

# Sample Memorandum of Understanding (MOU) for Partnership Work

## Purpose

The following Memorandum of Understanding (MOU) was created between a state university and a large, urban school district as part of a research-practice partnership. The partnership's goal is to adapt the district's curriculum to the new vision for K-12 science education laid out in the Next Generation Science Standards.

The specific content of this MOU is unique to the needs of this project and abilities of the partners involved. Research-practice partnerships are not plug-and-play. Nevertheless, its format and tone may be useful for those looking to write an MOU for a productive, reciprocal research-practice partnership.

Note that the tone of this document is fairly informal. This MOU was intended for use among team members, to shape their understanding of the partnership, rather than for external use. It is important to communicate openly and honestly within a partnership about issues like needs and capacity, in order to make decisions collaboratively and prioritize successfully.

This MOU was created through several rounds of revision and discussion between the school district and research teams. This process incorporated feedback from all major team members.

## Format

Black Text = Written by members of the district team

Blue Text = Written by members of the research team

## Three Potential Activity Roles for the University in the Partnership

### 1) Technical assistance / "deep dive" with a small set of teachers

School District: The project's PD model and resources are formally limited to the PD events—summer days and three school-year release days. The PD model targets teachers' instructional planning practices as the connection to change their classroom teaching practices.

However, we know teachers need more support in the classroom to substantially change teaching practice, and we know we have more to learn about how teachers take on the focal NGSS practices, what effect the project's activities have on teachers' classrooms, and what additional supports teachers need.

Research Team: I want to push on the model. The university team should be present to support classroom implementation, then the project isn't that different from "traditional" PD. We have to be really careful about providing support that is not sustainable.

Close work with a small set of teachers seems most aligned to the university's interests and can fuel more effective project PD events.

We agree with this. Also, we hope to facilitate connective engagement in the period between official PD days with a larger group of teachers.

The MOU here focuses on the researchers' role in the project, rather than outlining each partner's role.

In these numbered items, the partners articulate district needs and suggest beneficial areas for researcher involvement.

How to organize:

- Please specify the university's capacity. (E.g., number of sites, timeframe, frequency of interaction, types of activities offered to teachers, types of resources that can be developed.)
  - With three full-time graduate researchers:
    - Number of sites / teachers: ~3-5 per grade level
      - This could be any combination of the following, but I think picking teachers based on some commonalities will be important for building communities of practice. This year, one grad student worked with two 5th grade teachers and another with worked with one 5th grade teacher. It would be awesome to work with one grade level if we could support them in collaborating more. We want to leverage existing structures (grade level assignments, building assignments, etc.) to build communities of practice.
      - A grade-level team within a school (e.g. Logan 6th grade teachers)
      - A group of teachers from a similar grade across schools (e.g. four 3rd grade teachers from four different schools)
      - A group of different grade-level teachers from one school (e.g. all the teachers from Sandy Ridge involved in the project, across 3rd, 4th, and 5th grades)
    - Timeframe: two-to-three weeks with each focus teacher. Perhaps we would follow the science kit (which constitutes a curriculum unit). Does that get at the nature of teacher growth? It focuses our job because we follow the kit as a unit of analysis, which helps us stay sane. We can expand to work with teachers for more extended periods of time as necessary, e.g. if practices "bleed over" into other kits.
    - Support offered: co-planning, co-teaching (possibly), analysis of student work. I want to think about what we collectively can offer in terms of capacity.

With each suggested researcher role, the MOU stage can be a strategic time to lay out a rough outline of the arrangement in terms of capacity and resources, describing what the relationship will actually look like.

Each team draws from previous experience to estimate their capacity and to advise on strategy.

The district leads and university jointly negotiate identification of deep dive sites, based on desired characteristics from university and insights from district leads. District leads serve as broker to establish sites.

I want to think of teachers as the unit, not sites. We need to be specific in what "jointly negotiated" actually looks like for this decision.

Equity: Which teachers get what resources, and how do we decide? How do we decide when teachers get this support?

- Project leadership and PD teams identify specific, needed resources for PD events that could be developed by university staff in the deep-dive sites. For example, specific types of videos or new tools could be developed in partnership with teachers at the deep dive sites and then used at future PD events.
- University supports the development of these resources with "deep-dive" teachers.

## 2) Project staff learning needs

Project staff has much to learn for our own work! For example, district staff would like to improve our disciplinary knowledge of engineering and of practical tools and strategies for teaching engineering. In addition to this content knowledge, we can also learn more about effective PD models. For example, we want to learn how to effectively develop and use video for teacher learning. Learning about learning and helping project staff learn seems aligned to university's interests and will enable project staff to more effectively support improving teacher practice.

The MOU process can be a good time to consider the wide variety of equity issues that may come up in a project – not just for students, but for all participants.

The MOU process presents an opportunity for team members from both the research and practice to identify their own team members' potential areas for growth.

Practice briefs and research briefs created with deep-dive teachers (see item #1) may be a helpful resource for this.

How to organize:

- All project staff intentionally note topics that we need to learn, and the university manages this list. This doesn't need to be over-thought, just an intentional, simple list of topics. For example, engineering has been brought up as a topic for instruction multiple times, but we haven't explicitly captured and documented this anywhere. Whether these ideas are an outcome from a formal meeting, or a 12:00am email saying, "I've been thinking we need to learn more about..." We need a place to send and capture these ideas.  
[I can see this list including questions about what is going on in classrooms.](#)
- The university refines the list and reflects this back to project staff for clarity. Again, this process does not need to be over-thought. It would be a simple back-and-forth, like, "When you say engineering, do you mean...?"
- During quarterly project Leadership Team meetings, learning needs are prioritized by the Leadership Team and communicated to the university team.
- The university team develops plans for how project staff can learn what we need to learn. Note that the university team does not need to have all the answers in-house, but its role will be to develop plans to find the learning resources we need and develop plans for how we will use those to learn. Likely, some will be developed in-house by university and some will be gathered externally.

### 3) Teacher disciplinary domain knowledge

Our PD model and theory of action attempts to target factors proximal to teaching practice, including the tools for planning and reflecting on instruction. We have also taken the stance that the Science and Engineering Practices are science and engineering content, embracing the intertwined nature of the NGSS and Framework Dimensions.

All that being said, we've found that no matter how we slice it, we just can't get around the fact that teachers need disciplinary knowledge relevant to what they're teaching. The university has access to a large variety of human and material resources for science domain knowledge and has experience with teaching teachers.

[We also have time to filter through web-based resources. I think this is a very concrete area for us to provide support in. However, I'm a little wary of simply compiling resources for teachers.](#)

[Also, how do teachers maintain access to research after this project is over? How do we keep these waterways open?](#)

How to organize:

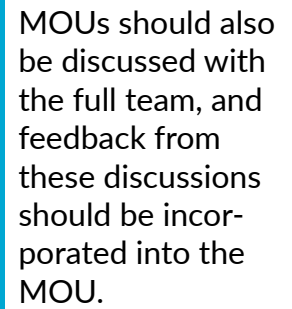
- Project district leads communicate the focal science units for the upcoming project year and identify the concepts represented in the units or particular lessons in the units ("big ideas," "science principles," or "disciplinary core ideas" – however they are represented in district language). This includes those concepts that are explicit, those that are implicit but not attended to well, and those that are not identified but could be addressed through fairly easy adaptation of the materials.  
[This needs to happen in late spring or early summer to give the university enough time to vet resources and develop resources over the summer.](#)
- Project district leads and university staff meet to discuss the identified con-

Even during the initial MOU phase, it is important to think about how the project will be sustainable and create long-lasting stickiness and change.

- cepts in the lessons and units to achieve consensus and clarity.
- University staff proposes models for how teachers can learn the concepts, if necessary. For example, a collection of afterschool sessions with instructors (e.g., from higher education, middle and high school teachers, project staff, or STEM professionals), a collection of print or online resources, or embedded into the formal project PD events in summer or during the school year. As with “project staff learning needs” activities, the university does not need to have all the resources in-house and does not need to be the direct provider of the PD for teachers, but they will propose feasible models for how we can address teacher content knowledge.

#### Additional University Roles, Based on Team Discussion

- Resource development. We want to study how the resources are developed and shared within and beyond networks.
- What does student sense-making look like, and what is the teacher’s role? The university needs to keep that as a focus.
- Reflecting on our shared work: scaffold reflection over time, talk about improvement over time.



MOUs should also be discussed with the full team, and feedback from these discussions should be incorporated into the MOU.