increases in knowledge about teaching and learning and changes in teaching practices, using methods such as pre- and post-tests, peer review, self-reflections, and instructor artifacts); students (e.g., changes in attitudes and learning, using methods such as analysis of student data, knowledge surveys, and questionnaires); and institutional culture. [14]

Implications for Washington State Colleges Moving Forward

With the advent of Guided Pathways, widespread work on improving student success in precollege and college math and English, college success classes, and the like in Washington State and elsewhere, the kind of large scale, strategic professional development discussed in this brief acquires significance as one way to move transformative change forward. It is a mission-driven way to strengthen teaching and learning using research-based approaches, engage faculty in community-building and sensemaking, and establish communities of practice that can build on their work over time.

With respect to student success and equity goals, active learning and Reading Apprenticeship are examples of approaches that actively engage students; build a range of skills that include collaborative work, problem-solving, metacognition, and critical thinking; and strengthen basic academic skills that allow students to extract meaning from their content-area texts and apply metacognitive techniques in learning and understanding in both general education and program-specific studies. Both have research bases that affirm their contributions to academic success, student engagement, and decreasing equity gaps.

Possible next steps for approaches such as these include incorporating them broadly into early contact classes at colleges. Those might be basic skills and precollege courses, pathways on ramp classes, college success classes, or exploratory, contextualized pathways classes. This would allow students to gain these skills early on and be able to apply them as they move through their programs of study.

14. Catherine Haras, et al., "Promising Practices in Assessment of Faculty Development Outcomes" in Catherine Haras, et al., editors, Institutional Commitment to Teaching Excellence: Assessing the Impacts and Outcomes of Faculty Development, available at http://www.acenet.edu/news-room/Documents/Institutional-Commitment-to-Teaching-Excellence.pdf

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