



Turnover Guidance

Supporting New Teachers with OSE Implementation

Teacher attrition remains to be a prominent challenge, and when rolling out a new curriculum, the effects can be felt more severely. New teachers must learn and adapt to their settings, on top of learning a new curriculum. It is important to provide direct and wraparound supports for new team members so that they are set up for success, without over-burdening returning teachers. This resource is divided into [Vignettes](#), where we share a variety of real teacher attrition stories from MA schools and districts within the 3-year grant program, and [Strategies & Resources](#), where we share some recommendations on strategies to address turnover.

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VIGNETTES

One New Teacher, Beginning of Year

Context: By SY24, this middle school has entered their Year 3 of the rollout and faced its first new hire between Years 2 and 3. This school knew that they would need to hire a new 6th grade science teacher at the end of Year 2. The new teacher joined the team during the summer, coming with 2 years of prior teaching experience. The 6th grade science team consists of 3 teachers. In this district, there is a K-12 Science and Technology Instructional Coach.

What steps, strategies, and resources did you take/use to support the new hire?

The K-12 instructional Coach has been involved from the beginning with the teachers. She attended professional learning sessions, including the 4-day Launch in the summer with the new hire. She also attended OEI Leader professional learning sessions that ran concurrently with the 4-day Launch session. This leader is in the middle school 3-4 times a week, and the teachers know that they can ask her to come to their classrooms at any point during the day or week.

Before the school year began, the district had a few days prior to students starting to introduce the new teacher to the team. The new teacher and the 6th grade Champion had a half day together, paid, to meet and talk about any and everything regarding OSE. They discussed things like how to set up student notebooks, set up labs, and go over the first couple of lessons. The district has provided supplies as teachers noted they need it. The hiring process was intentional, including saying that we are using OSE as the science curriculum and asking if the new hire would be willing to attend the 4-day Launch training in the summer.

What resources did you use and/or pull from?

They relied heavily on the curriculum itself. By this year, the other two 6th grade teachers had already taught the first units at least twice and have found ways to make it their own. They have all their modifications and customizations that they shared with the new teacher.

And more recently, the K-12 SEI/multilingual learner coach has started to meet with the 6th grade team weekly to help plan for in-time scaffolding.

What structures/systems are in place for teachers/new hires?

There is common planning time 2x per week that is content specific. All science teachers meet as science grade teams, and the Coach is on a rotation with them since they meet during the same block. So the leader will usually see them at least once a week. In addition, there is grade level time that happens once a week, which is across subjects. And as a district, they have had 6 early release PD days, 4 of which are content-specific.

Their new hire this year is part of the mentor program, with her mentor being the 6th grade Champion.

Any additional advice or strategies for supporting new hires with regards to OSE?

- Give the support that teachers actually need – just be in it with them, be available for them. Give your teachers the time to do what they need to do. Our new teacher has embraced OSE and mindset, and has brought her true self into it.
- If a district or school doesn't have a science-specific instructional coach, send the general instructional coach to an OSE training. It's important that someone has some knowledge of the curriculum and therefore can support the teachers in the ways they actually need.



One New Teacher, Middle of Year

Context [in conversation with the district's Supervisor of Science & Technology/Engineering]: This school participated in the field test from 2019-2021 and joined the 3-year grant program directly after. However, at the start of the grant program (Year 1), the 6th, 7th, and 8th grade teams grew from 3 teachers to 4 teachers. The school onboarded not only a new teacher per grade level in Year 1, but also an additional 6th grade teacher due to movement within the building. In SY24, this school experienced teacher turnover in the middle of the year, with a 7th grade position open from November 2023 through February 2024. The new hire had taught 6th grade OSE in another district so therefore had to learn the 7th grade OSE units. Due to the timing, the new hire was not able to attend any summer PL.

What steps, strategies, and resources did you take/use to support the new hire?

Specifically for the new teacher who was hired in the middle of this year, the Supervisor of Science & Technology/Engineering assigned the 7th grade teacher who is very well-versed, has been trained in all the units, and likes OSE as their mentor. The leader met with the new hire to introduce the unit they would be teaching, 7.5 Ecosystems Dynamics. They went through the storyline and made sure that she got access to the teachers' shared Google Classroom. The leader really encouraged the new hire's mentor to focus more on the curriculum and instructional support vs. the logistical tasks. The leader has offered and made herself available to support with those logistical questions.

When they were transitioning from the field test into Year 1 of the grant program, they had 4 new team members. During the interviews, the leader made sure that they would be able to attend one of the summer Launch trainings. In their district, they are able to provide stipends for attending summer training as part of summer curriculum work. After summer training, the leader debriefed with the teachers as well as making sure to connect them with their mentors.

What resources did you use and/or pull from?

They tried to stick with the OSE materials as provided. When they first started in 2021, their teachers used the [remote learning slides from Louisiana](#).

What structures/systems are in place for teachers/new hires?

The teachers have their own Google Classroom for each unit they teach. They share all of their customized slides and handouts, make posts that they can then just re-post into their actual Google Classrooms with students. Everyone contributes so now they have their bank of modified assessments, handouts, and slides.

For all grades 6-8, there are grade-specific, content-specific PLCs every 2 weeks, which means teachers get to work together about OSE. It is expected that teachers have to spend one PLC time to look at student data, which is easy since students are creating things nearly everyday. The teachers are looking at formatives, initial models, progress trackers, assessments, etc. For the other two PLC times, they will spend it on lab preparation or customizing. The leader tries to give them this time to do what they need to do; she tries to only join as needed.

Any additional advice or strategies for supporting new hires with regards to OSE?

- Teacher concerns [at the start] are often around materials. If you have the budget, just say "yes." It makes it easier for them, and you're taking away one obstacle.
- Share and remind teachers that in the past, science teachers have had to make their own curriculum. OSE was made by a team of developers with experience and has been field tested. Trust the process. Just do it, keep going.
- Be firm with building leaders – try not to move people between grades, especially during this rollout.



Majority Teacher Turnover

Context [in conversation with their Director of STEM Initiatives]: This is a charter school with 3 campuses in MA that include grades 6-8 at each campus. They joined the grant program in SY23. Each campus has one 5th/6th science teacher and one 7th/8th science teacher. In total, the teams have 3 dedicated 5th/6th positions and 3 dedicated 7th/8th positions. Between Year 1 and Year 2 of the program, they experienced 4 science teachers turnover, of which three being 7th/8th grade teachers with few to no years of prior teaching experience. One of these new hires did not join the team until early October 2023.

What steps, strategies, and resources did you take/use to support the new hires?

The first step that our network took between Year 1 and Year 2 was to create the current position as Director of STEM Initiatives. This role includes managing many of the science teachers and coaching the whole team on curriculum and instruction.

In preparation for onboarding new staff, the network has a new staff orientation and dedicated department time called “Summit” during the summer before the school year starts. For their new science teachers, they get a balance of what it’s like to be part of Excel staff and what it’s like to be a science teacher with OSE. In tandem with the new teachers, the Director of STEM Initiatives met with other leaders who would be managing the science teachers. They experienced the [6.1 Light anchor as the introduction](#) and overview of the common curriculum routines. Throughout the first two years, network leaders have also attended the leader PL sessions and some of the unit PL sessions with teachers, which further supported their teachers.

At the end of Year 1, the school also decided to loop the 7th and 8th grade sequences to support their 7th/8th grade team. In Year 2, the 7th/8th teachers followed “Year A” (the 8th grade MA sequence), and in Year 3, they will follow “Year B” (7th grade MA sequence).

What resources did you use and/or pull from?

A standards crossover document was created for the 3-year grant program. They mapped out what standards would and would not be covered by the unit rollout over the next several years, which was revisited when they decided to loop the curriculum. In tandem, they created Gantt charts each year for pacing. They also used the [OEI Pacing Recommendations for Full Implementation](#) during their planning and review.

Their Director of STEM Initiatives used the OSE website often, using many existing resources to support both teachers and leaders in unit preparation and instructional model.

What structures/systems are in place for teachers/new hires?

In addition to their new staff orientation and Summit, teachers have weekly grade level collaboration times to focus on content and grade level concerns. Teachers also have weekly 1-on-1 meetings with either the Director of STEM Initiatives or their managers for instructional practices and observations and any additional science-related topics.

There are department meetings that occur about twice per month when the whole science team will look at an OSE protocol or routine, prep for the unit being taught, make rubrics for an assessment, etc.

Any additional advice or strategies for supporting new hires with regards to OSE?

- No matter the number of years of teaching experience, OSE will still be a challenge so keep an open mind.
- Whoever your science coach is, make sure they are getting into the ring with the teachers. Help them with practicing those procedures and routines that they will use in every unit, like the Driving Question Board or the modeling.



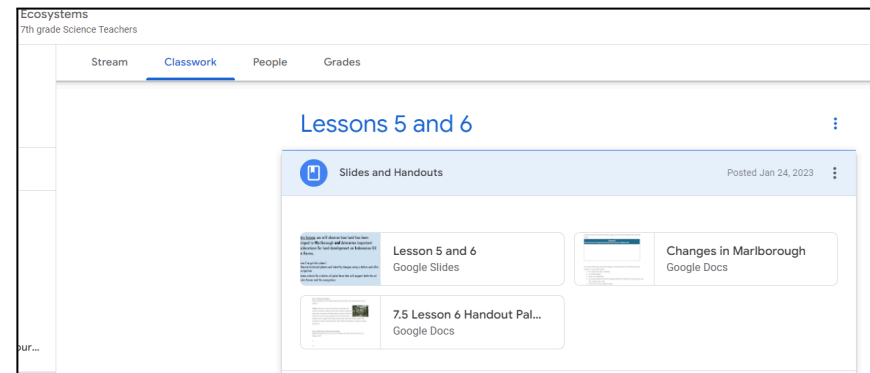
STRATEGIES & RESOURCES

A. Intentional onboarding to curriculum for new teachers and leaders

- Send teachers to [OSE professional learning](#), if possible a Launch session.
- Assign a mentor teacher (one who has experience with and is a proponent of OSE) to partner with the new hire.
- Support instructional leadership through professional learning workshops and resources ([materials available at ngsscurriculumtools.com](#)) and/or conduct internal meetings with district and school leaders to introduce the curriculum
 - School-adapted samples: [Lowell principals and APs](#) | [Excel Academy leader meeting](#)
- Watch the OSE webinars on [Phenomenon-Based Learning](#) and/or [OSE Instructional Model](#) as an introduction.
- If your school presented about OSE at a school committee meeting, consider watching that part of the recording.

B. Intentional unit planning and lesson internalization time for new teachers

- Use an OSE-focused unit internalization protocol to gain a high-level understanding of a unit.
 - School-adapted samples: [Excel Academy Unit-level Tool](#) | [UP Education Network Unit-level Tool](#)
- Use an [OSE-focused lesson internalization protocol](#) to support individual lesson preparation
 - School-adapted samples: [Excel Academy Lesson Intellectual Prep Protocol](#) | [UP Education Network OSE Prep Tool](#)
- Use these [Lesson Breakdowns](#) for each unit to help prepare for and plan each unit.
- Watch the OSE webinar for a specific unit for an overview. [Go to the OSE website](#) and scroll down to Tutorials and Webinars to find the Middle School Unit Webinars section.
- Use shared materials from teammates that have been edited and iterated by strong implementers. Teams have found success by creating a teachers-only Google Classroom to share materials.
 - Ex). Marlborough 7th grade teachers share materials for each unit via Google Classroom:



C. Develop building-based leader capacity to support new teachers with the curriculum

- **Regularly meet with the leadership team** to dive deeper into the OSE instructional model.
- **Use an [OSE-centered observation tool](#) to conduct classroom co-observations with building leaders.**
- **Look at progress over time with the [OEI Implementation Continuum](#) to identify trends in classrooms.**

D. Use a structured OSE-centered observation tool to provide teacher feedback

- **Collaborate with the teachers on what focal area they would like feedback on, using the [OEI Observation Tool](#).**
 - *Another version of the tool: [OEI OpenSciEd Classroom Support Tool](#)*
- **Use the [OEI Implementation Continuum](#) to support identifying trends across the school in OSE implementation.**
 - *School-adapted sample: [Fitchburg's](#) version of the OEI Implementation Continuum*
- **Conduct coaching cycles around one instructional move or routine.** You can find HQIM coaching tools at www.NGSScurriculumtools.com.

E. Broaden support network for new teachers and leaders

- **Make intentional time for teachers across the district** (and if possible, across districts) to meet together around a focal practice.
 - *School-sample: [Silver Lake mid-year department meeting](#) – In this meeting, grades 6-8 science met to reflect on their first units to norm on shared expectations for next units.*
 - *[Customizing for Emerging Multilingual Learners](#) sample PLC agendas – This set of meeting agendas was designed intentionally for a school seeking to customize the OSE curriculum for EMLs. Consider adapting to your context.*
- **Create a Google Group or Google Classroom** for teachers to collaborate and share questions and resources.
- **Join the national OSE Facebook Groups.** The Facebook Groups are moderated by members of the national OSE Facilitator Team. Resources and materials that are shared in these groups are not vetted by the OSE team. Scroll and click on the grade band to find the specific unit groups on the [OSE website here](#).

