Promising and Effective Practices in Student-centered Scheduling

Lessons and Artifacts from New York City Transfer Schools

Why Student-centered Scheduling?

This memo was prepared for Springpoint in response to a request for insights within four areas of student-centered programming and scheduling: designing pathways to graduation that allow for flexibility and programmatic personalization, incorporating asynchronous opportunities for credit accumulation, facilitating a positive school culture and youth development in this context, and creating a staffing plan to meet these objectives. To address these questions, we highlight promising and effective practices from New York City transfer schools with which Eskolta School Research and Design has worked over the past several years[1].

NYC transfer schools provide small, rigorous school settings to re-engage high school students who have dropped out or fallen behind in prior academic experiences. The challenges of meeting students' needs in this context are many: A single cohort of incoming students in a transfer school can have widely varying characteristics in terms of the rigor of their previous education experiences, strengths and challenges in their skills, credits they have accumulated and graduation requirements remaining for them to complete, as well as having varied windows of time available to progress towards graduation.

Moving beyond traditional high school curricula and course sequences, NYC transfer schools have used four main practices to schedule students in ways that effectively meet their diverse sets of needs, engage them as learners, and move them towards graduation and college-readiness as efficiently as possible:

1. Create course pathways to graduation that are versatile in meeting students' needs.
2. Dedicate the necessary time and staff to complete individualized scheduling.
3. Provide nontraditional routes for students to earn credits.
4. Create a cohesive culture for students and staff.

1. Create course pathways to graduation that are versatile in meeting students' needs

Moving through traditional grade-level sequences with large cohorts of peers does not offer a workable path for many high school students who often have varied, non-linear credit needs as well as skill gaps that do not match their credit histories. Most NYC transfer schools do not use grade levels and instead develop specific subject-area course offerings built around key content and skills. This provides structure within subject areas while allowing for multiple entry points and progression options to flexibly meet students' needs. To do this, several key steps are involved.

- **Define subject-area course offerings by outlining a progression of skills.** The process starts with content teachers or teams defining a sequence of skills that they expect students to build during their time at the school in a given content area. Teachers then outline the progression of these skills and create courses and curriculum maps that address a set of overall skills while also aligning to state standards and preparing students for state exams *(see Tool 1.1 Credit Offering Chart and Tool 1.2 Course Outcomes).* Instead of thinking of courses as fitting into traditional grade levels, consider each subject-area's course offerings as broken into one of three stages, with specific goals at each stage:
  - *Introductory classes* that focus on literacy skill instruction (regardless of the content area), foundational knowledge in a subject, introduction to the school culture, and developing

---

the academic behaviors (e.g. study skills or sense of belonging in school) necessary for success at the school.

- o *Curricular sequence classes* that move students forward in accumulating credits, developing key skills, and preparing to fulfill graduation requirements (i.e. exams).
- o *Near graduation or college prep classes* that focus on research skills, independent work, and self-reflection and planning skills.

- **Regularly review and revise course offerings to ensure they are meeting students' needs.** The diversity of students' needs at NYC transfer schools can vary greatly from term to term and year to year. It is important to regularly revisit the course offerings as well as curriculum maps to ensure the school is addressing the appropriate sequence of skills. Schools analyze data from student performance in courses as well as diagnostic skill information for incoming students to maintain a clear picture of current student needs and enact changes in response. For example, at one NYC transfer school each academic department analyzes and revises both its curriculum maps and course offerings each year during the summer to ensure the school is offering the courses that match well with where their students are *(see Tool 1.2 Course Outcomes).*

- **Design course offerings that provide flexibility for students to keep moving towards graduation.**
  - o *Revisit fundamental skills and content* at multiple stages in a course sequence to ensure students entering in the middle of a sequence get to review necessary skills and content and be prepared to pass state exams.
  - o *Offer differentiated pathways* within course offerings to address divergent student needs. For example, if a student completes a course sequence but then does not pass the state exam, try offering electives in which students can continue to practice the skills and engage in content they are going to need to pass the exam *(see Sample 1.3 Course Pathways).*
  - o *Design courses to connect to multiple credit areas* to ensure that courses can help different students accumulate credits in different areas of need, while still addressing necessary skills and competencies. For instance, a course around Civil War-era texts may count as a History credit for some students and an English credit for others, provided the curriculum is set up to appropriately cover the relevant standards.
  - o *Create courses on different themes that address similar sets of skills* to ensure that students can continue to work towards mastery in skills and competencies while not feeling stigmatized for having to repeat a course. For example, a course focused on Financial Literacy can provide opportunities to keep building math skills for students who recently did not pass an Introductory Algebra course.

2. Dedicate the necessary time and staff to schedule based on students' needs

Traditional school schedules are often built by first considering what teachers will teach, and then fitting students into those courses. However, ensuring that all students stay on a clear path to graduation each term calls for a flipped approach which starts by first considering the full set of student needs, and then setting up course offerings directly built around those needs *(see Guide 2.1 Student-Centered Scheduling Manual).* Such student-centered scheduling requires a substantial commitment of time and staff at several points over the school year, but NYC transfer schools that implement it have found that deliberately dedicating resources to the effort is central to their success. Student-centered scheduling involves the key elements below.

- **Lay out a path to graduation for every student.** As students enter the school, it is important to take the time to assess exactly what they each need to graduate. In practice, this often entails teachers and counselors analyzing individual student transcripts during intake meetings, considering credit and exam history, clarifying ambiguous course codes, and reviewing credit

needs in conjunction with each student's age to determine the pace at which he or she needs to progress towards graduation *(see Sample 2.2 Transcript Analyzer).*

Additionally, students' skill levels need to be taken into consideration, via diagnostic tests or other initial academic experiences, to determine if they need foundational support in particular subject areas before advancing to higher-level courses. Including students in the process by providing them a visually representation of their path through high school and discussing potential routes to graduation helps develop their sense of voice and agency in the process *(see Tool 2.3 Graduation Planning Template).*

- **Determine specific course needs for upcoming term.** Once a student's long-range graduation plan has been laid out, it is used as a reference point in the preparations for each new term to determine the next set of courses that will keep the student progressing toward graduation. This process entails a host of considerations.
    - *Looking back*
        1. Where in the student's credit history are there gaps to fill sooner rather than later?
        2. Where have they shown strengths to build on and weaknesses to address?
    - *Looking at the present*
        3. In which current courses is the student passing and ready to move on?
        4. In which courses are they not passing and need to revisit skills and content?
        5. What special needs, English-language status, or other designations affect their course placement?
        6. What preferences does the student express that can be accommodated?
    - *Looking ahead*
        7. When will the student take state exams and what course in each relevant subject area puts them on track for preparation?
        8. In which areas does the student need to earn the most credits for a timely graduation?

  To yield the final determination of each student's specific course needs for the upcoming term, these considerations should be made by a combination of subject staff familiar with the student's subject-specific needs as well as counseling or other staff with an eye on the big picture of what makes for a balanced schedule for the student.

- **Begin designing a new term 5-6 weeks before it begins.** To complete student-centered scheduling around upcoming course needs, the process typically begins several weeks before a new term begins *(see Guide 2.1 Student-Centered Scheduling Manual).* While different schools have their own specific methods of completing this process, the table below describes a typical timeline, steps, and staff responsibilities.

Student-Centered Scheduling Timeline Leading up to a New Term

	Step	Staff	Tips
5-6 weeks before	**Compile** the determinations of **individual course needs** to make a provisional tally of next term's overall course needs	• **Academic departments** meet for 1-2 hours to review current course progress and recommend individual students' course needs • **Scheduling point-person** compiles and tallies student course recommendations	• Consider the full set of course offerings to best match students based on their credit history, current course progress, and remaining graduation requirements (see above)

4 weeks before	Use course needs data to **determine course offerings** and **assign teachers** to courses	• **School leadership** meets for 1-2 hours to make final decisions about which courses to offer and how to assign teachers	• Keep track of requirements for students with special needs in course recommendations and staffing assignments (i.e. to have enough co-taught offerings)
3 weeks before	Analyze combinations of course needs to inform the **development of a master schedule** that minimizes conflicts for students	• **Scheduling point-person** analyzes data and maps out potential conflicts to avoid	• Utilize Excel pivot tables or other analytical software for a comprehensive analysis • Focus on singleton courses, course needs for upcoming graduates, and special needs offerings to ensure students can get a workable schedule that fulfills their requirements
2 weeks before	**Finalize a master schedule** that has balanced course offerings and addresses other school priorities	• **Scheduling point-person** maps out a full master schedule • **School Leadership** spends 2-3 hours making decisions about priorities and trade-offs to arrive at a workable schedule	• Set common planning times (see practice #4 on page 6) • Ensure enough course offerings each period for the full student body and a representative mix of courses • Ensure teachers have breaks in their day and minimize room switches
1 week before	**Program individual students** and distribute student schedules and teacher class lists for review	• **Scheduling point-person** provides organized list of student course needs • **Operational/support staff and counselors** make and distribute student schedules and class lists - typically 1-2 full work days for 2-3 staff members per 100 students (or less if using scheduling software)	• First make programs for students with the most individualized needs (upcoming graduates, students with IEPs, etc.) • Track class sizes as programs are made to close sections when needed
First week of new term	**Adjust student schedules** based on updated credit information and other emergent needs	• **Scheduling point-person** analyzes updated credit needs against student programs • **Operational/support staff and counselors** edit student programs 1-2 hours per day in the first days of the term	• Survey teachers about any obvious issues in class size or holes in student schedules • Create structures to efficiently gather and process schedule change requests

As noted in the table above, schools that have had success with student-centered scheduling find it important to appoint one staff member the role of "scheduling point-person" to manage the process, organize data, and liaise with staff and school leadership to ensure each step moves forward and deadlines are met. This point-person role is best assigned to a staff member who has an eye for detail, systems thinking, analytical skills, and can dedicate 20-40% of their work time to the process during the six-week period leading up to a new term.

3. Provide nontraditional routes for students to earn credits

An important element of student-centered scheduling is providing routes for students to learn and accumulate credit outside of the traditional classroom setting. Creating extra, asynchronous opportunities can help students who have struggled in the past to efficiently earn credits and progress towards graduation. These opportunities take a variety of forms at NYC transfer schools but all can be utilized most effectively by students when they concretely connect to a clearly established framework for learning

in a course. Such a framework often consists of a series of well-defined academic outcomes that outline the full set of skill and content understandings students must master in a course and a clearly written, accessible curriculum that moves students along a transparent pathway of learning, practicing, and demonstrating those outcomes for the course.

- **Use blended learning.** By combining classroom instruction and online curriculum, blended learning can be a useful approach for teachers to productively support multiple students with differentiated needs that have arisen from skill differences, irregular attendance patterns, or varying past experiences in a subject. Additionally, blended learning can be leveraged to expand the range of credit types being earned by students who are scheduled into a single class period. For instance, among a group of students scheduled into 2nd period blended learning with a science teacher, some may be working on introductory Biology credits, others on more advanced Biology, with still others pursuing Chemistry or other credits.

  There are several key considerations for ensuring that blended learning is used effectively in helping students meet learning goals, including: maintaining frequent instructional interactions to help students build skills and critical thinking while delivering content digitally, developing a system to regularly check on progress and provide scaffolds if students get stuck, and ensuring the blended learning experience is aligned to rigorous curriculum and expectations for work *(see Guide 3.1 Blended Instruction Teachers' Manual and Tool 3.2 Personalized Planning Template).*

- **Create off-site learning opportunities.** Off-site learning, such as after-school programs or internships, can provide students - especially those who have been disengaged in traditional education settings - relevant, real-life experiences that also help them accumulate credits. An effective off-site learning opportunity requires teacher time and commitment to ensure that the opportunity is aligned to rigorous academic outcomes and relevant content standards for it to be credit-bearing *(see Guide 3.3 Using Internships to Deepen Classroom Learning and Develop Professional Skills).* Additionally, the school and off-site supervisor need to coordinate to establish and maintain expectations for student attendance and learning objectives, and create and manage systems to track students' time and progress through the work. Many schools find that English is the core subject that fits best with these opportunities as it is easier to integrate meaningful writing tasks into off-site experiences than it is to assess skill areas in other subjects.

- **Provide opportunities to catch up on course expectations.** For students who have not yet managed to meet expectations on particular course outcomes during the term, offer special end-of-term schedule structures dedicated to providing them the extra time and support they need to demonstrate mastery and continue moving forward in the course sequence. At one NYC transfer school, for instance, the last two to four days of each term follow a different schedule designed for this purpose. School leadership completes an analysis of course grades to identify for each student one or two classes in which they are yet to attain required academic outcomes. Teachers then prepare an individualized set of academic work that will allow students to demonstrate proficiency in the remaining outcomes. In those last days, students are assigned to work with teachers in large, open blocks of time for targeted support and completion of work in their focus areas. This allows them to earn credit for one or two courses they were at risk of having to repeat.

- **Offer independent study opportunities.** For students approaching graduation, providing independent study opportunities can be an excellent way for the school to afford them the opportunity to earn additional credits that may be difficult to fit into their school-day schedule. This option is advisable for students who have a proven track record of skill proficiency and independent work habits in their prior academic experiences at the school.

4. Create a cohesive culture for students and staff

Forgoing the typical grade-level structure of most high schools creates flexibility and opportunities in scheduling, but comes with trade-offs. It can be challenging for students who are not part of any long-term cohort of peers to build a sense of community. In addition, when teachers are not part of a definitive

grouping around grade levels, professional collaboration may not occur as naturally. However, NYC transfer schools use a number of structures to help students and staff participate in a cohesive school culture while working in a non-traditional school model.

- **Provide staff time and structures to meet and talk about students.** Make sure there are times and structures for staff to meet with one another during the school day to discuss strategies and supports for students. This can be done by reserving common planning time in the master schedule (often by subject). Additionally, some schools ensure there are one or two periods each week during which students are in advisory or other enrichment enabling the full teaching staff to be available for meetings, professional development, or professional learning communities *(see Sample 4.1 Weekly Bell Schedule).*

- **Create a sense of community for students.** In the absence of grade levels, students need time and structures to feel that they are part of a smaller community within the school. Creating cohorts of students within the school, who then share common experiences, helps students build this sense of belonging and community.
    - o *Convene a full-school assembly* once every one to four weeks to help students stay connected to the larger school community *(see Sample 4.1 Weekly Bell Schedule).*
    - o *Schedule advisory multiple times a week* for groups of students of varying ages and amounts of time in the school, giving them a consistent and heterogeneous group with which to learn from and share experiences.
    - o *Create both an "upcoming graduates" group* for students projected to graduate that academic year and an *"introductory seminar" group* for students new to the school. Give each group a time and place to share with one another and connect with a teacher or counselor who can help them navigate their transitions. Some NYC transfer schools create a separate advisory specifically for "upcoming graduates" *(see Sample 4.2 Roadmap to life after West Brooklyn).*
    - o *Ensure each student is connected to at least one adult* who can serve as their primary support system, helping to pro-actively address the student's unique needs and helping create the sense of belonging they need to successfully navigate high school.

Appendix of Student-centered Scheduling Artifacts:

NYC transfer schools have developed multiple materials to support and advance the student-centered scheduling steps described in the memo. This appendix offers a selection of tools, samples, and guides compiled from several NYC transfer schools.Items are grouped according to the four main scheduling practices outlined in the memo, and include an introductory description followed by the artifact itself.

Table of Contents

Sample 1.1 - Credit Offering Chart

Practice: *1.Create course pathways to graduation that are versatile in meeting students' needs*
Key Element: *Define subject-area course offerings by outlining a progression of skills*

The Credit Offering Chart lays out a sample progression of courses over multiple school years set up around several considerations:

- Covering graduation requirements by advancing through Intro to higher level courses in each subject
- Timing completion of major course sequences to match with state exit exam administration and be staggered across a student's experience
- Striking a workable balance of electives, core academics, and opportunities for individualized support in each term
- Building in additional flexibility for differentiated course pathways as time goes on

	YEAR 1			YEAR 2			YEAR 3		
	Term 1	Term 2	Term 3	Term 1	Term 2	Term 3	Term 1	Term 2	Term 3
SBYD -135 min/day (81 min/ day in years 2&3) -135 hrs/per. in a term	0.5 cr. PE	0.5 cr. PE	0.5 cr. PE	0.5 cr. PE	0.5 cr. PE	0.5 cr. PE	0.5 cr. PE	0.5 cr. PE	0.5 cr. PE
	1 cr. Health	1 cr. Elective	1 cr. Elective	1 cr. Elective	1 cr. Elective	1 cr. Elective	1 cr. Science/ Ind. Study	1 cr. Science/ Ind. Study	1 cr. Science/ Ind. Study
	0.5 cr. NaliniKids (elective)	0.5 cr. Nutrition (Sci or elec)	0.5 cr. Nutrition (Sci or elec)	Liv Env 1	Liv Env 2	Liv Env 3	Phys Sci 1	Phys Sci 2	Phys Sci 3
Academic -3 periods of 60 min/day (4 per. in years 2&3) -60 hrs/per. in a term	Math 1	Math 2	Math 3	Math 4	Math 5	Math 6	Elective	Internship/ College All-Stars	Internship/ College All-Stars
	ELA 1	ELA 2	ELA 3	ELA 4	ELA 5	ELA 6	ELA 7	Internship/ College All-Stars	Internship/ College All-Stars
	US Govt.	US Hist. 1	US Hist. 2	Global 1	Global 2	Global 3	Global 4	ELA 8	Econ
Practice -75 min/day alternates A&B period -37.5 hrs/per. in a term	1 cr. DIG/IT (elective)	0.5 cr. Art	0.5 cr. Art	0.67 cr. For. Lang.	0.67 cr. For. Lang.	0.66 cr. For. Lang.	0.5 cr. Art	0.5 cr. Art	Elective
		Academic Support & Credit Recovery	Academic Support & Credit Recovery	Academic Support & Credit Recovery	Academic Support & Credit Recovery	Academic Support & Credit Recovery	Academic Support & Credit Recovery	Academic Support & Credit Recovery	Academic Support & Credit Recovery

= Period where students can be programmed as needed to fulfill missing requirements

Tool 1.2 - Course Outcomes Map

Practice: 1.Create course pathways to graduation that are versatile in meeting students' needs
Key Element: Define subject-area course offerings by outlining a progression of skills; regularly revise course offerings to ensure they are meetings students' needs

How the Course Outcomes Map Tool is Put to Use	
Purpose:	Outlines a progression of skills in each subject-area course
Who uses it:	Content teachers and teams
When it is used:	In designing curriculum maps and courses; as needed to inform planning and instruction

The Course Outcomes Map tool lays out the connections between the school's course curricula and major target skill areas to ensure course offerings provide clear pathways for students to progress through skill development. Content teachers and teams map out all the major units/outcomes of subject area courses and indicate their alignment to skills to create a grid representation of skill coverage across the school. Teams can then analyze the patterns and gaps in the grid to make key decisions about curricular and instructional planning that supports skill growth across classes as well as map out new course design to address areas needing greater coverage. Using the tool to organize course alignment into a unified, school wide view enables school wide collaboration to build coherent supports for student progress.

Steps to using the Course Outcomes Map Tool

1. **Create course/skill grid.** List subject area courses and their main curricular components, using a row to name each unit or outcome of the course. Across the top of the grid, label columns with the major target skill areas for the school. Complete the grid by marking which skills are covered by each unit or outcome. Set up tallies of skills covered overall and by subject to aid in the analysis of the grid.

2. **Analyze skill coverage.** Identify patterns and gaps in coverage of target skills to ensure clear pathways of skill development within course offerings. Connect teachers addressing related skills so they can set up expectations that are consistent and move through an appropriate progression from intro courses to more advanced levels (see example of leveled expectations for "revision" on pg. 12). For skills without enough coverage, adjust curriculum maps to include more opportunities for students to practice and grow in those areas.

3. **Revisit course offerings.** As new students come to the school and student skill and course needs evolve over time, reference the Tool to select the collection of courses that will best fit student needs for upcoming terms. In places with mismatches between offerings and needs, initiate new course development to have curriculum that can meet all students where they are and support them in their next developmental steps.

See tool in supplementary file – Tool 1.2 Course Outcomes Map Spreadsheet.xlsx

Tool 1.2 Course Outcomes Map, cont.

Outcomes Map Spreadsheet

This spreadsheet provides a means of comparison of outcomes across classes and disciplines. A total of 245 outcomes were evaluated, including 45 in Science, 60 in Social Studies, 60 in Math, and 70 in English. Each row in the table gives the course name and subject area associated with each individual outcome, followed by 21 possible categories of alignment. Using filters, it is possible to quickly determine where similarities and differences in outcome mapping exist. The following table gives a description of the categories included.

Category	Description
Content	Refers primarily to conceptual understanding of a topic.
Application of skill/tool/knowledge	Refers to the application of a new skill, tool or type of knowledge.
Analyzing/Evaluating	Refers to student performance on tasks that require analyzing and assessing information.
Synthesis	Refers to tasks involving summarizing or synthesizing information.
Inference	Refers to activities of drawing conclusions and inferring on the basis of evidence or reasoning.
Research Skills	Refers to activities that comprise research skills, such as searching for and citing written sources.
Using Evidence	Refers to activities involving the identification of and interpretation of evidence.
Questioning	Refers to generating questions and critical thinking about a subject.
Positive Participation	Includes evidence of student engagement in classwork, respectful interactions and communication strategies, and active work in the classroom.
Oral Communication /Presentation	Refers to development of oral communication skills, including expressing ideas, using new vocabulary, and giving oral presentations.
Reading Strategies	Refers to reading strategies such as drawing inferences, citing evidence, determining central ideas or themes, analyzing the voice or structure of texts.
Shared & Independent Reading	Refers to student participation and engagement in shared and independent reading.
Argument Writing	Refers to the development of theses or claims.
Writing Process	Refers to writing activities that include outlining, using literary devices, revising and editing, and citing evidence.
Revising/Editing	Refers to activities of revision and improvement of work in any subject.
Grammar	Refers to learning and using correct English grammar in speaking and writing.
Vocabulary	Refers to learning new vocabulary and using it correctly.
Study Habits/Testing Skills	Refers to study habits and test preparation.
Importance	Refers to identification of essential ideas or content in a text.
Making Connections	Refers to making connections between texts and students' experiences and lives.
Wild Card	Encompasses standards that do not fit neatly into other categories or are ambiguous.

Tool 1.2 Course Outcomes Map, cont.

Revision Outcome Levels

	Meets	Exceeds
Intro Courses	☐ I make **changes** to improve my writing based on **very specific teacher feedback** ☐ I use the **revision process to improve** my writing–e.g. planning, proof-reading, peer review, incorporating specific teacher feedback into re-writes. ☐ I revise for improving content, analysis, grammar, organization, sentence structure and tone for the given assignment.[2] ☐ I can **reflect** on how my editing decisions **improved** my paper.	☐ I can **identify the changes** needed to improve my writing based on **specific feedback** from a teacher and then apply it to **specific areas**. ☐ I use the **revision process to improve** my writing–e.g. planning, proof-reading, peer review, incorporating specific teacher feedback into re-writes. ☐ I revise for improving content, analysis, grammar, organization, sentence structure and tone for the given assignment. ☐ I can reflect on which **editing decisions** had the **biggest impact** on the quality of my paper [purpose and audience] and **explain** why I made them.
Higher-level Courses	☐ I can **identify the changes** needed to improve my writing based on **specific feedback** from a teacher and then apply it to **specific areas**. ☐ I use the **revision process to improve** my writing– e.g. planning, proof-reading, peer review, incorporating specific teacher feedback into re-writes ☐ I revise for improving content, analysis, grammar, organization, sentence structure and tone for the given assignment. (see footnote) ☐ I can reflect on which editing decisions had the **biggest impact** on the quality of my paper [purpose and audience] and **explain** why I made **editing decisions**	☐ Given **general feedback** from a teacher, I can **identify** and **revise** my own errors. ☐ I use a **self-guided** revision process to substantially improve my writing / work product – e.g. planning, proof reading taking **general teacher feedback** and making **specific changes** in re-writes. ☐ I revise for improving content, analysis, grammar, organization, sentence structure and tone for the given assignment. (see footnote) ☐ I can reflect on and explain why I made editing decisions and recognize the impact of my editing to improve my writing and I use that information to **set goals for my next project**. ☐ I **remove content** that does not add to the writing's purpose (e.g. whole paragraphs or sentences).

---

[2] Teachers will name the skills they have been teaching – for example, argument, evidence, organization, word choice – and will identify what that is at the beginning level and advanced level.

Sample 1.3 - Course Pathways

Practice: 1.Create course pathways to graduation that are versatile in meeting students' needs
Key Element: Design course offerings that provide flexibility for students to keep moving towards graduation

The Sample Course Pathways chart details examples of criteria used to determine student course placement in the upcoming term. This provides clear pathways for students to continue moving toward graduation in each subject area while remaining responsive to their individual course progress. In preparation for making a new schedule, school staff review student progress and apply the criteria to project upcoming course needs.

In determining criteria for differentiated course pathways, consider:

- Student course enrollment and prior credit history
- Continuation of course sequences
- Pacing for preparation of state exams
- Courses that can reinforce needed skills under new themes

Course Pathways

Current Course	Next Course if *Pass*	Next Course if *Fail*
ELA		
Linguistics 1	Linguistics 2	Linguistics 2
Just Words	Just Words	Just Words
Read 180	Read 180	Read 180
ENG 1	ENG 2	ENG 1
ENG 3	ENG 4	ENG 3
ENG 5	ENG 6	ENG 5
ENG 7	ENG 8	other needed ENG or ENG 8
Math		
Alg A	Alg B	Alg A or B repeater section in 7th
Alg B	Alg C	see if need lower, but likely Alg C
Alg C	Alg D	see what else is needed
Alg D	Geo 1/Regents Prep	Alg B if needed/Reg Prep, Math
Self-paced Alg A	Self-paced Alg A	Self-paced Alg A
Geo 1	Geo 2	Math elective
Geo 3	Double Global	higher level math than Alg
Math Intensive	Math Intensive	Math Intensive
Science and Social Studies		
US 1	US 2	Bio 1 or freshman Bio 2 or PIG,
US 2	Regents Prep	US2 or US1
Govt	US1 or Bio 1	Bio 1
Bio 1	Govt or Bio 2	Govt
Bio 2	Bio 3	see need based on transcript
Bio 3	Earth Sci 1 or History class	Bio 3

Guide 2.1 - Student-Centered Scheduling Manual

Practice: *2. Dedicate the necessary time and staff to schedule based on students' needs*
Key Element: *Determine specific course needs for upcoming term; begin designing a new term 5-6 weeks before it begins*

How the Student-Centered Scheduling Manual Is Put to Use	
Purpose:	Details a process for generating a schedule optimized around students' needs
Who uses it:	Scheduling point-person and school leadership
When it is used:	In the several weeks prior to a new semester or term

The Student-Centered Scheduling Manual outlines one school's process of analyzing academic needs to generate a master schedule prior to a new term. It breaks down detailed steps, starting 5-6 weeks before the new term and continuing through a sequence of organizing student data and designing scheduling structures. This includes guidance on using Excel-based strategies to efficiently process large amounts of data for scheduling purposes.

The following manual provides a timeline, tips and strategies, an illustrative attachment, and is organized by the major phases of the process:

- Identify student course needs (5 weeks before new term)
- Create teaching assignments (4 weeks before new term)
- Arrange courses into a workable master schedule (3 weeks before new term)
- Finalize scheduling materials (2 weeks before new term)
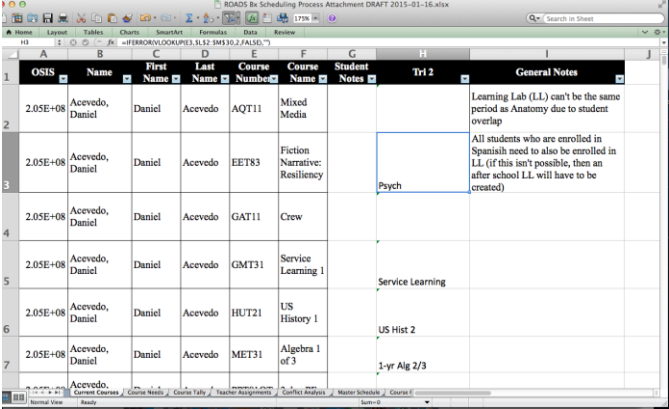
See accompanying exemplars of data analysis in supplementary file:

> Guide 2.1 Scheduling Process Attachment.xlsx
> This excel file has multiple sheets that illustrate the different steps of the scheduling process, as well as a number of the final materials. The excel file includes the following sheets:
> - Current Courses
> - Course Needs
> - Course Tally
> - Teacher Assignments
> - Conflict Analysis
> - Master Schedule
> - Course Requests
> - Programming Template

In preparation for each new trimester, ROADS Bronx carries out a detailed process to generate a master schedule of course offerings optimized around students' credit histories and academic needs. The chart below outlines the steps involved in this schedule development process, and provides a timeline, tips and strategies, as well as an illustrative attachment to guide one through the scheduling process.
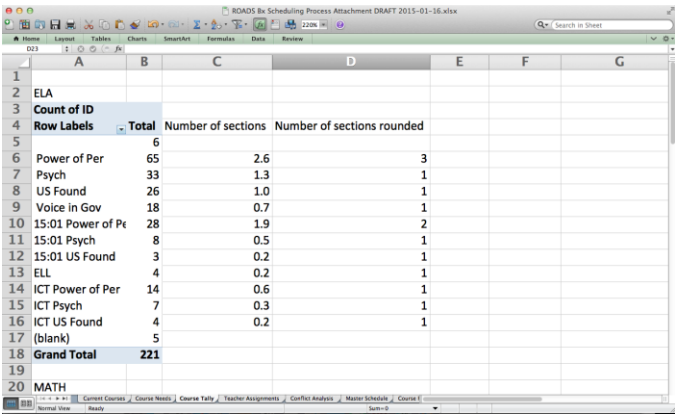
5 weeks *before new trimester*	Steps	Tips and Strategies
	• Meet with leadership to establish criteria for student placement in courses in the new trimester. • *Consider:* o Student credit history o Continuation of course sequences o Special Education accommodations o Credit histories and needs of any incoming students	• For students entering the school mid-year, and especially those with few credits, it must be decided whether they will be incorporated into courses offered to existing students, or if sections will be reserved for new students. One option is to administer placement exams to determine course assignments.
1) Identify Student Course Needs	• Set up a spreadsheet of students' course needs in each subject area based on the criteria determined by leadership (i.e. All E9 students continue to E10). 	• From Infinite Campus, generate a report of current course enrollment (see attachment 1, "Current Courses" sheet, columns A – G). • Create a list of all current courses, and the next course for the new trimester based on the criteria determined by leadership (see columns L & M). • Use the VLOOKUP formula to add students' course needs for the new trimester next to their current courses (see column H). • Transform this list into a new table with one row for each student, and their course needs in each subject area (see "Course Needs" sheet) using the following steps: o On the "Current Courses" sheet, use the filter in column E to show only ELA courses. o Once filtered, copy columns A – H. o Un-filter column E, and paste the copied list into empty columns (see columns O – V). o On the "Course Needs" sheet, use the VLOOKUP formula to pull, from columns O – V

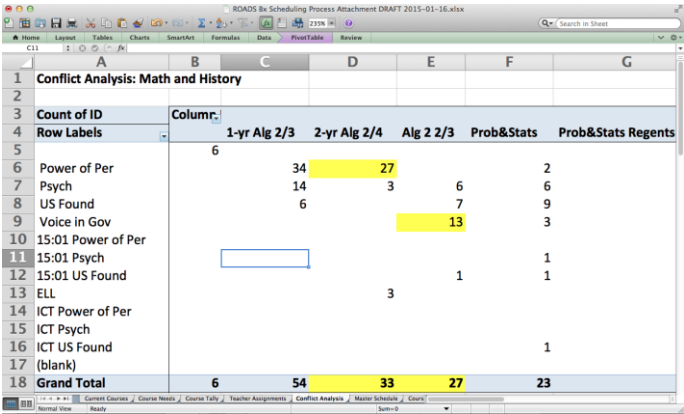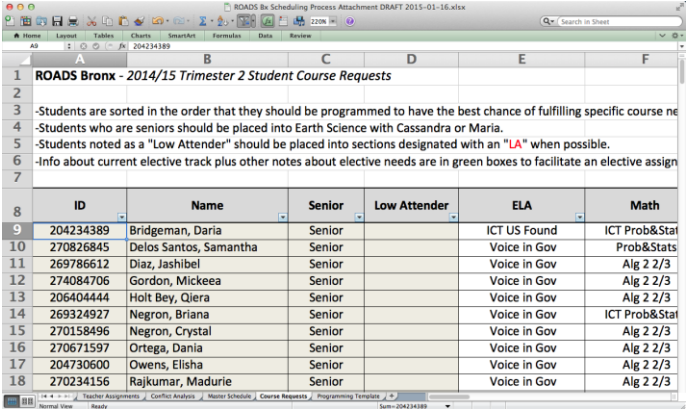|		on the "Current Courses" sheet, the ELA course needed for each student (see column F on "Course Needs" for the VLOOKUP formula). o Repeat this process for each subject area.
	• Incorporate special education accommodations into list of course needs in order to consider those in determining course offerings. 	• Get a list of special education accommodations for each student in each subject area. • On attachment 1, "Course Needs" sheet, copy and paste the student IDs and accommodations for each subject area (see columns U – Y). • Insert a column to the right of each subject area (see columns G, I, K, and M). • In those inserted columns, use VLOOKUP (w/ student IDs) to add the accommodation needed for each subject area. • In a new column, use the excel formula =(CELL1&" "&CELL2) to combine the accommodations (CELL 1) with the class title (CELL 2) to generate the complete class recommendation for each student (e.g. 15:1 + Global 2 = 15:1 Global 2). Columns E, H, J, and L show the complete class recommendations.

4 weeks *before new trimester*	Steps	Tips and Strategies

2) Create Teaching Assignments	• Tally course needs to determine courses and numbers of sections needed, including numbers of sections with specific special education accommodations.
	
		• See attachment 1, "Course Tally" sheet, which shows pivot tables for each subject area and calculates the number of students who need each specific class.
		• To create the pivot tables:
		  o Highlight the entire data set in course needs including header labels.
		  o In the "Insert" ribbon, choose "Pivot Table".
		  o For "choose where to place the pivot table," click on the cell in the "Course Tally" sheet where you want the pivot table to appear.
		  o To set up the Pivot Table, Drag "ID" (from field name list) to the values box, and select count of ID.
		  o Drag "ELA" (or other subject area in question) to the row labels box to see the number of students who need each ELA course.
		• Divide the number of students in each course by the maximum class size to get an indication of the number of sections needed of each course (see columns C & D).

	• Set up a spreadsheet of each teacher with the specific course sections they will teach in the new trimester.
	• *Consider:*
	  o Preferences for teaching assignments
	  o Minimizing numbers of preps
	  o Special Ed certification where needed
	  o Staff with reduced teaching loads for other responsibilities
		• See attachment 1, "Teacher Assignments" sheet.

3 weeks *before new trimester*	Steps	Tips and Strategies

3) *Arrange Courses into a Workable Master Schedule*	• Analyze cross-tabs of student course needs to identify potential scheduling conflicts to avoid in the master.
	
		• See attachment 1, "Conflict Analysis" sheet, which shows a pivot table identifying Math and History courses with high overlap of students. These courses should be scheduled into different periods.
		• To create the pivot table:
		  o Insert the pivot table into the "Conflict Analysis" sheet.
		  o Drag "ID" (from field name list) to the values box, and select count of ID.
		  o Drag one subject area to the row labels box, and another to the column labels box.
		  o Analyze the cross tabulation to identify places where a significant percentage of students with an assignment in one course also have an assignment for another specific course. These are courses that need to be scheduled into different periods.
		  o Repeat this process for all combinations of subject areas, keeping a running list of conflicts to consider when developing the master schedule.

	• Begin the master schedule by placing the most constrained items first:
	  o Common Planning Time for each department
	  o Putting PE and art in available building times
	  o Conflicting courses across different periods (singletons, ICT, advanced)
		• See attachment 1, "Master Schedule" sheet.
		• It helps to spread out ICT courses across different periods, as many students will need multiple ICT courses (repeat this process for 15:1 and advanced courses).

	• Working from the spreadsheet of teacher assignments, organize remaining courses into available periods to	• See attachment 1, "Master Schedule" sheet. • While developing the master, it can help to add a row

	create a balanced master, revisiting teaching assignments where needed.
	• *Consider:*
	   o Ensuring enough course capacity for the full student body across each period
	   o Minimizing the number of periods taught in a row
	   o Minimizing the number of room changes teachers make
	   o Keeping co-teachers in one subject
		below each period to keep a tally of how many students each class can accommodate. Insert a sum function in a column to the right of the schedule to help keep track of the numbers of students scheduled in each period as you place the courses in the schedule. A finalized schedule should have course capacity for the whole student body in each period.

2 weeks *before new trimester*	Steps	Tips and Strategies
	• Review draft master with leadership to gather and incorporate feedback.	• Try to get to this step sooner rather than later to have enough time in case significant shifts need to be worked in.

4) *Finalize Scheduling Materials*	• Organize student course need information for reference in student scheduling and rank by difficulty to schedule.
	
		• See attachment 1, "Course Requests" sheet.
		• This sheet is a reformatted version of the data in the "Course Needs" sheet, listing the students in the order in which they should be scheduled.
		• To calculate the degrees of freedom:
		  o Create a table that lists each course, and the number of periods each course is offered (see "Course Requests" sheet, columns U – AD).
		  o *Note:* For general ed. course needs, include the 15:1 and ICT sections in the count. For example, if there was one period each of Global 2 15:1 and ICT, and 2 periods of general ed. Global 2, you would record that Global 2 is offered in the schedule 4 times (since a general ed. student could enroll in all those sections).
		  o For each subject area and each student, use VLOOKUP to enter how many periods are available to get their course need in that area (see columns O – S).
		  o Sum the totals of each subject area to generate the total degrees of freedom for each student (column M). Lower degrees of freedom mean those students are more difficult to schedule.
		• To create the scheduling order, first sort students by degrees of freedom and then by senior status to move all seniors up for priority scheduling.

	• Develop a template for the process of creating individual student schedules.	• See attachment 1, "Programming Template" sheet.

Sample 2.2 - Transcript Analyzer

Practice: 2. Dedicate the necessary time and staff to schedule based on students' needs
Key Element: Lay out a path to graduation for every student

The Transcript Analyzer provides an easy-to-understand visual of a given student's credit accumulation and exam history, as well as remaining requirements to fulfill for graduation. It is generated by a series of algorithms that analyzes raw transcript data as reported by the school district and reorganizes it into a student-friendly format designed by school staff. Teachers and counselors use this visual in academic planning conversations with students (e.g. see Graduation Planning Template on pgs. 22-23) to fulfill multiple purposes:

- Helping students visualize and understand their achievements to date and potential routes to graduation
- Identifying credit and Regents priorities for upcoming scheduling decisions
- Incorporating student voice into the scheduling process

MURRAY HILL GRADUATION TRACKER: *ARE YOU ON TRACK?*

Student Name

SUMMARY OF PROGRESS

H.S. Credits	25 out of 44
Regents Diploma	2 out of 5
Adv. Regents	0 out of 4

CORE REGENTS*

ELA: 81	
Algebra: 67	
1st Science:	[Lab]
Global:	
US: 55	

ADV. REGENTS

Geometry:	
Alg. 2/Trig:	
2nd Science:	[Lab]
LOTE:	

CREDIT ACCUMULATION

Subject	Earned	Not yet earned
ENGLISH	5.	3.
MATH	6.	
GLOBAL HISTORY	2.	2.
US HISTORY	1.	1.
ECONOMICS	1.	
GOVERNMENT	1.	
LIFE SCIENCE		2.
PHYSICAL SCIENCE	1.	1.
PHYS. / LIFE SCIENCE		2.
PHYS. ED.	2.9	1.1
HEALTH	1.	
ART / MUSIC	2.	
FOREIGN LANGUAGE	2.	
ELECTIVES & ADD'L.	3.5	3.5

GRAD REQUIREMENTS

English - 8 credits
Math - 6 credits
Global History - 4 credits
US History - 2 credits
Economics - 1 credit
Government - 1 credit
Life Science - 2 credits
Physical Science - 2 credits
Phys. / Life Science - 2 credits
Phys. Ed. - 4 credits
Health - 1 credit
Art / Music - 2 credits
Foreign Language - 2 credits
Electives & Add'l. - 7 credits

KEY
Regents:
Green = Passed
White = Not yet passed

Credits:
Green = Earned
White = Not yet earned

* Please note that CUNY looks for a 75+ on the ELA Regents and 80+ on a Math Regents for entrance to a 4 year college.

You are in cohort Q. You entered high school in 2011. Cohort Q is expected to graduate in 2015.

Tool 2.3 - Graduation Planning Template

Practice: 2. Dedicate the necessary time and staff to schedule based on students' needs
Key Element: Lay out a path to graduation for every student

How the Graduation Planning Template Is Put to Use	
Purpose:	Includes students in the process of determining their path through high school
Who uses it:	Students with a counselor or teacher
When it is used:	As students enter the school, and prior to a new semester or term

The Graduation Planning Template is a student-facing tool that helps students reflect on the graduation requirements they have fulfilled and consider the requirements they still need to address to progress towards graduation in a timely manner. Students should complete the planning tool as part of a discussion with a dedicated staff member (teacher or counselor) to help both parties identify scheduling priorities based on the student's needs and interests. The tool helps students build confidence and agency by involving them in the process of determining their path through high school and proves a useful tool for helping students track their progress and next steps.

Steps to using the Graduation Planning Template

1. Review data. With the student, look over their high school transcript, exam history, and other data related to their progress toward graduation (e.g., see Transcript Analyzer sample on pg. 21) to take stock of what the student has completed so far and what steps remain. Enter basic information about the student's current status into the relevant items of the Planning Template (e.g. "Number of credits I have right now").

2. Make a plan. Discuss the student's achievements and next steps to identify a target date for graduation and enter goals that will keep them on-track (e.g. "How many credits I want to get this year"). Considering the data and goals, narrow in on key next steps to inform the scheduling process and offer guidance in regards to spreading out challenging courses, balancing credit needs and student interests, and ensuring student choices are feasible given the school's offerings and staff capacity.

3. Revisit progress. As a student approaches the next term, review their most recent Credit Planning Template to check in on progress, revisit goals and priorities, and complete a new planning template that maintains the student's active involvement in ongoing scheduling processes.

GRADUATION PLANNING TEMPLATE

My name: _____ **Today's Date:** _____

My age: _____   Birthday: _____   School years left until I turn 21*: _____
DOE policy = you age out the school year you turn 21 (but you do get the school year that includes your 21st birthday)

Number of credits I have right now: _____

Number of credits I still need to graduate: _____

I would like to graduate in (month and year): _____

How many credits I want to get this year (minimum 10): _____

Number of credits I have already completed this year: _____

Arena 1's goal is for every student to earn at least 10 credits per year. How many more credits do I need to earn to have earned 10 by the last day of school? (10 minus the number of credits I have earned)

_____

Which Regents exams have I already passed?

Which Regents am I taking next?

What courses do I want to focus on next? (name up to 5 courses, then rank them)

Guide 3.1 - Blended Instruction Teachers' Manual

Practice: *3. Provide nontraditional routes for students to earn credits*
Key Element: *Use blended learning*

How the Blended Instruction Teachers' Manual is Put to Use	
Purpose:	Provides guidelines and strategies for ensuring that blended learning is used effectively in helping students meet rigorous learning goals
Who uses it:	Teachers and school leaders
When it is used:	In the design and day-to-day implementation of blended learning opportunities

The Blended Instruction Teachers' Manual provides educators with concrete guidance on leading effective blended learning opportunities. Based on the practices of Bronx Arena H.S., which has an asynchronous mastery-based learning model, the manual outlines key considerations to ensure that blended learning helps students progress toward rigorous learning expectations through frequent instructional interactions with teachers who provide differentiated supports and feedback. It also includes descriptions of challenges encountered in blended learning and strategies Bronx Arena teachers have used to address those.

The following manual provides guidance along these major themes:
- What is Blended Learning (and what is it not?)
- What Does **Planning** Look Like in a Blended Classroom?
- How do Teachers **Differentiate** in a Blended Classroom?
- What Does **Feedback** Look Like in the Blended Classroom?

Bronx Arena High School
Blended Instruction Teachers' Manual

Developed by Bronx Arena Staff with support from Eskolta School Research and Design

The purpose of this manual is to provide teachers who are new to Bronx Arena High School, and who are new to teaching in a blended learning environment, a clear sense of key instructional practices within the model.

This manual covers the following:

- What is Blended Learning (and what is it not)? (p. 1)
- What Does Planning Look Like in a Blended Classroom? (p. 4)
- How Do Teachers Differentiate in a Blended Classroom? (p. 8)
- What Does Feedback Look Like in the Blended Classroom? (p. 11)

What is Blended Learning (and what is it not)?

Bronx Arena's overarching mission is to personalize the school experience for our students. We work to ensure students are getting the kinds of support that fit their individual needs, including social emotional, instructional, and post-secondary planning. **Blended learning is the instructional component of Bronx Arena's efforts to personalize school.**

To successfully uphold the mission of Bronx Arena, it is important that teachers are clear about what blended learning is and how it differs from other teaching methods that incorporate technology into the classroom. It is contrasted with other instructional models below:
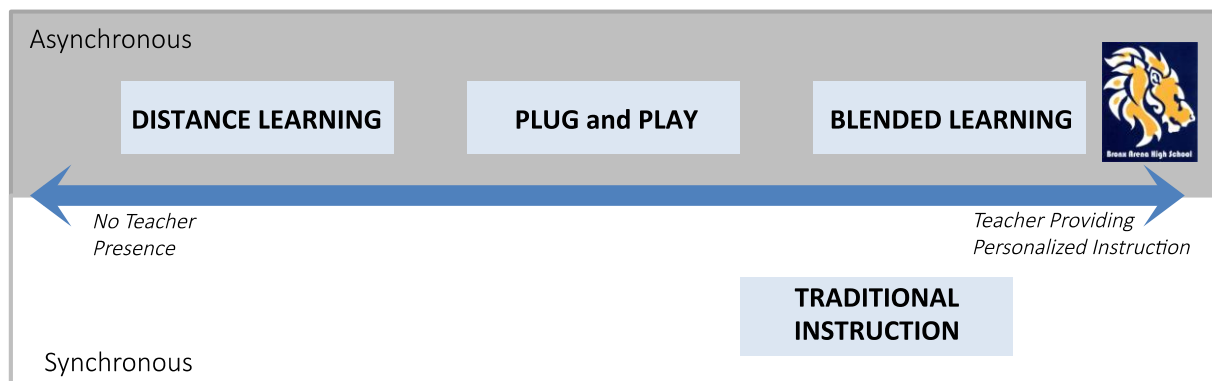
Blended Learning is Not:

Distance learning: Students are engaged in a curriculum or lessons without a teacher physically present. Students complete coursework on their own, usually online. In some cases, the teacher may give feedback and instruction on completed assignments.

Plug and play: Students progress through a digital curriculum while a teacher is present to supervise them. The teacher may circulate around the room to keep students on task, provide clarification around course requirements, or help students navigate the tasks and assignments. However, the

teacher is not responsible for individualizing or differentiating curriculum or providing instruction or lessons beyond what is already in the curriculum.

One of the biggest mistakes that teachers who are new to blended learning make is to confuse blended learning with distance learning or plug and play. In those models, a student may do most of the work with little or no assistance from the teacher. Teachers sometimes think that, like in distance learning, the teacher's job is to wait for the students to complete a task and then give feedback.

People also sometimes believe that doing activities such as adding technology to a course, making a class-specific website, having students post assignments online, or having students hand in assignments digitally are the equivalent of teaching a blended classroom. Though these activities may be present in blended learning, they are only one aspect of the blended learning approach.

Blended Learning is:

Blended learning: At Bronx Arena, students are in a classroom with teachers providing instruction, but students work through the curriculum at their own pace. Students enter the class, access the curriculum (often online) and begin working wherever they left off last.

The role of the teacher as an active facilitator of learning is extremely important in the blended classroom. Teachers regularly assess students' progress and design strategies and interventions suited to each specific student's individual needs such as one-on-one support on a specific skill or a mini-lesson for a subset of students. At the same time, other students in the blended classroom are engaged in their own work at their own pace, allowing for more differentiation and individualization than is often possible in a traditional classroom.

The Competency Tracker

The Tracker is central to the success of blended instruction at Bronx Arena. It is an online tool that organizes information about students, their performance on coursework, and their overall progress toward graduation.

Tracker features include:

- Indications of tasks students are currently working on and the status of that work

- A "Task Bank" measure of students' recent productivity

- Indications of students' progress through courses and their grades on coursework

- Measures of student progress across different competencies

- Aggregate measures of class productivity and attendance over time

- Reports of where students are working on the same tasks and/or competencies

- Reports of student progress on credit and Regents requirements for graduation

- Interactive goal-setting and planning

Because blended instruction calls for teachers to be highly responsive to student needs and well-coordinated within their various instructional roles, the Tracker works best when teachers regularly enter responses and grades to recent student work and frequently check for updates on student progress from other teachers. This provides teachers with access to a real-time, comprehensive picture of students' experience, which supports more consistent and coordinated planning, differentiation, and feedback.

Know your Students
To provide the individualized support that is central to blended learning, teachers must get to know how each student learns best, how they tend to interact within the classroom, and how they prefer to get feedback. For most students, the easiest way to do this is to ask them directly. Even if they don't know their optimal learning style, they will at least know from past experiences and other schools what *doesn't* work. This information is a starting point for finding strategies that work for them, which can be further honed as the teacher builds up their working relationship with each individual.

This knowledge of students is essential to apply to the process of planning, differentiating, and giving feedback within the blended model, as detailed in the following sections of the manual.

What Does Planning Look Like in a Blended Classroom?

Planning in the blended classroom is dependent on the monitoring and ongoing assessment of each student's progress through both the sequence of tasks and subskills of a course as well as the macro picture of competency development and longer term goals of students. In planning weekly facilitation, the first step is to look at the Tracker to determine where your individual students are in relation to the relevant courses and their macro-level goals. Next, teachers must decide what students need in order to move forward in their work. Specific students may need task-specific support, and others may need some content reviewed or to do goal-setting/reflection. Some students may need individual or small group instruction on a related skill that ties to a broader focus competency they are working on or support connecting the work to other broader learning focus areas of their individual program.

Robust communication with co-teachers is critical to ensuring that you have an accurate picture of the work students have completed and that you can find ways to collaborate on providing coherent and complementary supports. Additionally, in your planning, you must make sure that all students are continually receiving a variety of experiences in different facilitation modes. For example, no student should go several weeks without experiencing a mini-lesson, peer-to-peer interaction, or discussion.

Be Aware: with frequent feedback and assessment, it is easy to get caught up in day-to-day or weekly goals for students and lose sight of the bigger picture. If you notice that most of your plans are just mapping out task completion (i.e. Student will complete tasks A and B), you may be involved more in task management than actual planning around student learning needs. Keeping the long-term goals of competency development as a main consideration in mapping out instructional moves and what student will demonstrate can help you avoid this trap.

On a fundamental level, much of the planning for the blended classroom should come directly from regular attention to strengths and weaknesses in students' work as well as their self-reflections on their learning. Students are actually encouraged and empowered to comment openly about their progress in the class. The norm should be for students to tell you the areas in which the he or she wants and needs future assessment and support.

> **Using the Tracker for Planning**
>
> - **Student progress:** Teachers look at the Tracker to determine where students are in their courses and plan accordingly.
> - **Road map:** The Tracker provides a clear map of the competency and credit needs students have and the progress they need toward graduation.
> - **Common skills:** Teachers can see where students have similar assignments or are working on the same skills.

Once you have identified the needs of the students in your class, you have to decide what to cover and which facilitation modes (see list below) you will use in the coming week. After determining this, you must then plan how you will organize each mode. For example, if you choose to do One-to-One Support with a student, you must plan beforehand what your goals for the One-to-One meeting will be. Or, if you are going to pull four students for a Small Group Mini-Lesson, you must plan the targeted Mini-Lesson. Rubrics and guidelines are available on the Bronx Arena Google Drive for how to effectively implement each of the facilitation modes.

Bronx Arena Blended Instruction Facilitation Modes

1) **One-to-One Support:** The teacher goes to a student or group of students and, based on the teacher's observations of the students' progress, assists them with their learning. This assistance can be around mastering a skill, completing a task or understanding content. Facilitation and guidance should be informed by an understanding of each student's previous work and progress up to that point. The teacher should work with students to set immediate task related goals/objectives, identify the steps that need to be taken to achieve those goals/objectives, and have a concrete exit strategy for when the students can be left alone to continue working independently.

2) **Small Group Mini-Lessons:** The teacher identifies a group of students who need direct instruction on a specific skill or on specific content. The teacher then gives a structured mini-lesson to this group. The mini-lesson should include a clear goal/objective and assess whether or not students achieved the goal/objective.

3) **Small Group Discussions:** The teacher identifies a group of students to participate in an in-class discussion. This discussion should have a specific goal/objective, follow a structure/protocol determined by the teacher or students, and assess whether or not students achieved the objective.

4) **Conferencing:** The teacher schedules a time for the student to come to the teacher for a one-on-one meeting. Conferences can focus on a student's academic or behavioral progress. Possible topics for conferences include discussing focused competencies, individualizing a student's work on a challenge and setting pacing and timelines for the student's academic progress. Conferences should have clear goals/objectives and a system in place to follow up on those goals/objectives.

5) **Whole Group Instruction:** The teacher identifies content, a specific skill or directions to a task on which the entire class needs teacher-led instruction. This can take the form of a structured mini-lesson, discussion, or experiential learning experience. Whole Group Instruction should have a specific goal/objective, follow a structure/protocol, and assess whether or not students achieved the goal/objective.

6) **Peer Interaction:** The teacher identifies two or more students who would benefit from working together on a specific task. The teacher provides the students with a clear goal, a clear structure/protocol to follow as they work together, and assesses whether or not students achieved the goal.

7) **Circulation:** The teacher approaches a student to check the student's progress or, if the student is not actively progressing in his or her work, to get the student back on track. This type of intervention can occur when a student has a clarifying question about the work (such as "What am I supposed to do next?") or when the student is engaged in off task activities such as surfing the Web or having a side conversation with a fellow student. (*Note: There will be times when a student calls a teacher over to answer a clarifying question and the intervention starts as Circulation. However, in answering the clarifying question, other areas in which the student needs support may surface. When this occurs, it may become a One-to-One Support.*)

Common Challenges within the Blended Model and Potential Strategies to Apply

Planning	
Challenges	**Potential Strategies**
• How do I prepare engaging techniques for **one-on-one support** and adjust them for different individuals?	• **Share** facilitation plans with other teachers. • Pull ideas from the **Arena Mini-lesson Bank** in Google Drive.
• How can I best keep up with **individualized planning** when it is largely dependent on recent student progress and feedback that is not always forthcoming?	• **Grade first, then plan** • **Update Tracker:** *All teachers* need to grade, give feedback, and update the tracker so that everyone has an accurate read on student progress. • Implement **student-led goal-setting** and check-ins to measure progress.
• How can I provide students with discussions or mini-lessons when there is **only one student** who needs this?	• **Consult** with CSTs and generalists and **pull students** who need this support **from more than one arena.**
• How can I **communicate** with students, generalists, and other CSTs about mini-lessons?	• Create a shared **Google Calendar.** • **Send email reminders** to all involved staff.
• How can I **keep up with planning objectives** over the whole week?	• Try to **find commonalities** between students to group them (by skill or topic). • **Plan course arcs** to follow with students. • Use **objectives from the task** to guide you.

How Do Teachers Differentiate in a Blended Classroom?

In order to effectively teach in a blended learning environment, the teacher must know the curriculum as well as teachers in traditional classrooms know their curricula. Teachers must understand where students are and where they are going at all times in any given course. Though most of the curriculum in the blended learning model is online and accessible to students at all times, classes are not limited to students just working independently on the lessons and tasks on their computers—most courses include mini lessons that involve groups or the whole class.

Based upon the students' needs, the teacher should supplement the online curriculum with in-person lessons, enhancements and a variety of strategies to ensure that the students are learning the necessary material. For example:

- For specific students, some of the **online lessons and tasks can be taught by the teacher as mini-lessons or structured as discussions**. Not every lesson and task needs to be completed by students independently. If, for example, there is a student who is having reading comprehension issues, the teacher may do an online lesson that is heavy on reading as a guided out-loud reading activity. Another online lesson may be done as an interactive mini-lesson. (see *Bronx Arena Blended Instruction Facilitation Modes,* pp. 5–6) Based on the teacher's knowledge of the students, it is incumbent upon the teacher to decide on the most appropriate way for lessons and tasks to be delivered to individual students. The teacher is free to deviate from the online task and individualize for the student to fulfill the requirements of the task.

- If students need to develop a concept or skill beyond what is in the curriculum, teachers should **create additional, or modify current, mini-lessons or activities** that will support the students' learning around that concept or skill. Teachers should not feel limited by the online curriculum.

- Teachers can support students writing by referring students to lessons in the Bronx Arena **Mini-lesson Bank in Google Drive**. For example, if students are having difficulty writing in complete sentences, using capital letters correctly or writing fully developed paragraphs, teachers should assign or facilitate learning experiences that use lessons and tasks in the bank that teach these skills.

- If, upon looking at student work, a teacher feels that a student needs more information on a specific topic or skill in order to complete a challenge or revise a task, the teacher should **bring in supplemental material to support the student's learning.** This material can include teaching tools such as manipulatives, visual aids, additional texts, etc. Note that it is

Using the Tracker for Differentiation

- **Goal-Setting –** The Tracker provides data that informs goal-setting and allows teachers to advise students on how to spend their time.
- **Gaps in Progress –** Looking at the Tracker allows teachers to see what subjects students are avoiding and address this.
- **Targeting Instruction** – Teachers can reference the Tracker for concrete evidence about competencies where students are lagging.
- **Grouping** – Teachers can group students based on where they are in the course using the common work report or gradebook in the Tracker.

occasionally challenging to balance supplementing learning with keeping to the scope of the course. While courses in blended learning classrooms do not have time boundaries like in traditional education, students should be able to complete the credit in a reasonable amount of time (see *Differentiation Challenges and Strategies Box*, p. 9).

- Teachers can use a combination of digital and non-digital enhancements to supplement the curriculum. Depending upon the enhancement, teachers can use these as tools for teaching mini-lessons, opportunities for students to work independently, in pairs or groups, and opportunities for students to create a variety of products to fulfill the requirements for different lessons and tasks. Below are examples of ways to enhance the curriculum, many of which can be developed using online tools. This list is not comprehensive. Teachers should feel free to incorporate additional enhancements (such as posters, board games, and art) that are not included on this list:

Enhancements
- Create and share resources such as documents, forms, surveys, websites
- Create multimedia presentations (that students present)
- Create lessons to supplement tasks
- Do focused Regents preparation
- Create flashcards and vocab practice

Common Challenges within the Blended Model and Potential Strategies to Apply

Differentiation	
Challenges	Potential Strategies
• How can I **build my awareness** of each student's different skill sets?	• **Conference** with students individually about progress and areas of struggle, using the Tracker to uncover broader patterns. • **Assess students** early on • **Meet with CSTs** to uncover broader patterns
• How can I **help students feel comfortable** with differentiation?	• Create an expectation for frequent use of multiple **facilitation modes** so those who need differentiation do not feel singled out. • Be tactful when implementing multiple forms of student work within a lesson, and immediately address any negative comments from students regarding the work of peers.
• How can I **find the time** to create regular and differentiated curriculum?	• Use the **Tracker to group students** based on progress in lesson or skill need (fewer lessons).

• How can I best **identify the places** to differentiate within lessons?	• Find out students' strengths and weaknesses:
	    o Assess students academically ahead of time.
	    o Look at students' lowest grades.
	• When creating lessons, make sure to **develop additional differentiated materials** as backup.

• How can I **balance supplementing the curriculum** through additional learning opportunities/tasks with keeping the scope of the course manageable?	• When students get low grades and revise many times, **count it as an additional task** (Grading can be entered as "plus 1."). • If you know a lesson is **especially long, break it down** into multiple lessons.

What Does Feedback Look Like in the Blended Classroom?

When teaching a blended learning course, giving students regular feedback on their work is essential. **Students should be getting feedback, making revisions, and receiving targeted interventions/supports on the tasks leading up to each of their challenges.** The challenges themselves should not be considered complete until the teacher has looked them over and given feedback, and the student has integrated this feedback into the challenge if necessary. This feedback should be geared toward a specific aim of proficiency on the rubric or other measures of significant growth.

Strategies for Giving Feedback
(These strategies can be used verbally in One-to-One meetings or in writing)

Strategy 1: Use Strengths-based Approaches to Feedback

Two critical factors in how students perceive and apply feedback are their mindset about their own abilities and how fairly they think their work is being judged by the person giving feedback. Strength-based approaches can promote a growth mindset in students and positive feelings around the feedback being offered. This includes recognizing areas of strength alongside areas of struggle, providing space for student self-evaluation that is then reflected in teacher feedback, framing feedback on ways to improve as part of a natural learning process, and explicitly communicating high expectations and commitment to supporting students in taking the steps being suggested.

Strategy 2: Be Prompt, Timely, and Consistent

To give feedback effectively it must be done in a timely manner. Ideally, feedback will be given within 48 hours of when the student first turned in the assignment. This way, the student is still highly aware of what the assignment was and can best integrate your suggestions into your lesson planning. If you wait too long to return work with feedback on it, students will have forgotten the assignment and the feedback will have lost much of its relevance and power. Additionally, students might move forward in the meantime, working through a large amount of coursework while making the same mistake, resulting in a missed opportunity for growth and potential frustration. Similarly, if you wait too long to give feedback, it will no longer be as timely and relevant for your lesson planning. In-person feedback is always more effective than digital, so in those 48 hours you should plan to talk to the student, either as the main means of communicating feedback, or in addition to another form.

Using the Tracker for Feedback

- **Give process feedback** – Teachers find the Tracker more effective for communicating the status of work (complete, incomplete, missing, needs revision).
- **Provide immediate feedback** – The Tracker can be used to communicate small notes to students on the revisions they need to make, especially for digital assignments.
- **Track progress over time –** The Tracker serves as a single place for all feedback to be recorded and tracked, allowing the teacher and student to see overall growth over time.
- **Support Student Use** - Students benefit from using the Tracker to access feedback and track their own progress but can use guidance on how to do so.

Strategy 3: Use the Competency Rubrics as a Basis for Feedback:

In Bronx Arena, every course challenge is aligned to specific school-wide Bronx Arena competencies. These competencies are Common Core-aligned and each has a rubric that defines what student work in that competency looks like at the 'Proficient,' and 'Exemplary' levels. Note that not all students will always be ready to reach the 'Proficient' level pre-defined in the rubric. Rubrics should be considered a guide and starting point and may be differentiated based on student needs. The student's end result may look different from the initial design of the assignment, but the skills the student develops should be aligned to the competency (see *Feedback Challenges and Strategies Box*, p. 14).

When giving students feedback it is essential that you make them aware of the competencies that they are demonstrating, in what ways they are meeting the rubrics, what specific areas they are doing well in, and what they need to do to achieve proficiency or move to the exemplary level in that area (see *Feedback Challenges and Strategies Box*, p. 14). Doing this is essential for several reasons. First, by clarifying to students the competencies they are focusing on, they gain an explicit awareness of what they are learning. This awareness will help them to learn these skills and competencies and consciously transfer this learning to other courses and contexts. In pointing out to students where they are on the rubric, you are giving them a specific and easy-to-grasp sense of what they are doing well and what they need to work on, both in the course and in their broader academic goals around competencies. And, by using the rubrics to show students what they need to improve, you are giving them clear and specific guidance as to the steps they need to take to make their work stronger.

Strategy 4: Give Feedback on Each Stage of a Major Challenge

In Challenges and Capstones, you should provide the student with feedback on each stage of the action plan. For example, if the assignment requires the student to begin by taking notes or gathering data, give them feedback on that, before they continue on to the next step. Or, if they need to outline, first provide feedback on their outlines. This strategy is most effectively employed if each step of the process is treated as a specific assignment that requires feedback. Some students may end up rushing through multiple parts of a project, resulting in a deluge of feedback from the teacher that can feel overwhelming. Rather than sending everything at once, it is suggested that teachers space out the feedback in the sequence that was originally intended (see Strategy 2 and *Feedback Challenges and Strategies Box*, p. 14).

Strategy 5: Narrative Feedback

Effective feedback is more than simply writing "Good work" or "Nice job." Though comments such as these may help boost a student's self-esteem, they are vague and do not give the student any insight into what areas he or she is doing well, nor what areas he or she needs to improve. One of the most effective ways for a teacher to give feedback is to view it as a conversation between you and the student. For example, writing conversational phrases like, "I like how you describe this," or "I've always been confused about this—you explain it really well in a way that I can understand." Feel free to use humor. Comment on things that the students' writing reminds you of and share questions that you have. If a student shares something personal or painful you can write, "I'm sorry you went through that—that sounds really rough."

While still ensuring your feedback is clearly connected to the expectations for work as laid out in the competency rubrics (as noted above), the more personal and genuine your comments are, the more

valuable it is to the students and the more it encourages them to put more effort into the work they do for you. Teachers who write personal, narrative feedback often find that when they hand back work students are excited to read the feedback. Comments that express interest, empathy, and concrete examples of where they demonstrated success or excellence can really inspire and motivate students to value what they've written and to write more.

Strategy 6: Proofreading

In order to prepare our students for college, they must realize that proofreading and revision is a fundamental and expected part of the writing process. Be explicit about the fact that they will be submitting multiple drafts for feedback and revision from the beginning and why this is important. Otherwise, some students who were not expecting it may react negatively to being asked to make changes (see *Feedback Challenges and Strategies Box*, p. 14). When completing assignments, students need to proofread their work. However, if you just tell them, "You need to proofread," they won't do it. Before you accept student work (especially the challenges) students must take time in class to proofread and you should hold them accountable for doing it. During the first meeting, proofreading or revising should be done as a One-to-One lesson with the student. You shouldn't be proofreading their work every time you meet, so take some time at the beginning to think about when the appropriate moments for this type of edits will happen.

When you have students proofread in class, you need to require students to mark the corrections on their rough drafts if they are giving you a hard copy and monitor their work as they do it. Or, if their work is online, make sure they are making corrections on the computer. (In general, for first drafts, it is best for them to print them out and make corrections by hand. On the computer it is much easier for the eye to quickly pass over a mistake. On hard copies you can also easily see the markings and corrections that a student makes.) It's best to give them some practice early in the term and then build on that throughout the course.

The best way for students to proofread is to read over their writing out loud. By doing this they can often detect the most important mistakes. **Though ideally we would like them to catch every error with punctuation or spelling, what really matters is that they are demonstrating growth in skill in line with the competency they are working on.** To avoid getting caught up correcting many small errors, it can help to take a step back, consider the larger skill the student is working on, and focus on a few key pieces of feedback that address the development of that skill. Most students' errors are due to haste and a lack of rereading what they wrote. When they revise, they can usually correct the most serious problems.

Another approach to proofreading written work is to have them read each sentence of a composition separately from the end of their paper back to the beginning. This process forces them to focus on what each sentence says individually and not get lost in the flow of their writing.

Strategy 7: Allow Students to Revise Their Assignments

Students should revise assignments and make improvements based on your feedback and their proofreading. This process not only helps students develop their expository skills, but also reinforces and augments their learning of the content. *Having students revise assignments is an essential part of*

communicating your high expectations to students and having them internalizing your feedback to grow as a learner.

When giving suggestions for revision it is important to focus on a few items or areas. **Too many corrections on an assignment can destroy a student's confidence in his or her writing.** Modulate the amount of your feedback based on your knowledge of what works best for each student, but often focusing on one or two areas for students to fix mistakes is more effective than addressing all revisions at once. Although grammatical mistakes and spelling errors are often the most obvious, it's often more important to focus on major issues such as clarity, coherence, organization, and development.

Common Challenges within the Blended Model and Potential Strategies to Apply

Feedback	
Challenges	Potential Strategies
• How can I **help students view feedback** as something useful and not necessarily negative?	• Use **strengths-based** language and approach to giving feedback. (Insert an example/reference strategy 1) • Be **explicit** about the **revision process**; conference with students about what is expected and why in advance. • Work on **growth mindset** – feedback & revisions as evidence of high expectations that they can meet. • **Modify rubrics** and add bullets so that they are customizable and easy for students to self-assess. • **Teach** students how to **assess their own work using the rubric.** • Have students **give their own feedback;** print out the rubric for them to evaluate their work.
• How can I best work with students who overload / speed through tasks and then become **overwhelmed by feedback** on everything at once?	• **Conference** with students about pacing and communication. • Give **feedback in sections**, spacing them out following the intended sequence of the project. This may be **multiple conferences** with the student, always revisiting the **macro goals**. • Use a **team of teachers** to give feedback and support follow-up on feedback. • Tape a calendar or chart of what they are doing (sometime students don't refer to the to-do list throughout the day).
• How do I best balance giving feedback on broad goals vs. specific elements of student work?	• **Prioritize** feedback on objectives of task and focus competencies, and address items when aligned to those. • **Spread feedback** over multiple sessions if there are multiple items to address. • **Use multiple forms** of feedback to ensure students are connecting item feedback to more holistic goals (oral, written, on essay, and in Tracker).

• What happens when the **pre-existing rubric doesn't match up** with the differentiation needs of a student?	• Use preexisting rubrics as a guide, but **adapt the rubric as needed**. Though adaptations should not change the fact that the **competency should remain the main consideration** through which you give students feedback and connect progress to macro-level goals. • **Create project-specific bullet points** that clearly **indicate expectations.**
• What do you do if students **ignore** or **fail to integrate** feedback?	• **Know the student** and how they **best receive feedback** (all at once, spaced out, on paper, etc.) • **Use the tracker** to regularly **indicate** that feedback has **not been integrated.** • **Follow up in person!** • Use a **team of teachers** to give feedback and support follow-up on feedback.

Tool 3.2 - Personalized Planning Template

Practice: *3. Provide nontraditional routes for students to earn credits*
Key Element: *Use blended learning*

How the Personalized Planning Template is Put to Use	
Purpose:	The Personalized Planning Template is used to help teachers plan daily instruction (one-on-one, mini lessons, small group discussions) for individual students based in their needs
Who uses it:	Teachers
When it is used:	Weekly and daily as teachers plan instruction

The Personalized Planning Template helps teachers map out their support to students who are in various places of a curriculum and working on different skills. Similar to a weekly lesson plan, personalized plans map out activities aligned to learning objectives, but are built around individualized targets for each student, in group or one-on-one settings.   Teachers determine student needs then set up and schedule a variety of approaches to address everyone in the class. This helps ensure that blended learning opportunities are helping students meet rigorous learning goals and that teachers are regularly providing effective, personalized support.

Steps to using the Personalized Planning Template

1. Identify individual needs. Review students' progress toward learning goals by examining their recent work. Determine who is on-track, needs support, or could be pushed further, and then for each individual, set the next learning target appropriate for their needs. Reflect on students' strengths and challenges to anticipate where students might get stuck in upcoming lessons.

2. Determine instructional approach. Create groupings of student with similar needs and identify students needing individual instruction (see different sections of template for each). Plan out scaffolds and mini-lessons to advance the groups or individuals to their learning targets, and set up a "Check for Understanding" task that will assess how well they have attained the target.

3. Schedule instructional steps. Allocate the available class time to each group and individual to have an organized approach to providing the support everyone needs. Consider other opportunities there might be to pull students for additional support and communicate with colleagues to ensure a coordinated plan. Be ready to revise the plan in response to absences or other shifting needs.

Personalized Planning Template

Week of:
Teacher:

	Whole/Small Group Instruction			
	Session 1	Session 2	Session 3	Session 4
Day and Time				
Location (push-in/pull-out)				
Target Students				
Focus Competency				
Learning Target				
Assessment/Check for Understanding				

	Individual Instruction				
Room & Time	Student Name & Instructional Mode	Focus Competency	Learning Target	Check for Understanding/Follow-up Steps	Notes

Guide 3.3 - Using internships to Deepen Classroom Learning & Develop Professional Skills

Practice: *3. Provide nontraditional routes for students to earn credits*
Key Element: *Create off-site learning opportunities*

How the Using Internships Guide is Put to Use	
Purpose:	Provides resources and materials to use in helping students develop professional skills, namely academic and personal behaviors
Who uses it:	Teachers and school leaders
When it is used:	In the design and day-to-day implementation of off-site learning opportunities

The Using Internships Guide provides educators with specific guidance on how to leverage off-site learning opportunities, such as internships, to help students deepen their classroom learning, as well as develop professional skills. The guide shares resources and materials from Flushing International High School, and highlights specific steps and materials the school has used in its efforts to promote academic and personal behaviors. The guide also describes the Flushing International High School context, helping readers understand the school culture and structures that enabled effective development of the work.

In addition to an overview of the work and the aforementioned school content, the guide describes the following activities that Flushing International used in helping students develop professional skills:

- Promoting Self-Reflection: Internship Journal
- Understanding Relationships in the Workplace: Who's Who? Activity
- Identifying and Exploring Strengths: Transferable Skills Activity
- Deepening Professional Skills: Mentor/Co-worker Interview Activity

See guide in supplementary file - Guide 3.3 Internships Guide.pdf

Sample 4.1 - Weekly Bell Schedule

Practice: 4. Create a cohesive culture for students and staff
Key Element: Provide staff time and structures to meet and talk about students; create a sense of community for students

This bell schedule shows how schedule structures across the school week can intentionally incorporate time for both student community building and staff professional collaboration:

- **Daily advisory** meetings help students feel connected to a smaller community within the school, and gives them a consistent group of peers with which to learn and share experiences.
- **Friday assembly** opens time for building a sense of community with the entire student body and staff.
- **Common staff planning time** occurs when students are with counselors during advisory periods as well as a larger professional development block following early student dismissal on Fridays (afforded by longer school days the rest of the week).

	MON	TUES	WED	THURS		FRI	
8:30							8:30
1st per							1st per
9:25							9:20
9:26							9:25
9:46	Advisory					ASSEMBLY	2nd per
9:47							10:00
2nd per							10:05
							3rd per
10:49							10:55
10:50							10:56
3rd per							4th per
11:45							11:46
11:46							11:47
4th per							5th per
12:41							12:37
12:42							12:38
5th per							6th per
1:37							1:28
1:38							1:30
6th per	LUNCH					LUNCH	
2:08							2:00
2:09							2:00
7th per						STAFF PD	
3:04							
3:05							
8th per							
4:00							4:00

Sample 4.2 - Roadmap to life after West Brooklyn
Practice: 4. Create a cohesive culture for students and staff
Key Element: Create a sense of community for students

The Roadmap to life after West Brooklyn charts out a set of experiences and work products for students to complete as they progress through milestones of credit accumulation and move toward graduation. It creates opportunities to set up cohorts of students who are at similar places in the Roadmap and engage them in common activities that build post-secondary readiness. This helps build community in the school, especially for students who are not connected to a grade-level cohort, but can still benefit from ties to peers moving with them on the pathway to graduation.