

RETHINKING PRE-COLLEGE MATHEMATICS PROJECT

# ADJUNCT FACULTY

In Pre-College Mathematics Reform

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## **About the Authors**

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## Introduction

Improving low student outcomes in pre-college mathematics (the developmental or remedial algebra sequence) hinges on building capacity among adjunct faculty who comprise the majority of pre-college instructional staff in community colleges.<sup>1</sup> Community colleges employ large numbers of adjunct faculty (often called part-time, contingent or non-tenure-track) to teach pre-college mathematics because of their flexibility and lower costs, institutional restrictions on teaching assignments for adjunct faculty, and preferences of full-time faculty for college-level courses.<sup>2</sup>

From 2009 to 2012, the Rethinking Pre-College Mathematics project [RPM] supported pre-college mathematics reforms in seven Washington State community college mathematics departments.<sup>3</sup> Recognizing the key role of adjunct faculty in improving pre-college mathematics, a research inquiry group<sup>4</sup> formed and conducted a study of strategies employed in three RPM departments to engage their adjunct faculty. The results and recommendations of this research, shared in this report, derive from interviews with seven departmental grant leaders and eleven adjunct faculty spread across the three colleges.

The RPM project promoted the adoption of three core practices to improve instruction: 1) classroom assessment techniques [CATs], a formative assessment technique aimed at providing a window into student learning during a class session;<sup>5</sup> 2) faculty inquiry groups [FIGs] where faculty work collaboratively to develop questions about student learning and seek answers from the research literature or examining student work;<sup>6</sup> and 3) reciprocal classroom observations, also called reciprocal exchanges between two faculty members to provide non-evaluative feedback on classroom instruction.

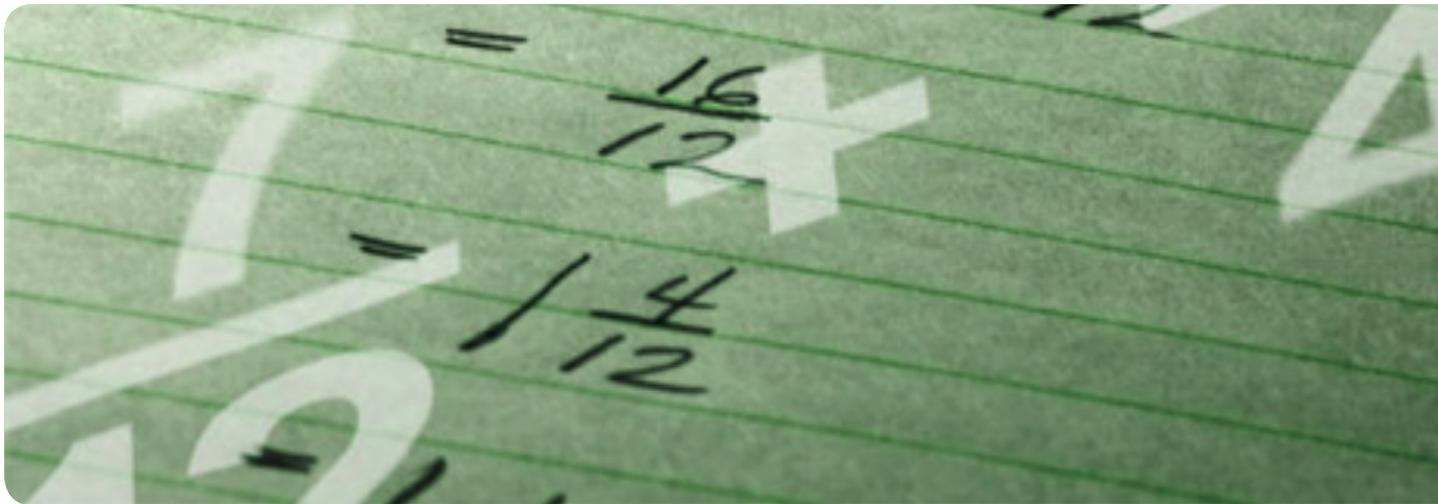


## Sample and Methods

Departments included in the RPM grant committed to make “substantive changes in core educational practices (curriculum, instructional practices and teacher support, assessment) in their pre-college math programs.”<sup>7</sup> The three departments selected for study each comprised roughly 10 to 15 tenured faculty members, with a subset (~2 to 3) serving as grant leaders. Two departments had 10 to 15 adjunct faculty and implemented major course redesign; a third department focused on improving existing curricula in a department with large numbers (>50) of adjunct faculty.

Baseline interviews conducted with seven grant leaders (57% female, 43% male, ages 30s to 60s) at the outset of the grant in spring of 2010 were followed by a second round of interviews with the grant leaders and eleven adjunct faculty (55% female, 45% male, ages 20s to 60s) at the conclusion of the grant in spring of 2012. The hour-long phone interviews were transcribed and analyzed using an iterative process of thematic coding and writing reflective memos. The adjunct faculty interviewed varied in their professional goals (tenure hopefuls, retired, etc.) and were purposely selected to reflect a range of involvement in grant activities.

IRB approval was secured through a host college and performance site approval was secured for the other two colleges. To protect the identity of the adjunct faculty interviewed, the findings and quotations are not linked to particular colleges.



## Grant leaders recognized the adjunct “challenge”

In baseline interviews, grant leaders recognized adjunct faculty as key stakeholders to the pre-college mathematics curriculum. At the same time, grant leaders characterized adjunct faculty involvement in departmental activities outside of teaching as historically weak or sporadic.

*Just speaking personally, I will on a regular basis only interact with [adjunct] faculty that I run into, say, in the copy room or possibly in the tutoring center if they're holding office hours there at the same time I am. But it's not usually engaging in any deep fashion around pedagogy, curriculum, and etcetera.*

–Grant leader

Grant leaders described a culture of support and respect among tenured and adjunct faculty, with one faculty member stating, “We sort of treat them as colleagues instead of as people who come and go in the night.” When questioned specifically about the role<sup>8</sup> of adjunct faculty in their departments, nearly all echoed the sentiment of one grant leader who said, “I think if a faculty member who is adjunct wants to be considered a professional, they have every opportunity to do so.” Most grant leaders believed that adjunct faculty needed to be compensated for work outside of teaching, and that lack of compensation was the primary barrier to adjunct faculty engagement.

## Adjunct faculty willingly engaged in grant activities

All adjunct faculty members interviewed participated in grant activities across a broad spectrum of engagement and at a level higher than mandated. According to the grant leaders interviewed, many adjuncts wanted to be involved. To be sure, adjuncts kept their economic situations in mind, knowing that participation in reform efforts valued by departments was not optional if they wanted to continue teaching at the college.

*I'm pretty much relegated to the precollege classes anyway, and so given that they were going to phase out the old curriculum and phase in the new, it was pretty much a given that that's what I was going to do. But I mean, I would have done it anyway, because the whole concept of taking people that have struggled with math probably their whole lives and helping them to get through that hurdle, that really kind of is what drives me in doing this job and what's rewarding for me. So it kind of fell right into what I was interested in anyway.*

– Adjunct faculty member

Adjunct faculty with lower engagement attended training on the revised curriculum and learned new instructional techniques resulting in some change to practice (see section on changes to practice). Higher levels of engagement included adjunct faculty spearheading an aspect of reform, leading workshops on campus, creating instructional materials or instructor guides, and serving as leaders among their adjunct peers. At one college, strong adjunct faculty involvement was contrasted with limited tenured faculty involvement in grant activities.

# Multiple engagement strategies used

Strategies used to engage adjunct faculty fell into four major categories, shown in Table 1. Some were planned strategies while others emerged as the grant progressed.

**Table 1: Four major strategies used to engage adjunct faculty in departmental grant activities**

<p><b>Perquisites (non-wage compensation over salaries)</b></p>	<p>Adjunct faculty were offered perquisites to participate, such as stipends, opportunities to teach sequentially through the curriculum, or guarantees of teaching the same class. Perceptions of the importance of compensation varied. Some adjuncts only participated initially because of stipends, while others saw them as unnecessary. Most adjunct faculty participated out of a desire to improve student learning, described by one adjunct faculty member who said, “I wanted to change my student success rate. So the incentive for me was that this might work in my classroom.”</p>
<p><b>Targeted instructional support</b></p>	<p>The departments offered adjunct faculty members targeted instructional supports which included establishing a lead faculty as a contact point for courses and developing common materials for the new curriculum. These instructional materials, initially intended to create uniformity and consistency across sections of a course, came to serve as scaffolds for professional learning around curriculum reform. As adjunct faculty developed an understanding of the curricular changes, most stated they ceased using the materials and instead created their own.</p>
<p><b>Professional development opportunities</b></p>	<p>Professional development opportunities were powerful ways for adjunct faculty to connect with the department around grant goals. These included on-campus curricular training (sometimes mandatory) or off-campus grant retreats. One adjunct, in describing how a retreat affected her, stated, “That week somehow really lit a fire in me.”</p>
<p><b>Leveraging grant “core practices”</b></p>	<p>Tenured faculty promoted the grant’s core practices (FIGs, CATs, and reciprocal observations) to engage adjuncts, calling these activities “required” for grant compliance. The most powerful of these practices, the FIGs, involved both adjunct and tenure track faculty. Even when FIGs did not focus deeply on inquiry and student learning, they became a place for adjunct faculty to get information on courses, learn about teaching, and build relationships with tenured faculty.</p>

# Engaging in grant activities led to some changes to adjunct practice

Of the 11 adjunct faculty members interviewed, two described minimal changes to their teaching practice as the result of grant activities; some observed dramatic change to their practice, while most faculty fell somewhere in between. Table 2 displays the major changes to practice.

**Table 2: Major changes to adjunct faculty practice as a result of grant involvement**

<b>Preparing for courses and approaches to topics</b>	The majority of adjunct faculty members interviewed now felt they had to do more than just prepare and deliver a lecture. They mentioned being more intentional about course outcomes, developing projects and activities, and incorporating technology. Two departments implementing new curriculum required practices and technologies which affected faculty practice, including new textbooks, prescribed activities, and MyMathLab technologies. <sup>9</sup> Adjuncts interviewed shared a belief that their approach to topics was improved by incorporating ideas from FIGs and reciprocal observations.
<b>Restructuring class time</b>	Adjunct faculty described rebalancing their approach to classes, with less lecturing, a greater emphasis on group work, more instructor attentiveness to classroom questioning patterns (how the instructor is asking, which students are asking questions, who is answering), instructor efforts to decentralize their authority in the classroom, and more classroom activities.
<b>Broadening assessment practices</b>	Overall approaches to assessment broadened to include different ways to capture student learning on timed exams and realizing that assessment “can come in many forms.” Some instructors adopted CATs (classroom assessment techniques) but with limited impact on practice. Others described the power of the online homework as a formative assessment tool.

*Now I spend a lot more time thinking about the outcomes that I want, the ways in which I can represent the material or ask students to investigate the material that will lead to understanding.*

*– Adjunct faculty member*

*When you do [homework] online, you get three tries. ... So to me, I feel like this is really good, because it encourages students to learn. Like if you don't get it, try again until you get it, and then it would reward you with points. So it gives you immediate feedback.*

*– Adjunct faculty member*

## Recommendations

This study revealed that within each department, a group of adjunct faculty willingly engaged in, and in some cases led, efforts to improve the pre-college mathematics curriculum. Compensation and personal invitations were key to initiating adjunct faculty engagement. In contrast, sustaining adjunct faculty engagement appeared more often to be linked to offering value-added opportunities for professional growth<sup>10</sup> aimed at improving instruction. These included opportunities to learn about new curricular ideas and teaching strategies, to connect with their peers, to build professional relationships, and to deepen their commitment to student learning.

The study also revealed that supporting adjunct faculty in a large curricular area like pre-college mathematics is a shared responsibility of departments, colleges, and the state system. Particularly in cases where adjunct faculty members circulate among colleges, attending to their professional growth at the campus or system level could have long-term, positive benefits.

### Recommendations for Departments

- Leverage adjunct faculty interest in improving instruction; offer stipends when possible.
- Create explicit “supportive policies”<sup>11</sup> that set clear expectations for adjunct faculty related to orientation, training, mentoring, and shared governance opportunities.
- Offer periodic large-scale training sessions to bring tenured and adjunct faculty together. Over the course of the grant, mandated, department-wide curricular trainings for adjunct faculty tended to devolve into individual training by a lead faculty or mentor. It is unclear whether this was intentional or a result of barriers to adjunct availability or the view that adjunct faculty required no further training.
- Leverage opportunities for adjunct advancement. It is noteworthy that no department used “advancement opportunities” as a strategy to encourage adjunct faculty engagement even though all three colleges had contractual language about “affiliate” or “associate” status for adjunct faculty.

### Recommendations for Colleges

- Fund stipends for adjunct faculty engaged in curriculum projects.
- Offer campus-wide professional development relevant to adjunct faculty. The study revealed that some adjuncts need a review of teaching basics (e.g., effective questioning patterns) in addition to higher level teaching development.
- Support departments in developing departmental-level policy for adjunct faculty.
- Secure adjunct faculty representation on campus-wide, pre-college curricular initiatives.

### Recommendations for the Washington State Board of Community and Technical Colleges

- Secure adjunct faculty representation on major statewide curricular initiatives.
- Provide funding for adjunct faculty to attend state-wide retreats. Grant-wide retreats were where the light bulb went on for many adjunct faculty, who had previously felt the pre-college math “problem” was theirs alone. Adjunct faculty on the cusp of interest in innovation could be nudged toward making significant improvements in practice, creating long-term payoffs for the system as a whole.

## Endnotes

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<sup>1</sup> Grubb, W. N. (2010). The quandaries of basic skills in community colleges: View from the classroom [Working paper]. Paper presented at National Center for Postsecondary Research Developmental Education Conference, New York. Retrieved from: <http://www.postsecondaryresearch.org/conference/downloads.html>; National Center for Education Statistics [NCES]. (2008). Community Colleges: Special Supplement to the 2008 Condition of Education. Retrieved from: <http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2008033>

<sup>2</sup> Landrum, R. E. (2009). Are there instructional differences between full-time and part-time faculty? *College Teaching*, 57(1), 23–26; Leslie, D. W., & Gappa, J. M. (2002). Part-time faculty: Competent and committed. *New Directions for Community Colleges*, 118, 59–68; McLaughlin, F. (2005). Adjunct faculty at the community college: Second-class professoriate? *Teaching English in the Two-Year College*, 33(2), 185–193.

<sup>3</sup> Moore, W.S., Lardner, E., Malnarich, G., & Davis, M. (2013). Rethinking Pre-College Math: Pedagogy, Professional Responsibility, and Student Success. Retrieved from: [http://transitionmathproject.org/images/uploads/resource\\_docs/pedagogy0213.pdf](http://transitionmathproject.org/images/uploads/resource_docs/pedagogy0213.pdf); Transition Mathematics Project [TMP]. (2012) Transition Mathematics Project Projects Page. Retrieved from: <http://transitionmathproject.org/index.php/projects>

<sup>4</sup> The research inquiry group comprised the authors ([www.curriculumresearchgroup.org](http://www.curriculumresearchgroup.org)) and Dr. William S. Moore, Policy Associate for Assessment, Teaching and Learning, Washington State Board of Community and Technical Colleges.

<sup>5</sup> Angelo, T. A., & Cross, P. K. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco: Jossey-Bass.

<sup>6</sup> Huber, M. T. (2008). The promise of faculty inquiry for teaching and learning basic skills. Retrieved from The Carnegie Foundation for the Advancement of Teaching SPECC Series Website: <http://www.carnegiefoundation.org/publications/promise-faculty-inquiry-teaching-and-learning-basic-skills>; Klein, B. & Wright, L. M. (2009). Making prealgebra meaningful: It starts with faculty inquiry. *New Directions for Community Colleges*, 145, 67-77.

<sup>7</sup> Transition Mathematics Project [TMP]. (2012) Transition Mathematics Project Projects Page. Retrieved from: <http://transitionmathproject.org/index.php/projects>

<sup>8</sup> For discussion of the role of adjunct faculty as hybrid or managed professionals, hired and managed as contingent labor but with professional autonomy and academic freedom, see Kezar, A., & Sam, C. (2010). Non-tenure-track faculty in higher education: Theories and tensions. *ASHE Higher Education Report*, Vol. 36, No. 5. San Francisco: Jossey-Bass; Rhoades, G. (1998). *Managed professionals: Unionized faculty and restructuring academic labor*. Albany: SUNY Press; Shaker, G. (2008). *Off the track: Full-time non-tenure-track faculty experience in English*. Unpublished doctoral dissertation, Indiana University, Bloomington, IN.

<sup>9</sup> MyMathLab (<http://www.mymathlab.com/>) is a Pearson Publishing product that is an online supplement to a traditional textbook and includes online homework, eBook access, practice problems, and video lectures.

<sup>10</sup> O'Meara, K., Terosky, A. L., & Neumann, A. (2008). Faculty careers and work lives: A professional growth perspective. *ASHE Higher Education Report*, Vol. 34, No. 3. San Francisco: Jossey-Bass. O'Meara et al.'s (2008) framework conceptualizes faculty professional growth into four synergistic and self-reinforcing aspects: 1) the ability to engage in learning, personally and professionally, 2) the ability to assume agency, 3) the ability to create, nurture, and sustain professional relationships, and 4) the ability to act on and form commitments. Agency suggests power, will, and the ability to act freely as oneself to "create contexts conducive to their thoughts over time" ( p. 28). Commitments refer to long-term, conscious, personal and professional investments that faculty make in "people, programs, places and social concerns through concrete activity that furthers the goals of higher education" (p. 31).

<sup>11</sup> Kezar, A. (2013). Examining non-tenure track faculty perceptions of how departmental policies and practices shape their performance and ability to create student learning at four-year institutions. *Research in Higher Education*, 54, 571–598.