

Building Knowledge *Out of the Gate*

2019 EVALUATION REPORT

Prepared for PBLWorks and the ECMC Foundation

Out of the Gate: Preparing Preservice Teachers to Use Project Based Learning (PBL) Through PBL is a program that brings together university faculty members, the pre-service teachers they instruct, and the cooperating teachers who mentor pre-service teachers in schools. *Out of the Gate* is designed to transform teacher education programs (TEPs) by providing professional development to faculty members, cooperating teachers, and pre-service teachers. Professional development and coaching provided through PBLWorks gives TEP faculty members and cooperating teachers the skills they need to teach using projects and to support pre-service teachers in implementing PBL out of the gate, that is, as soon as they enter the teaching profession.

Out of the Gate was developed by PBLWorks (formerly the Buck Institute for Education), with support from the ECMC Foundation. Participants receive PBL professional development and ongoing support from PBLWorks. In 2018–19, three TEPs and their local school districts participated in the project: Grand Valley State University (Michigan), Otterbein University (Ohio), and University of Mary (with Dickinson State University in North Dakota).

PBLWorks hired Education Northwest to conduct a three-year (2017–2020) external evaluation of the project. This annual report provides an analysis of data collected in 2018–19. During this time, the evaluators gathered information through a Year 2 survey, interviews with TEP faculty members, PBLWorks attendance data, and visits to each TEP. Comparative analysis between the Year 1 (2017–18) and Year 2 (2018–19) surveys are presented, when appropriate. Methods and data sources are described in the appendix.

KEY RESULTS

- PBLWorks offered all planned activities. Participation was consistent among cooperating teachers and pre-service teachers through the first sustained support visit. Faculty participation declined with each additional activity offered by PBLWorks.
- Over three-fourths of university faculty members, cooperating teachers, and pre-service teachers reported incorporating a high-quality project into their classrooms.
- Observations of faculty members' classrooms showed that faculty members who implemented projects have attained intermediate-level skills in implementing PBL.
- The most commonly mentioned challenge to implementing PBL was lack of time.
- District partnerships are a key systems-level element for the success of *Out of the Gate*.
- Participants' beliefs align with *Out of the Gate*, but faculty members identified added challenges in the second year of the project.
- Many participants were knowledgeable about PBL and said *Out of the Gate* increased their knowledge, but fewer participants (especially faculty members) were confident about implementing PBL in their classrooms.
- Faculty members and cooperating teachers showed increased confidence in their ability to support pre-service teachers in implementing PBL practices.



PBLWorks offered all *Out of the Gate* activities and participation varied by TEP

EVALUATION QUESTION

To what extent are the Out of the Gate activities implemented as intended?

Education Northwest collaborated with PBLWorks to collect data on participation in *Out of the Gate* activities, including Project Slice, faculty implementation lab, PBL 101, sustained support visits, and symposia (box 1).

Box 1. PBLWorks services as part of Out of the Gate

PROJECT SLICE

This two-day workshop is designed to immerse pre-service teachers, cooperating teachers, and faculty members in PBL by having them experience high-quality PBL as learners.

FACULTY IMPLEMENTATION LAB

This half-day session helps TEP faculty members, personnel, and administrators articulate a vision for PBL in the TEP and courses. It also helps participants determine key actions needed to move the TEP program forward in achieving the vision and goals of *Out of the Gate*.

PBL 101

This three-day, intensive, hands-on professional development session is designed to deepen understanding of PBLWorks' *Gold Standard Design Elements* and *Project Based Teaching Practices* to support pre-service teachers and cooperating teachers as they design the projects they will implement during the student-teaching semester.

SUSTAINED SUPPORT VISITS

PBLWorks conducts two on-site visits during the student-teaching semester to refine project design and support the implementation of PBL.

SYMPOSIA

At these annual events, participating faculty members, cooperating teachers, and pre-service teachers share lessons learned; deepen their understanding; and cultivate support for high-quality PBL among stakeholders within the university, among school and district partners, and across the region and state. Each participating TEP hosts a regional symposium as a culminating event for pre-service teacher placements.

In Year 2, most participants attended Project Slice, PBL 101, and the first sustained support visit (table 1). PBL 101 served the most participants: 32 from Grand Valley State University, 44 from Otterbein University, and 46 from the University of Mary partnership—16 of whom came from Dickinson State University. Most of these participants also attended Project Slice. Although the participation of cooperating teachers and pre-service teachers remained steady through the first sustained support visit, faculty member participation declined following Project Slice.

Compared with Year 1, the services PBLWorks provided for *Out of the Gate* are different in two ways. First, only three TEPs participated in the project, whereas four TEPs did so in the previous year. Second, the faculty implementation lab did not occur at Otterbein University due to low participation in Project Slice.

A third of cooperating teachers and most faculty members (85 percent) who participated in *Out of the Gate* in 2017–18 also participated in 2018–19. All pre-service teachers who participated in 2018–19 only participated for that year.

Table 1. Number of participants who attended events by site and role, 2018–19

Participant site and role	Project Slice	Implementation Lab	PBL 101	Sustained support visit 1	Sustained support visit 2
Grand Valley State University					
Faculty members	5	5	2	1	3
Cooperating teachers	14	--	13	12	7
Pre-service teachers	13	--	13	13	9
Otterbein University					
Faculty members	0	0	1	0	1
Cooperating teachers	19	--	27	20	19
Pre-service teachers	25	--	26	23	20
University of Mary					
University faculty	11	11	8	1	0
Cooperating teachers	18	--	18	15	15
Pre-service teachers	17	--	18	17	14
Total	122	16	126	102	88

Note. "--" indicates these groups were not offered this service. Participants from Dickinson State University are included in the counts for the University of Mary.

Source: PBLWorks participation records.



Over three-fourths of survey respondents reported using a project in their classrooms

EVALUATION QUESTION

How do Out of the Gate faculty members', cooperating teachers', and pre-service teachers' knowledge, classroom practice, confidence, and attitudes related to PBL change over time?

In Year 2, about 75 percent of university faculty members reported including a high-quality project in at least one of their courses compared with 62 percent in Year 1 (see the second interim evaluation report for these results). Nearly all cooperating teachers reported teaching at least one high-quality project in their classroom, and 75 percent reported two or more (up from 48 percent in Year 1). It is important to note that 39 percent of cooperating teachers and 60 percent of university faculty members who responded to the Year 2 survey were returning participants; they participated in *Out of the Gate* in both 2017–18 and 2018–19.

Pre-service teachers who responded to the Year 2 survey span two *Out of the Gate* cohorts. The first cohort participated in Year 1 of the project during 2017–18, and the second cohort participated in Year 2 of the project during 2018–19. For this annual report we are able to compare pre-service teachers from Cohort 1 of *Out of the Gate* to Cohort 2. Of pre-service teachers, 100 percent of Cohort 2 pre-service teachers taught at least one project during their student teaching year (2018–19), whereas only 63 percent of Cohort 1 pre-service teachers taught a project during their student teaching year (2017–18).

In 2018–19, many Cohort 1 teachers had graduated from their TEP and were in their first year of teaching. The Year 2 survey followed up with Cohort 1 teachers to understand their use of projects following the completion of *Out of the Gate* services and upon starting their teaching careers. Among Cohort 1 teachers who responded to the Year 2 survey, 50 percent reported completing a project during 2018–19.

Notably, both cohorts of teachers taught more projects during their student teaching year than Cohort 1 teachers reported teaching the year after participating in *Out of the Gate*. This difference may be due to the fact that pre-service teachers are in a structured environment while participating in *Out of the Gate* that encourages them to try PBL during their student teaching year, whereas for Cohort 1 teachers, practicing PBL may be more difficult in their first year of independent teaching. In addition, two pre-service teachers from Cohort 1 were not teaching at the time of the survey administration, which would limit their ability to implement projects.

Table 2. Projects reported during 2018–19, by role

	University faculty members*	Cooperating teachers	Cohort 1 pre-service teachers	Cohort 2 pre-service teachers
None	23%	3%	50%	0%
1	45%	20%	0%	81%
2	32%	31%	30%	13%
3	0%	23%	10%	3%
4 or more	0%	23%	10%	3%

* University faculty members were asked about the number of courses including projects. All other survey participant groups were asked about number of projects.

Note: University faculty members (N = 22), cooperating teachers (N = 35), Cohort 1 pre-service teachers (N = 10), Cohort 2 pre-service teachers (N = 31).

Source: Education Northwest analysis of participant survey data.

Overall, cooperating teachers reported the highest integration of PBL into classroom practices. This may be because they have more opportunities to teach projects than pre-service teachers or university faculty members based on the schedule of teaching typical for each participant group. According to the National Center for Education Statistics (2004), university faculty members spend, on average, half of their workload teaching (with additional research and service duties). This often results in faculty members at four-year postsecondary institutions teaching zero to four courses per semester—resulting in, at most, eight opportunities to introduce a project into their teaching practice annually. Pre-service teachers have one opportunity to teach with projects: through their student-teaching, when they are paired with cooperating teachers. Cooperating teachers are often full-time teachers who dedicate all their time to teaching—and they teach multiple classes a day with the same students throughout the year. As a result, the sheer number of hours that cooperating teachers can implement projects is greater than that of university faculty members or pre-service teachers.

Box 2. Description of PBL taught by a university faculty member

After participating in *Out of the Gate*, a professor redesigned one of her courses to facilitate a semester-long PBL unit. The introductory-level course, “Developing Classroom Environments,” is required for all students completing early childhood education, elementary education, or special education degree programs at the university. The goal of the course is to help students understand how elements in the classroom environment enhance curriculum and instruction.

The project focused on one driving question: “What do we need to know and do to design effective classroom/program spaces?” For the entry event, the professor led a full-group discussion about what environments the students enjoy and prefer to learn in. Then the students broke into groups and toured campus, documenting different learning spaces they enjoy with photographs and videos. Throughout the semester, students explored the driving question through class discussions, small-group activities, readings, and hands-on research. Students were given choice regarding the environment they explored and which classmates they collaborated with for the project.

For their final product, students created physical representations of an ideal classroom space, accounting for a set of parameters outlined by the instructor (e.g., classroom spaces need to accommodate 18 students; see figure 1). Students worked on their classroom models throughout the semester, through multiple revisions, using rubrics and teacher and peer feedback. Final products were presented to the class at the end of the semester.

Figure 1. Example of “Developing Classroom Environments” product





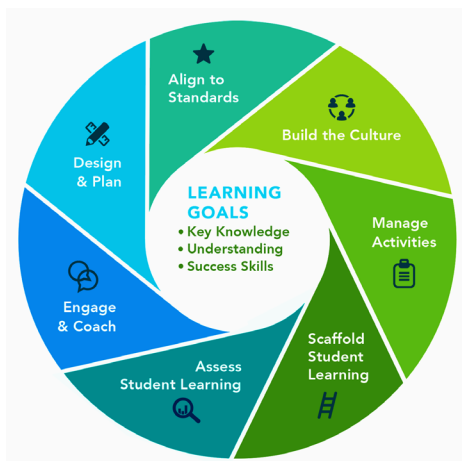
Observations of faculty classrooms show that faculty who implemented projects are in an intermediate stage of developing PBL skills

EVALUATION QUESTION

How do Out of the Gate faculty members, cooperating teachers, and pre-service teachers' knowledge, classroom practice, confidence, and attitudes related to PBL change over time?

In addition to reviewing university faculty members' self-reports, we observed their classrooms at each TEP site in spring 2019. In each classroom observation during which a university faculty member was facilitating a project, we evaluated the project based on the *PBLWorks Gold Standard Project Based Teaching Practices* rubric.

Box 3. *PBLWorks' Gold Standard Project Based Teaching Practices*



- **DESIGN AND PLAN:** Creating or adapting a project for your context and students, planning project implementation from launch to culmination
- **ALIGN TO STANDARDS:** Using standards to plan your project addressing key knowledge, success skills, and understanding from subject areas to be included
- **BUILD THE CULTURE:** Explicitly and implicitly promoting student independence and growth, open-ended inquiry, team spirit, and attention to quality
- **MANAGE ACTIVITIES:** Working with students to organize tasks and schedules, setting checkpoints and deadlines, finding and using resources, creating products and making them public
- **SCAFFOLD STUDENT LEARNING:** Employing a variety of lessons, tools, and instructional strategies to support all students in reaching project goals
- **ASSESS STUDENT LEARNING:** Using formative and summative assessments of knowledge, understanding, and success skills and including self- and peer assessment of team and individual work
- **ENGAGE AND COACH:** Engaging in learning and creating alongside students, identifying when students need skill building, redirection, encouragement, and celebration

A total of 10 classrooms were observed, but only three university faculty members were facilitating projects during the observation period. To evaluate faculty members' use of projects, we developed a rating system that categorizes projects based on the following metric: 1 = beginning PBL; 2 = developing PBL; 3 = Gold Standard PBL. Table 3 below shows the average rating across all three classrooms. On average, the three faculty members who were observed implementing projects are in the development stage of implementing PBL, as indicated by the 2 and 2.33 averages.

Table 3. Ratings of university faculty members' use of projects based on PBLWorks' Project Based Teaching Practices

Project based teaching practices	Average
Design and plan	2.00
Align to standards	2.33
Build the culture	2.33
Manage activities	2.00
Scaffold student learning	2.33
Assess student learning	2.33
Engage and coach	2.00
Number of classes rated	3

Note: 1 = beginning PBL; 2 = developing PBL; 3 = Gold Standard PBL. These ratings are based on classroom observations in which PBL was occurring, not in which PBL was discussed. These ratings also include a review of online class content.

Source: Education Northwest analysis of classroom observation data.

Of the 10 classes we observed, seven did not include a project. Of the seven classroom observations that did not include a project, four discussed PBL to some extent during our observation. These faculty members included readings on PBL, discussions of PBL's benefits, their experience with PBL, and brainstorming sessions for designing PBL units.



The most commonly mentioned challenge to implementing PBL was lack of time

EVALUATION QUESTION

What supports and challenges do TEP participants (faculty members, as well as pre-service and cooperating teachers) experience related to the implementation of Out of the Gate? How can these supports be sustained and these challenges overcome?

Participants also reported on the types of challenges they encountered with implementing a project. The most common challenge (which was mentioned by almost half of all survey respondents across all roles) was the time required to plan a PBL project and the time required to execute it completely in the classroom. Below, we discuss challenges specific to university faculty members, cooperating teachers, and pre-service teachers.

For university faculty members, challenges related to the classroom, the university system, and access to cooperating teachers

Through site visits, interviews, and surveys, we asked all faculty members about challenges they had experienced during *Out of the Gate*. Their top three challenges are listed below.

- In the survey, over 60 percent of faculty members identified time as a challenge, specifically lack of time to implement projects. In addition, many faculty members we interviewed see meeting standards as occurring outside of project work. Therefore, implementing a project is considered secondary to ensuring class time covers standards. As a result, faculty members are less likely to implement a project if they feel pressure to cover standards, or they will implement a project only when there is sufficient time in the schedule.
- Faculty members at all TEPs said training in content areas for secondary teachers occurs outside of the School of Education and therefore is more difficult to restructure with PBL than courses under the purview of the School of Education. Thus, it is more difficult to expose secondary pre-service teachers to PBL because they take fewer of their courses within the TEP.
- The lack of cooperating teachers interested in participating in *Out of the Gate* made the identification of cooperating teachers and matching them with pre-service teachers more difficult during *Out of the Gate* than matching cooperating teachers with pre-service teachers otherwise. In addition, many TEPs lack the resources to do the additional scheduling required to find cooperating teachers who are interested in both PBL and meeting the certification requirements of their pre-service teachers.

Additional challenges include:

- TEP leadership turnover makes it difficult to implement a project like *Out of the Gate*.
- Long gaps in the implementation of a course make it difficult for university faculty members to learn and then practice PBL. For example, faculty members may design a project for a course that is offered every other year. As a result, they sometimes must wait a year and a half to test their design.
- Faculty members also mentioned limited class time to implement PBL. Specifically, students do not meet frequently enough or do not meet for long enough periods of time when they do meet to implement a project.

Cooperating teachers and pre-service teachers had similar concerns

About half of cooperating teachers and pre-service teachers said their biggest challenges were a lack of planning time for project design and a lack of time to implement projects. Nearly a third of cooperating teachers also reported a lack of collaboration partners, a lack of time to work with partners, and too much standardized content to cover to allow for teaching with projects. Other challenges reported by at least a third of pre-service teachers in Cohorts 1 and 2 include a lack of time for collaboration, too much standardized content to cover, and other student learning needs that take priority over PBL.



TEP-district partnerships are a key systems-level condition necessary for successful implementation

EVALUATION QUESTION

What supports and challenges do TEP participants (faculty members, as well as pre-service and cooperating teachers) experience related to the implementation of Out of the Gate? How can these supports be sustained and these challenges overcome?

During site visits and interviews, participants discussed the crucial role district partnerships played in *Out of the Gate*.

The University of Mary has a strong relationship with Bismarck Public Schools, which includes PBL as one of its primary teaching practices and provides contracted PBLWorks professional development for its teachers independent of *Out of the Gate*. In addition, unlike other TEPs, where the institution of higher education must reach out to districts to find cooperating teachers with an interest in PBL, Bismarck Public Schools has been responsible for gathering support among cooperating teachers to participate in *Out of the Gate*. The University of Mary also employs a full-time director of student teaching who manages logistical coordination of *Out of the Gate* between the district and the TEP. As a result, compared with the other TEPs, this one had fewer logistic hurdles in recruiting and placing cooperating teachers.

In contrast, the other TEPs have relied on partnerships with multiple districts to recruit cooperating teachers interested in PBL. In these cases, participation in *Out of the Gate* is difficult because TEPs must align cooperating teacher certification with pre-service teacher area of focus (both grade level and content area) and PBL interest. Further, multiple interviewees said district restrictions in Michigan require that cooperating teachers have a pre-service teacher only once every three years; in some districts, cooperating teachers interested in PBL can participate in *Out of the Gate* only once before the TEP must find other interested cooperating teachers. As a result, finding cooperating teachers to participate in *Out of the Gate* has been exceedingly difficult for TEPs that do not have a relationship with one district dedicated to training a PBL teacher workforce.

However, in all cases, *Out of the Gate* has facilitated improved relationships between districts and TEPs. There are two potential avenues for improved relationships. First, cooperating teachers and pre-service teachers are meeting a semester before student teaching begins (previously, pre-service teachers met cooperating teachers their first day in the classroom). Specifically, cooperating teachers and pre-service teachers meet during *Out of the Gate* trainings and work together to design a PBL project the semester before student teaching occurs—and participating in the trainings and learning new concepts together fosters teamwork. Second, since the TEP is the source of additional PBL professional development for the district, the district sees this as a service and is more willing to collaborate. In the past, districts were regularly providing a service to TEPs, as their cooperating teachers trained pre-service teachers, but this service was not reciprocated. *Out of the Gate* has been a way for TEPs to give back to their partner districts.



Participants’ beliefs align with PBLWorks’ program, but more faculty members identified challenges in the second year of the program

EVALUATION QUESTION

How do Out of the Gate faculty members’, cooperating teachers’, and pre-service teachers’ knowledge, classroom practice, confidence, and attitudes related to PBL change over time?

All participants described their beliefs about teaching and learning related to PBL. Most participants agreed with statements that align with the philosophy of *Out of the Gate*—that incorporating PBL can improve teacher instruction and improve student learning. Additionally, most participants agreed that the training they received was high quality and that they will incorporate PBL into their future work (table 4). There was no substantial variation in these beliefs between Year 1 and Year 2 of *Out of the Gate*.

Table 4. Percentage of participants who agreed or strongly agreed with statements about PBL, by role

	University faculty members		Cooperating teachers		Pre-service teachers Cohort 1		Pre-service teachers Cohort 2
	2017-18 (N=26)	2018-19 (N=25)	2017-18 (N=54)	2018-19 (N=36)	2017-18 (N=41)	2018-19 (N=11)	2018-19 (N=33)
Positive statements about PBL							
Incorporating PBL into pre-service programs will improve teacher instruction	100	100	98	100	100	100	100
Incorporating PBL into K–12 education will improve student learning	100	100	98	100	100	100	97
I consider the PBL training I received from PBLWorks to be high quality	96	96	93	100	100	100	97
I plan to incorporate PBL into my future work	100	100	100	100	96	100	97
Pre-service teachers are especially well situated to learn how to use PBL	96	84	85	97	93	82	91
All teachers could benefit from using PBL	86	96	94	100	91	82	88
Statements about challenges to PBL							
I need additional support to incorporate PBL into my future work	68	54	59	36	67	45	61
Fitting PBL into existing curricula is challenging	39	52	59	42	64	100	55
Adding PBL to pre-service teaching is just too much for pre-service teachers to learn without more teaching experience	11	16	19	14	16	0	15
Adding PBL to pre-service teaching is too much work for university faculty members	0	0	6	9	9	--	--
I am NOT able to apply what I’ve learned about PBL to my current work	4	13	4	3	7	9	3

Note: “--” indicates no data are available for this item.

Source: Education Northwest analysis of participant survey data.

Interviews from fall 2018 brought to light an added benefit not investigated in participant surveys: University faculty members said pre-service teachers participating in *Out of the Gate* benefited substantially from the relationship they developed with their cooperating teacher. In most cases, before *Out of the Gate*, pre-service teachers met their cooperating teacher their first day in the classroom. By participating in *Out of the Gate*, pre-service teachers were able to meet their cooperating teacher as much as six months before their first day in the classroom. According to university faculty members, as a result, pre-service teachers were able to form stronger relationships with their cooperating teachers. This was partly due to the additional time they spent together, as well as the shared goal of learning about PBL and designing a project together. This relationship increased the confidence of pre-service teachers and helped eliminate anxiety and nervousness before they began their student teaching.

From 2017–18 to 2018–19, as Cohort 1 pre-service teachers transitioned from *Out of the Gate* to the teaching profession, this group showed a decrease in the percentage who believe pre-service teachers are especially well situated to learn how to use PBL. In addition, Cohort 1 pre-service teachers are less likely to believe pre-service teachers are well situated to learn PBL than Cohort 2 pre-service teachers currently participating in *Out of the Gate*. This pattern held true for pre-service teachers’ evaluation of whether all teachers could benefit from using PBL. Additionally, Cohort 1 pre-service teachers were more likely to report that fitting PBL into existing curricula is challenging when asked in 2018-19 after *Out of the Gate* than 2017-18 during their pre-service year. Given that most Cohort 1 pre-service teachers are now K–12 teachers, they have a valuable perspective on the challenges future pre-service teachers may face once they enter the field.

A smaller percentage of cooperating teachers than university faculty members reported that they required additional support to incorporate PBL into their future work. In addition, a smaller proportion of faculty members and cooperating teachers agreed with this statement in 2018–19 than in 2017–18. However, outside of this decline, more faculty members identified with the challenges of implementing PBL in Year 2 than Year 1. In the second year of *Out of the Gate*, a smaller proportion of faculty members agreed that pre-service teachers are especially well situated to learn how to use PBL. In addition, there was a small increase in the number of faculty members reporting that fitting PBL into existing curricula is challenging and that they were not able to apply what they learned about PBL in their current work.

Table 5. Percentage of participants who agreed or strongly agreed with statements about PBL’s effectiveness for different student groups, by role

PBL using PBLWorks’ Gold Standard Design Elements and Teaching Practices will improve teaching and learning for students who are ...	University faculty members		Cooperating teachers		Pre-service teachers Cohort 1		Pre-service teachers Cohort 2
	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2018-19
	(N=26)	(N=25)	(N=54)	(N=36)	(N=41)	(N=11)	(N=33)
Average-performing students	100	100	100	100	100	100	97
Performing below grade level	93	100	93	97	84	100	97
English learners	93	100	91	100	87	82	91
In special education	96	100	96	97	87	91	91
Eligible for free or reduced-price lunch	93	100	98	100	93	91	97

Source: Education Northwest analysis of participant survey data.

Participants also reported the extent to which they agreed that PBL is effective for different student groups (table 5). Most participants agreed PBL is effective for students who have different circumstances and are performing at a variety of levels. Overall, pre-service teachers were the most skeptical of PBL's efficacy for students who may struggle (including English learner students, students enrolled in special education, and students eligible for free or reduced-price lunch). University faculty members and cooperating teachers both increased their belief in PBL's efficacy from Year 1 to Year 2. Cohort 2 pre-service teachers generally had more positive beliefs about the effectiveness of PBL for different student groups than Cohort 1 pre-service teachers reported during their pre-service year. From 2017–18 to 2018–19, Cohort 1 pre-service teachers increased their beliefs about the effectiveness of PBL for students performing below grade level.



Overall, many participants said they were knowledgeable about PBL, but fewer were confident using the teaching practices in their classrooms, especially among faculty members

EVALUATION QUESTION

How do Out of the Gate faculty members’, cooperating teachers’, and pre-service teachers’ knowledge, classroom practice, confidence, and attitudes related to PBL change over time?

Participants rated their understanding of PBLWorks’ Project Based Teaching Practices on a four-point scale: no understanding, little understanding, moderate understanding, and full understanding. Across all groups, in 2018–19, at least 80 percent of participants indicated moderate or full understanding of each practice—with the exception of Cohort 1 pre-service teachers reporting a lower rating for “Engage and coach” in Year 2 (table 6). A higher percentage of university faculty members said they had moderate to full understanding of nearly every practice in Year 2 than Year 1.

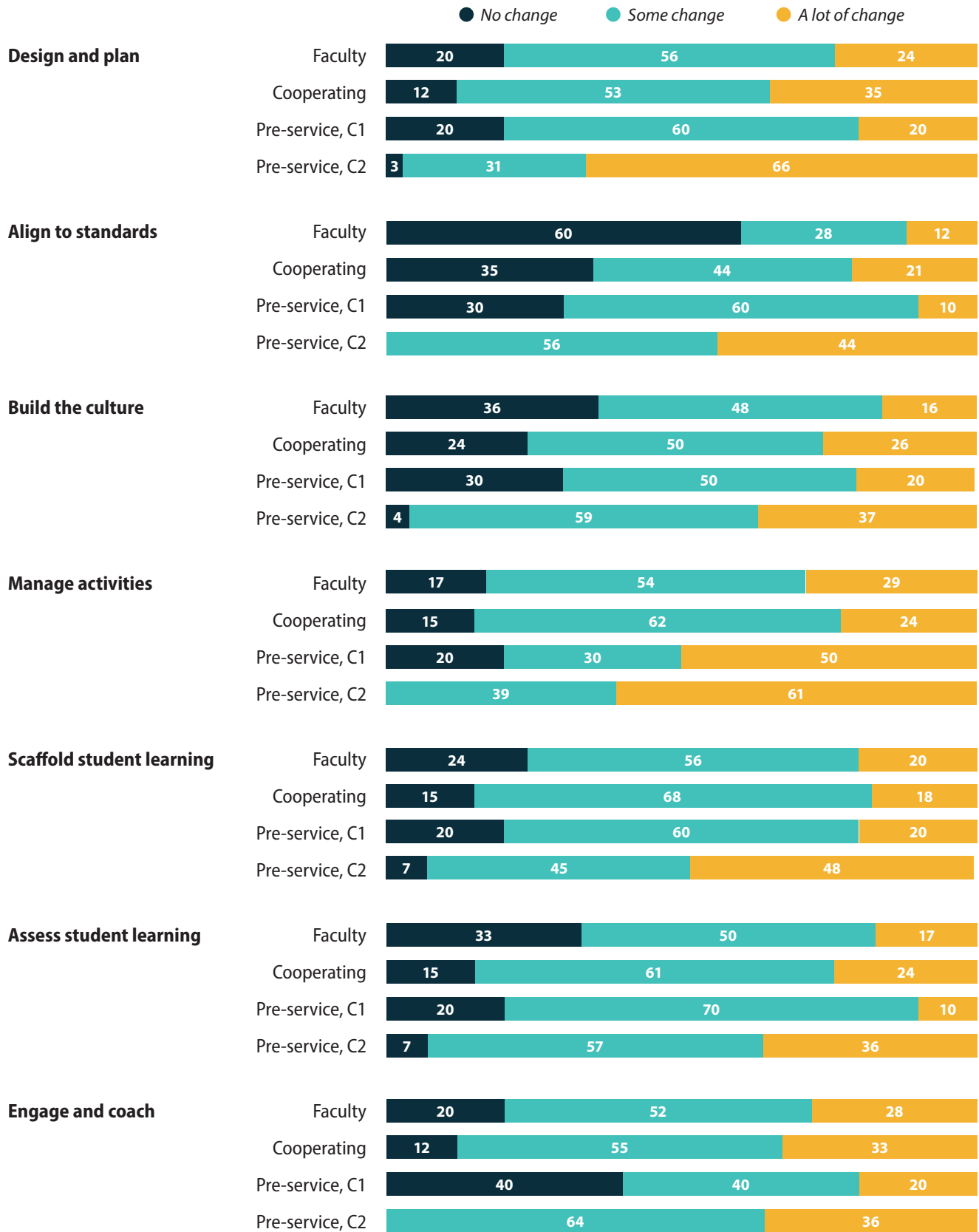
Table 6. Percentage of participants indicating moderate or full understanding of PBLWorks’ Project Based Teaching Practices, by role

Project based teaching practices	University faculty members		Cooperating teachers		Pre-service teachers Cohort 1		Pre-service teachers Cohort 2
	2017-18 (N=26)	2018-19 (N=25)	2017-18 (N=54)	2018-19 (N=35)	2017-18 (N=41)	2018-19 (N=10)	2018-19 (N=30)
Design and plan	81	92	89	86	95	90	93
Align to standards	81	92	96	97	95	100	93
Build the culture	81	96	94	97	90	100	97
Manage activities	73	88	91	97	93	90	100
Scaffold student learning	77	84	94	91	91	100	100
Assess student learning	88	84	94	97	93	90	93
Engage and coach	81	92	91	94	95	70	93

Source: Education Northwest analysis of participant survey data.

Participants also rated whether their knowledge of PBLWorks’ Project Based Teaching Practices had changed over the last year due to their participation in *Out of the Gate* (figure 2). On average, more cooperating teachers than pre-service teachers or university faculty members attributed a change in their knowledge to participation in *Out of the Gate*. Faculty members and cooperating teachers noted the most change in their ability to design and plan PBL, manage activities, and engage and coach, and they noted the least change in their ability to align projects to standards. In contrast, Cohort 1 pre-service teachers noted the least change in their knowledge related to engaging and coaching students with PBL.

Figure 2. Percentage of participants attributing increases in their knowledge to participation in Out of the Gate, by role



Note: Percentages may not total to 100 due to rounding.
 Source: Education Northwest analysis of participant survey data.

Participants also rated their confidence with implementing high-quality projects using PBLWorks' *Project Based Teaching Practices* on a four-point scale: not at all confident, somewhat confident, confident, and very confident (table 7).

Table 7. Percentage of participants indicating they were confident or very confident with implementing high-quality projects, by role

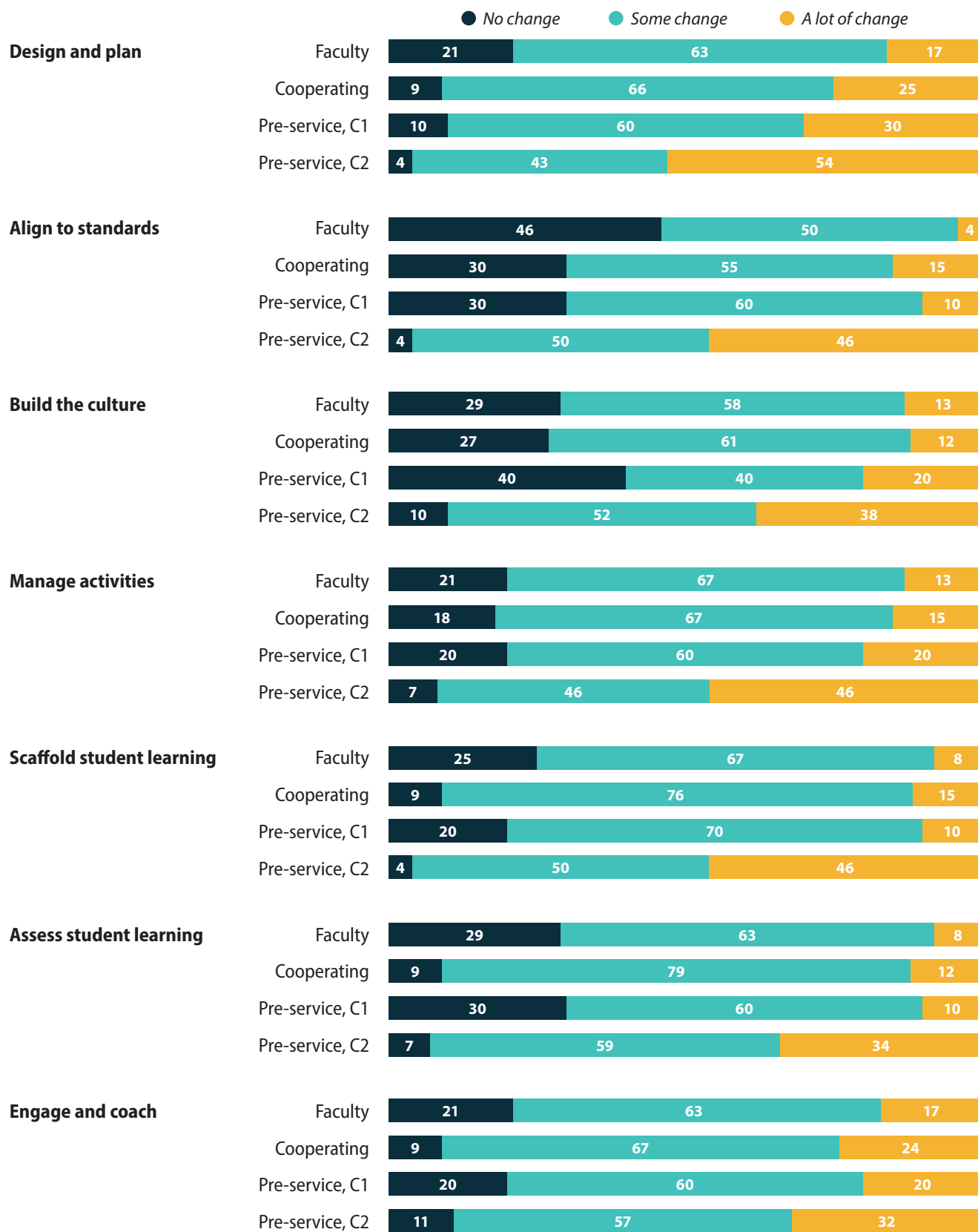
	University faculty members		Cooperating teachers		Pre-service teachers Cohort 1		Pre-service teachers Cohort 2
	(N=26)	(N=24)	(N=54)	(N=35)	(N=41)	(N=10)	(N=30)
Project based teaching practices	2017-18	2018-19	2017-18	2018-19	2017-18	2018-19	2018-19
Design and plan	38	50	81	86	72	70	60
Align to standards	58	75	87	89	72	60	83
Build the culture	68	63	85	86	72	30	73
Manage activities	54	63	71	77	72	60	80
Scaffold student learning	58	58	67	77	74	70	80
Assess student learning	69	58	81	69	72	70	67
Engage and coach	69	58	77	77	81	30	73

Source: Education Northwest analysis of participant survey data.

Overall, fewer participants expressed confidence in their ability to implement PBLWorks' *Project Based Teaching Practices* (table 7) than in their knowledge about those practices (table 6). A higher percentage of cooperating teachers said they were confident with implementing PBLWorks' *Project Based Teaching Practices* than faculty members, with pre-service teachers falling somewhere in the middle. Notably, faculty members' confidence with designing and planning projects increased substantially from Year 1 to Year 2. In addition, although only half of faculty members said they were confident with designing and planning projects, a larger percentage were confident with implementing other parts of high-quality projects. The confidence of Cohort 1 pre-service teachers declined from 2017–18 to 2018–19 regarding all teaching practices.

Participants also rated the degree to which their confidence with implementing PBLWorks' *Project Based Teaching Practices* changed due to their participation in *Out of the Gate* (figure 3). At least 70 percent of participants across all roles attributed some or a lot of change in their confidence to their participation in *Out of the Gate* for every practice—except “Align to standards” (30 percent of cooperating teachers and Cohort 1 pre-service teachers, as well as 46 percent of university faculty members reported no change on this item) and “Build the culture” (40 percent of Cohort 1 pre-service teachers reported no change on this item).

Figure 3. Percentage of participants attributing an increase in their confidence with implementing PBL to their participation in Out of the Gate, by role



Note: Percentages may not total to 100 due to rounding.
 Source: Education Northwest analysis of participant survey data.



TEP faculty members and cooperating teachers showed increased confidence in their ability to support pre-service teachers in implementing PBL practices

EVALUATION QUESTION

How do Out of the Gate faculty members’, cooperating teachers’, and pre-service teachers’ knowledge, classroom practice, confidence, and attitudes related to PBL change over time?

We asked university faculty members and cooperating teachers about the degree to which they were confident in supporting pre-service teachers’ implementation of high-quality projects using PBLWorks’ *Project Based Teaching Practices*. In 2018–19, about 50 to 60 percent of university faculty members—compared with about 70 to 85 percent of cooperating teachers—said they were confident or very confident in their ability to support pre-service teachers in implementing PBLWorks’ *Project Based Teaching Practices* high-quality PBL teaching practices (table 8). A similar pattern was found in 2017–18. Year over year, faculty members’ confidence increased substantially for two practices: “Design and plan” and “Manage activities.” Year over year, cooperating teachers’ confidence increased substantially for two practices: “Manage activities” and “Engage and coach.” These responses show an overall increase in confidence among faculty members and cooperating teachers over the course of *Out of the Gate* (which is more surprising for the latter; faculty member participation remains largely the same each year, but cooperating teachers may change each year).

An area for potential growth among cooperating teachers is scaffolding student learning. Only 68 percent of cooperating teachers said they felt confident supporting pre-service teachers in this area.

Table 8. Percentage of participants indicating they are confident or very confident in supporting pre-service teachers in implementing PBLWorks’ Project Based Teaching Practices, by role

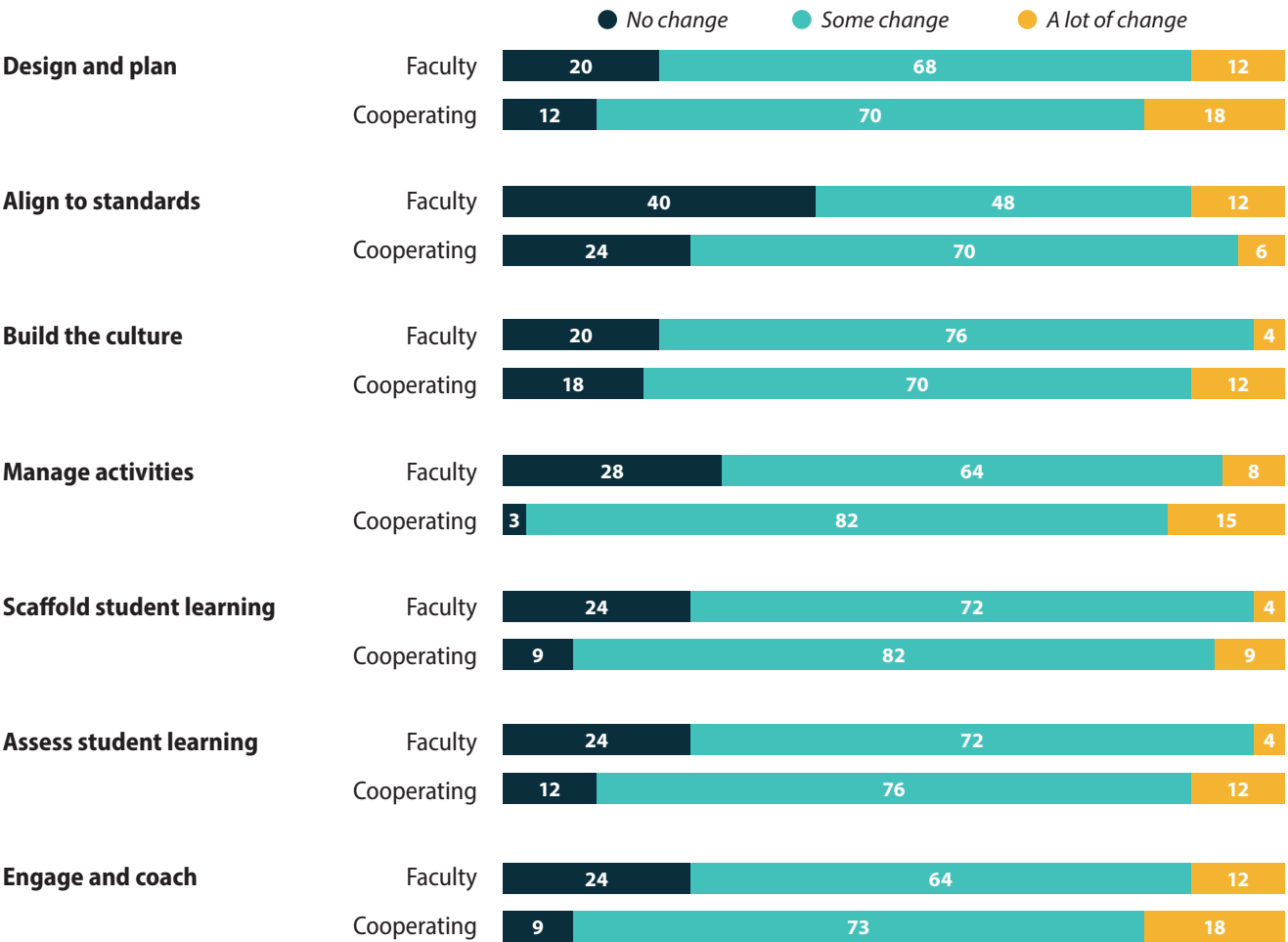
Project based teaching practices	University faculty members		Cooperating teachers	
	2017-18	2018-19	2017-18	2018-19
Design and plan	37	52	78	85
Align to standards	56	56	82	88
Build the culture	56	52	82	82
Manage activities	48	56	66	76
Scaffold student learning	52	52	72	68
Assess student learning	59	56	76	79
Engage and coach	59	60	68	83
	(N=26)	(N=25)	(N=50)	(N=35)

Source: Education Northwest analysis of participant survey data.

Cooperating teachers and university faculty members also reported how much their confidence in supporting pre-service teachers changed due to their participation in *Out of the Gate* (figure 4). Overall, a higher percentage of cooperating teachers than faculty members attributed their change in confidence to *Out of the Gate*. For cooperating teachers, “Design and plan,” “Manage activities,” “Scaffold student learning,” and “Engage and coach” showed promising increases. For these *Project Based Teaching Practices*, over 85 percent of cooperating teachers said PBLWorks’ services resulted in at least some of their increase in confidence. For faculty members, 75 percent or more said *Out of the Gate* contributed to their increased confidence in the following practices: “Design and plan,” “Build the culture,” “Scaffold student learning,” “Assess student learning,” and “Engage and coach.”

Differences between faculty members’ and cooperating teachers’ reports could be due to the fact that the majority of faculty members attended *Out of the Gate* trainings in 2017–18 (with only one new faculty member completing the 2018-19 survey) and attributed their increase in confidence to the training last year. Along those lines, they may have attributed less change in confidence to *Out of the Gate* because they had less change in confidence overall from Year 1 to Year 2. Cooperating teachers, on the other hand, are more likely to be new to *Out of the Gate*; over half who responded to the 2018-19 survey were new to *Out of the Gate* this year. Thus, they may have been more likely to attribute their confidence to *Out of the Gate* trainings and services.

Figure 4. Percentage of participants who attributed an increase in their confidence with supporting pre-service teachers in implementing PBLWorks’ Project Based Teaching Practices to their participation in *Out of the Gate*, by role



Source: Education Northwest analysis of participant survey data.

Reference

National Center for Education Statistics. (2004). National Study of Postsecondary Faculty (NSOPF:04). Institution Data Analysis System. U.S. Department of Education.

Appendix: Data Sources and Methods

This phase of the evaluation included surveys of university faculty members, cooperating teachers, and pre-service teachers; interviews with faculty members; and observations of faculty members at each TEP. These activities are described in more detail below. It is important to note that surveys, interviews, and observations are all susceptible to response bias; participants who are more involved and interested in *Out of the Gate* and/or PBL may also be more likely to participate in surveys, interviews, and observations.

Participant survey

Survey respondents answered questions regarding their beliefs about, knowledge of, and confidence related to PBL; their teaching practice; and their experiences with *Out of the Gate*.

We administered the survey to 218 university faculty members, cooperating teachers, and pre-service teachers. A total of 105 participants responded to the survey, for a 48 percent response rate (table A1).

Table A1. Survey response rates, by TEP and role

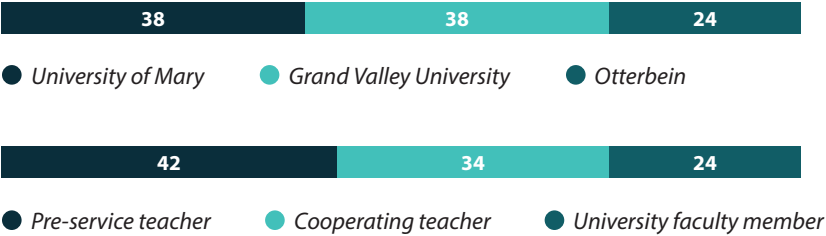
TEP	Response rate
University of Mary	52%
Grand Valley State University	57%
Otterbein University	35%

Role	Response rate
Cooperating teacher	61%
Pre-service teacher, Cohort 1	22%
Pre-service teacher, Cohort 2	57%
University faculty member	50%

Source: Education Northwest analysis of participant survey data.

The survey sample included more respondents from Grand Valley State University and the University of Mary than Otterbein University. Additionally, more pre-service teachers responded to the survey than cooperating teachers or university faculty members. Figure A1 details the percentage of the survey respondents from each institution and role.

Figure A1. Percentage of survey respondents from each TEP and role



Source: Education Northwest analysis of participant survey data.

Cooperating teachers and university faculty members reported a mean of 14 and 16 years of K–12 teaching, respectively, with faculty members reporting an additional 13 years, on average, of teaching at the postsecondary level.

University faculty member interviews

Education Northwest interviewed faculty members from each TEP. We emailed all faculty members participating in *Out of the Gate* to invite them to take part in a 60-minute interview. We interviewed five faculty members from each institution in October and November 2018. We asked interviewees about their experiences related to PBL, their teaching practice, their experiences with *Out of the Gate*, and systemic changes that appeared to be occurring at their institution. We recorded, transcribed, and analyzed each of the interviews.

TEP site visits

Education Northwest visited each TEP in February and March 2019. We contacted the chair of the department at each TEP to identify an ideal week for a site visit. We then emailed all faculty members participating in *Out of the Gate* to request that we observe their classroom during the given week. During the site visits, we met with department chairs, talked to faculty members, and observed classrooms. When possible, two researchers attended each interview and classroom observation. Together, we reviewed and analyzed all classroom observations as they related to PBLWorks' *Project Based Teaching Practices*.

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