Bethel School District

Long Range Facilities Task Force - *Housing our Students*

UPDATED Multiple Shift Schooling & Double Shifting

12/13/18

Model/Option Overview

Multiple Shift Schooling is an approach that has been primarily considered and used by developing nations as a solution to overcrowding in schools. The approach extends the hours of school operations and breaks the school day or week into instructional shifts. Models include Double Shifting, Triple Shifting and Quadruple Shifting. To meet the minimum instructional hours required in the State of Washington, each shift must be approximately 6 hours (excluding lunch) and run for 180 days out of the year. Since it becomes challenging to meet state requirements with triple and quadruple-shift models, this factsheet will focus on Double Shifting.

Double Shifting can be split up in two ways. The first way is by day, with one shift running in the morning (e.g. 7:15 a.m. to 1:45 p.m.) and the other shift running in the afternoon (e.g. 2:15 p.m. to 8:45 p.m.). In between shifts there is typically a 30-minute break. The second way is on an A/B day system where students attend school either on A days (e.g. Monday, Wednesday, Friday) or on B days (e.g. Tuesday, Thursday, Saturday). School days are longer in an A/B day system to make up for the two missed days that students would have if they were going to school Monday through Friday. Unless students are in school for 12 hours a day the school year must be extended so students reach the required 1,080 instructional hours.

Research shows that shifts can be broken up by grade (e.g. 1st – 3rd grade students attend school in the morning & 4th-6th grade students attend school in the afternoon).[i,ii] Teachers can also be assigned to a specific shift or work both shifts. Research shows that where possible teachers should be assigned to one shift to provide them time for curriculum planning and to prevent fatigue.

Bethel Specific Information

Anticipated cost	High School $ **High**	Middle school $ N/A	Elementary school $ **High**	District wide $
Potential capacity increase	Elementary School : 0 – 300 students depending on school High School: 300 – 1000 students depending on school			

What Could Change? (schools affected)

- School daily or weekly schedules
- Bus schedules
- Use of school facilities
- Staff support for school programs, facilities maintenance, and student transportation
- Storage space usage
- Operation costs
- Access to afterschool activities – sports/clubs
- Nutritional breaks/lunch times

Other District Experiences

Districts currently / previously using this model

- Bayamon School District | Puerto Rico
- Peninsula School District | Great Key Peninsula Area, WA
- Post Falls School District | Post Falls, ID
- Washoe County School District | Reno, NV

Interview Feedback

The feedback provided below was gathered through phone interviews with the Post Falls School District in Post Falls Idaho; emails with Dr. Charles Ballinger, Former Executive Director for the National Association for Year-Round Education; and the Puerto Rico Department of Education.[3,4,5]

Anticipated/ experienced challenges	• ***Meeting state required school minutes.*** To keep the school day as close to a normal school schedule as possible, Post Falls School District shortened their lunches for all students. Their AM shift ran 6:45 a.m. – 12:00 p.m. and their afternoon shift ran 12:30 p.m. - 5:45 p.m. • ***Serious safety concerns to consider.*** Post Falls stopped using the Double Shifting model after a student was killed in a car crash riding their bike home from school after the second school shift let out at 5:40 p.m. in the dark. • ***Space for PE and afterschool sports.*** Since PE classes are typically offered during all shifts it can be challenging to find space for sports teams to practice. Post Falls' solution was to bus older students to practices off campus, so younger students could use their gymnasium and fields in the afternoons. The younger students didn't participate in sports teams. • ***Teacher shift assignments.*** Teachers in Post Falls liked the Double Shift schedule. The challenge was for teachers who had children going to school on a normal school day schedule. Principals are encouraged to work with these teachers to assign them to a shift that works for their family. • ***Shared classrooms and classroom material storage.*** It can be challenging for teachers to share classroom space, but at Post Falls they were able to adjust to the new schedule. The school did buy more storage containers for teachers to make it easy for them to pack up and move their classroom materials. • ***Transportation to/from school.*** This is a perceived challenge. At Post Falls bus drivers enjoyed having the extra work. They bused students to/from school twice in the morning and twice in the afternoon. The Post Falls school district is also 60 square miles.

Implementation timing considerations	• ***Post Falls School District took seven months to plan and transition to the Double Shifting model.*** The district needed time to inform families about the transition and answer their questions. Most parents understood the need for the switch.
Effects on learning outcomes	• ***Since Post Falls School District only used Double Shifting at their middle school, it is too small a sample size to accurately conclude if there was an effect on learning outcomes.*** However, they did not see a significant change in academic performance from students leaving the middle school and continuing to high school.
Cost implications	• ***Additional costs when using this model are mostly operational.*** Post Falls needed to hire a second team of custodial staff to make sure both shifts had access to custodial services. They also needed to pay bus drivers to work four times a day instead of just twice. Additionally, they bought more storage containers for teachers to use for storing their classroom materials. • ***Post Falls estimates they spent 1/3 more money using the Double Shift model.***
Capacity gained	• ***Post Falls was able to add 850 students to their middle school using this model.***
Recommended for use in other districts?	• ***Post Falls School District would only recommend this model to schools as a last resort.*** Although Post Falls said this model is easier to implement than most people think, it is not as good for students as a normal school day schedule. • ***Dr. Charles Ballinger says that if the Double Shifting model is used, it's better to use it at the high school level where students are more independent.*** • ***Post Falls doesn't recommend using Double Shifting at the high school level because the model makes after school activities difficult.***

Benefits of The Model

✓ Additional capacity

In the Double Shift model students are split into two groups, so only half the student body is using school facilities at one time.[6]

✓ Student rest/recovery

If the student day is shortened, students have a full half-day to recreate, study, volunteer and/or rest unlike in a normal school system where students attend school for a full day.[7] *Some students also like starting the school day later since it provides an opportunity to sleep in during the morning.*[8]

☐ Impacts fewer students (school-specific v district-wide)

Challenges of The Model

Community & family

- ✓ Family schedule

  Students are required to go to school either very early in the morning or late in the afternoon which can be challenging for working parents to coordinate pick-up and drop-off.[9, 10] If parents have children on different shifts it becomes even more challenging to coordinate family schedules.

- ✓ After-school care

  Since Double Shifting schedules do not match working hours, parents who work need to find care for their children outside of school.[11] Sources cite[12, 13] that in developing world countries parents are able to lean on relatives for child care, which may not be possible for families in more developed countries.

- ☐ Vacation

Student

- ✓ Safety

  Students staying late at school may need to walk or bike home in the dark or in other elements that are un-safe.[14]

Instructional

- ✓ Summer school/remediation

  In this model it is hard to schedule remediation classes since school classrooms are in constant use and there is no extra time or space available.[15] Space would be available in the summer when the common break occurs.

- ✓ Atmosphere

  Students coming early for the afternoon shift can be disruptive to early shift classes and vice versa, early shift students who stay late can be disruptive to afternoon shift classes. Since no one ever comes to school at the same time it can also be hard to create cohesive and distinctive school communities.[16]Difficult to allow students to engage in the school environment during after school activities such as sports and clubs because the building is in use by other students during the time for activities to take place.

- ✓ Student achievement/learning outcomes

  If the day is shorter, as it may be on many Double Shifting models, it will impact the time students are in school learning. A shortened day greatly impacts the ability to provide intervention supports to students.

Teaching staff

- ✓ Classroom space

  Additional classroom space may be needed for students coming to school early before their shift or staying late after their shift ends.[17]

- ✓ Curriculum

  If teachers are working both shifts, they can become fatigued and have less time to plan lessons.[18, 19, 20] Since teachers share classrooms they are also limited in the wall space they can use and can't leave notes up on chalk boards for students to reference.

- ✓ Additional staff

  Research shows that in some countries, such as Hong Kong, Singapore and Puerto Rico, teachers are not allowed to work both sessions to prevent fatigue in the afternoon. Therefore, more teachers are needed to cover additional classes.[21] In the United States shifts can more easily be broken up by grade level, so the teachers already at the school can be more easily split up.[22]

- ☐ State testing

<u>Administration</u>

- ✓ Work hours

  As the Bethel School District understands this model, there would be two shifts run. School A would be in the morning and School B would be in the afternoon (second shift). Each building/shift would have their own administrators, resulting in an increase in administrator costs. Teachers would also be separate – one set of teachers for School A and a second group of teachers for school B.

- ☐ Additional staff

<u>Extracurricular activities</u>

- ✓ Athletics

  Schools that choose a double-shift may face some difficulties providing athletic extracurriculars for all grade levels. Students that attend school in the afternoon may not be able to participate in sports, since competitive matches usually occur in the afternoon when those students would still be in class.[23]

- ✓ Clubs / social organizations

  Studies show that most students do not have the opportunity to participate in extracurricular activities, since schools find it hard to provide the space for practices and it can be hard to schedule times that work for all interested students.[24, 25] It is also challenging to schedule competitive matches with teams from single shift schools, since matches are typically scheduled in the afternoon when double-shift students are still in class. Without sufficient extracurricular activities, students in this model can also become bored and are in danger of becoming involved in gangs or activities that exacerbate other social problems.[26]

  Double Shifting can be difficult at the high school level since there are typically more extracurricular activities offered. [27] However, it is possible that opportunities for extracurricular activities may not be affected if the District decides to shorten break times for students and end the afternoon shift at the same time as the existing single-track schedule.[28]

- ☐ Music / band

Facilities

- ✓ Storage

  Extra cupboards, store rooms and offices are needed for teachers to keep their supplies. Extra study rooms and other facilities may also be needed for students coming to school early or staying late.[29]

- ✓ Access

  Since students are in school from early in the morning until late at night, maintenance staff have limited time and access to facilities for cleaning and completing other maintenance tasks on school equipment.[30]

- ✓ Increase in wear and tear

  Extra use of facilities in this model puts strain on school buildings and equipment. Buildings typically need to be replaced sooner than schools on a single shift system.[31]

- ☐ Additional staff
- ☐ Time

Transportation

- ✓ Additional buses/routes

  In a morning/afternoon double-shift model, additional bus routes would need to be planned to transport students to schools for each shift. These extra routes would require some additional funding. However, it is possible that additional bus drivers would not need to be hired depending on the availability of the existing staff.[32]

- ☐ Additional bus drivers
- ☐ Increase in traffic during student pick-up & drop-off

Resources

- Blatchford, Roy. (2015, June 24). Schools Must Consider Double Shifting to Accommodate Growing Pupil Numbers. Retrieved from https://www.theguardian.com/teacher-network/2015/jun/24/schools-double-shifting-growing-pupil-numbers
- Bray, Mark. (2008). Double Shift School Design and Operation for Cost Effectiveness. UNESCO: International Institute for Education Planning. Retrieved from http://unesdoc.unesco.org/images/0016/001636/163606e.pdf
- Cacho, Raynald M., Cacho, Lynle C., & Raneses, Marlon M. (2019). Decoding Double Shift Effect on Pupils, Parents and Teachers' Lived Experiences: Alternative inputs for policy improvement. International Journal of Research Studies in Education, Volume (8) Number (1), p.77-88.
- Garrett-Hatfield, Lori. The Advantages & Disadvantages of Double Shift Schools. Retrieved from https://classroom.synonym.com/advantages-disadvantages-double-shift-schools-12305457.html
- Lusher, Lester and Yasenov, Vasil. (2015, September 4). Double-Shift Schooling and Student Success: Quasi-experimental. Retrieved from evidencefromEuropehttps://lrlusher.weebly.com/uploads/1/0/0/4/10048967/lusher_yasenov__2016_.pdf

[1] Bray, Mark. (2008). Double Shift School Design and Operation for Cost Effectiveness. UNESCO: International Institute for Education Planning, p. 20. Retrieved from http://unesdoc.unesco.org/images/0016/001636/163606e.pdf
[2] Keane, J. (2018, November 15). Phone interview.
[3] Ibid
[4] Pagán Morales, Francisco. (2018, November 15). Solicitud de información del Distrito Escolar Bethel [Email interview].
[5] Ballinger, C. (2018, December 3). Phone interview.
[6] Cacho, Raynald M., Cacho, Lynle C., & Raneses, Marlon M. (2019). Decoding Double Shift Effect on Pupils, Parents and Teachers' Lived Experiences: Alternative inputs for policy improvement. International Journal of Research Studies in Education, Volume (8) Number (1), p.77-88.
[7] Ibid., 87.
[8] Keane, J. (2018)..
[9] Blatchford, Roy. (2015, June 24). Schools Must Consider Double Shifting to Accommodate Growing Pupil Numbers. Retrieved from https://www.theguardian.com/teacher-network/2015/jun/24/schools-double-shifting-growing-pupil-numbers
[10] Cacho, Raynald M., Cacho, Lynle C., & Raneses, Marlon M. (2019), 84.
[11] Bray, Mark. (2008), 48.
[12] Cacho, Raynald M., Cacho, Lynle C., & Raneses, Marlon M. (2019), 84.
[13] Bray, Mark. (2008), 40.
[14] Cacho, Raynald M., Cacho, Lynle C., & Raneses, Marlon M. (2019), 84.
[15] Bray, Mark. (2008), 51.
[16] Ibid., 50-52.
[17] Ibid.
[18] Lusher, Lester and Yasenov, Vasil. (2015, September 4). Double-Shift Schooling and Student Success: Quasi-experimental. Retrieved from evidencefromEuropehttps://lrlusher.weebly.com/uploads/1/0/0/4/10048967/lusher_yasenov__2016_.pdf
[19] Cacho, Raynald M., Cacho, Lynle C., & Raneses, Marlon M. (2019), 84
[20] Bray, Mark. (2008), 50-51.
[21] Ibid., 45.
[22] Keane, J. (2018).
[23] Ibid.
[24] Ibid., 60.
[25] Garrett-Hatfield, L. (n.d.). The Advantages & Disadvantages of Double Shift Schools [Web log post]. Retrieved October 10, 2018, from https://classroom.synonym.com/advantages-disadvantages-double-shift-schools-12305457.html
[26] Bray, Mark. (2008), 49.
[27] Keane, J. (2018).
[28] Bray, Mark. (2008), 49.
[29] Ibid., 43.
[30] Ibid., 43.
[31] Ibid., 42.
[32] Keane, J. (2018).