Increasing Usage of the District Learning Management System  
Through the Use of Professional Development in Blended Learning

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EDTC 631: Administration and Supervision of Technology in Educational Settings

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**Needs Assessment**

Charged by the Superintendent to get 100% compliance with the district’s learning management system (LMS) initiative, the professional development committee began a mixed-methods sequential explanatory needs assessment (Creswell, 2014). First, quantitative data was anonymously collected and analyzed based on a district wide survey using Google Forms. Then qualitative data was collected by means of anonymous interviews with survey respondents within the instructional staff.

Many participants did not understand the differences between in-person only, online only, and blended learning modes of professional development (PD) participation, which also begs the question if they understand the differences and possible benefits of blended learning for instructional purposes. Teachers stated in the survey that the PD provided during the initial roll-out of the LMS was sufficient and they had a thorough understanding of system basics. They felt confident using the system for document delivery, but less than 60% were doing so.

During the interviews however, based on assurance of complete anonymity and confidentiality, teachers admitted that the LMS was far more complex than existing document distribution solutions (hard-copy, Google Drive or Dropbox) and the teachers interviewed simply were not motivated to use such a complex system to replace the simple expedient of handing students papers in class. In other words, the extensive needs assessment undertaken by the professional development committee indicated that the teachers has sufficient *training* (as defined by Gartner, Inc.) but insufficient *professional development* to understand the value of an LMS in instruction (Gartner, 2012).

**Professional Development Design**

The professional development committee therefore needed a “hook” or a compelling, curriculum driven reason for faculty to embrace the system. Using the LMS for document delivery would be an obvious next step once the teachers had committed to using it for instruction.

After compiling the research data, it was determined that teachers across all content areas valued face-to-face class time, but regretted that school hours did not provide ample time for students and teachers to reflect in depth on what they had learned. Teachers also indicated a desire to provide differentiated support to students but were generally using a de facto one-size-fits-all approach in the classroom.

The professional development committee reviewed the functionality inherent in the District’s LMS and determined that the Blogging feature would allow for greater student and teacher reflection on learning activities and also that the system could support screencasting so teachers could make quick “one-off” video lessons on selected topics to provide differentiated instructional opportunities outside of traditional class time. The LMS would also allow teachers who were using other blogging or screencasting solutions to link to their existing work so that students could access all related instructional materials from one place, assuming, of course, that all necessary class documents were also available in the LMS. Therefore, by introducing teachers, librarians and administrators to Blended Learning techniques and using blogs and screencasts, the professional development committee would accomplish the superintendent's vision while also providing added value to faculty and students.

This “value-add” of crowdsourcing shared knowledge through multimodal means of blogs and screencasts will also convey to students that not only are they capable of teaching each other, but that exemplar material and intellectual property generated by students can be just as engaging and important as teacher-generated materials when and because age-level peers are the audience (Ferrante in Rowsell, 2006). Through the lens of the district’s LMS students will not only learn via blended learning experiences but, in doing so, they will slowly create their own personal learning networks (PLNs) by collecting significant screencasts, blog posts, and blog comments (Richardson & Mancabelli, 2011). Additionally, teachers within the district will be able to learn from and use each other’s blog and screencasting ideas, tips, and approaches as they too develop their own support system through the LMS. In this way the LMS will become a crucial component not only of the staff’s everyday instructional workflow but also within their professional learning communities (PLCs) and for their own professional development needs.

**Professional Development Delivery**

In order to receive the maximum benefit from the blended learning workshop participants will need to have more than a cursory understanding of the LMS. They must become insiders who can scaffold and support students through and beyond the nuances that the LMS affords. A hands-on, “learning by doing” approach for the workshop is called for, one which will take on the “I, we, you” methodology often employed in instructional settings. To foster a greater understanding of discipline-specific needs, concerns, and issues, workshop groups will be determined by content areas. (Future groups can and should be broken up by content area and/or grade levels: elementary, middle, high school.) Participants will be shown best practice, real-world use cases and exemplars of the LMS; participants will then create their own LMS artifacts for their content area.

These groups could also function as PLCs for the duration of the year, and act as an incubator for action research projects within the district to use for student and staff needs. Participants will act as their own self-contained content area cohorts and will be able to share important information about LMS best practice uses at faculty meetings and standalone professional development days throughout the academic year. In this way, the workshop—ideally situated at or before the start of the school year—would become the foundation that would inform all future PD and PLC workshops, sessions, and meetings.

**Professional Development Evaluation**

Assessing the professional development workshop will consist of analyzing qualitative and quantitative data gathered from pre- and post-workshop surveys on Google Forms (Appendix A, Appendix C), most of whose questions are arranged on a five interval Likert scale; there are however two open-ended components on the post-test where participants are asked what they plan to change about their workflow and their opinion of the quality of the workshop. The pre- and post-workshop Likert scale questions are related to the functionality of the LMS (screencasts and blogs) and are identical to each other, which will allow those analyzing the data to see if and to what degree there were improvements in participants’ understanding of the LMS. Should the training for the LMS be extended to PLCs and future PD days, the post-test survey should be given at the end of each marking period/trimester to determine if and to what degree there are improvements in participants further understanding and use of the LMS as well as any concerns that arise with more widespread and long-term use.

Evaluation of the PD workshop (or, conditionally, workshop series) should be conducted by the parties of the Supervisor of Technology, the Supervisor of Curriculum & Instruction, the Reading Specialist, Technology Leader Committee Members, and Team Leaders or those in equivalent positions. Data from the pre- and post-workshop surveys should be correlated with student grades, periodic benchmark assessments, LinkIt assessments, and NJASK/PARCC assessments to see what was successful and what areas of growth exist for student achievement facilitated by the LMS. Reports compiled by team leaders (“Blended Learning & Personal Learning Networks: Year 1 Report (Faculty/Staff)” in Appendix E.2) and by the Supervisor of Technology and Instruction and Technology Leader Committee (“Blended Learning & Personal Learning Networks: Year 1 Report (Students)” in Appendix E.2) will inform the year-end evaluation of the LMS as presented to the district superintendent, will shape how the LMS is implemented, and will contain recommendations for what changes need to be made for next year’s PD workshop series.

**References**

Campbell, B. (2012). Innovative leadership: Insights from a learning technologist. *The Quarterly Review of Distance Education, 13*(4), 233–240.

Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Los Angeles, CA: Sage.

Gartner, Inc. (2012). SIS/LMS implementation guide to professional development & training planning. Stamford, CT.

Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Thousand Oaks, CA: SAGE.

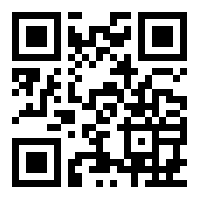
Richardson, W., & Mancabelli, R. (2011). Personal learning networks: using the power of connections to transform education. Bloomington, IN: Solution Tree Press.

Rowsell, J. (2006). Family literacy experiences: Creating reading and writing opportunties that support classroom learning. Portland, Me.: Stenhouse ;.

Sample Board Meeting Agenda. (n.d.). Retrieved December 4, 2014, from https://sites.google.com/a/awackerson.com/www/boarddevelopment/sample-board-meeting-agenda

Appendix A

[**Addressing LMS in Instruction (Pre-Workshop Survey)**](https://docs.google.com/forms/d/1q2iv91ndFTsl2AYttvcuKWmWzY5jOJPmVXuaujpO7xE/viewform)

To what degree do you agree with the following statements about the LMS in instruction? 

\* Required

**Top of Form**

**1. I understand how to use technology to implement instruction. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**2. I understand how to use screencasts to implement instruction\***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**3. I understand how to use blogs to implement instruction. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**4. I understand how to differentiate instruction using screencasts and blogs. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**5. I understand how to assess student learning using screencasts and blogs. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**6. I understand how to use data/feedback from student learning using screencasts and blogs to plan for future instruction. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**7. I understand how to use screencasts and blogs to create environments where students learn from each other. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**8. I understand how to use screencasts and blogs to create environments where students reflect on their own progress. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**9. I understand how to use screencasts and blogs to create environments where teachers can learn from each other. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**10. I understand how to use screencasts and blogs to prepare students for high-stakes, one-time assessments. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

Appendix B

**Alexandria Township Public Schools  
Professional Development In-Service Training**

Date: December 2, 2014

Time: 9:00am-3:10pm

Location: AMS Media Center

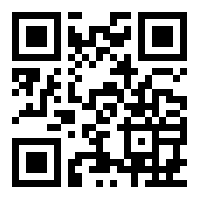
*(If you have a hardcopy please use i-nigma or another QR code app to access the QR codes below, or you may click on the links if you’re using e-mail.)*

Vision Statement: All students will utilize the Learning Management System (LMS) to prepare students to electronically retrieve and submit assignments.

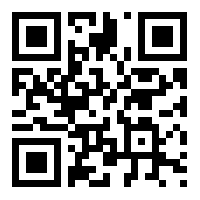
Mission Statement: The ATSD will prepare instructional faculty and key administrators on how to effectively use the district-wide Learning Management System (LMS).

**Objective: Upon completion of the training, participants will understand how to effectively implement Blended Learning experiences using blogs and screencasts (LMS).**

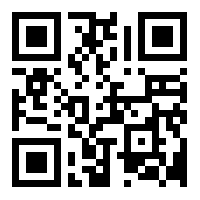
**Agenda**

Pre-Workshop Survey [Reminder](http://goo.gl/Go0Pac): 

9:00am-9:50am: Introduction to the LMS

([Teacher-to-Student](http://basicenglish3.blogspot.com/)/[Student-to-Teacher](http://basicenglish3.blogspot.com/)) ([Teacher-to-Teacher](http://alexandriaschooldistrict.blogspot.com/))

* What’s the point?
* What do they offer that in-person learning doesn’t?
* How can teachers use these to teach and students use them to learn?
* How can students use these to learn from each other?
* What are the larger implications for “crowdsourcing” learning/teaching?

10:00am-11:50am: [The Range of Utility within the LMS](http://goo.gl/DHbh59) 

* Authentic vs. Inauthentic learning experiences using Screencasting and Blogging
* Using Screencasting and Blogging to strengthen areas for growth, differentiation, and higher-challenge learning experiences
* [Using Screencasting and Blogging to address high-stakes testing](http://goo.gl/E1e9Us) 
* Using Screencasting and Blogging for assessment/using BL for peer-to-peer learning
* Using Screencasting and Blogging for reflecting on progress and as student portfolios/assessments

12:00pm-12:50pm: Lunch

1:00pm-2:25pm: Create LMS Materials (Content Area-Defined Groups)

* Create Tasks to be Completed within Content-Area PLCs for Ongoing PD throughout the Year

2:30pm-2:55pm: Presentation of LMS Materials

* Presentation of tasks to be Completed within Content-Area PLCs for Ongoing PD throughout the Year

2:30pm-3:10pm: Wrap-up Q&A Session & [Post-Workshop Survey](https://docs.google.com/forms/d/1PPCFmEgQhtlZE6I_tZTUEgaZ_uQ8A-MkWv_1PH2HMiE/viewform) 

Appendix C

[Addressing LMS in Instruction (Post-Workshop Survey)](http://goo.gl/dgeCls)

To what degree do you agree with the following statements about the LMS in instruction? 

\* Required

**Top of Form**

**1. I understand how to use technology to implement instruction. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**2. I understand how to use screencasts to implement instruction\***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**3. I understand how to use blogs to implement instruction. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**4. I understand how to differentiate instruction using screencasts and blogs. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**5. I understand how to assess student learning using screencasts and blogs. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**6. I understand how to use data/feedback from student learning using screencasts and blogs to plan for future instruction. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**7. I understand how to use screencasts and blogs to create environments where students learn from each other. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**8. I understand how to use screencasts and blogs to create environments where students reflect on their own progress. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**9. I understand how to use screencasts and blogs to create environments where teachers can learn from each other. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**10. I understand how to use screencasts and blogs to prepare students for high-stakes, one-time assessments. \***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | 1 | 2 | 3 | 4 | 5 |  |
| Strongly Disagree |  |  |  |  |  | Strongly Agree |

**11. What's something you plan to change about how you use the LMS in your work after today's workshop?**\*



**12. What was the quality of the presentation and/or the trainer?**\*

Please be as descriptive as you can with both strengths and areas for growth you believe could improve future workshops...



|  |
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Bottom of Form

Appendix D

LMS Resources

|  |  |
| --- | --- |
| [Getting Wallflowers Down From the Wall: Using Blogging Techniques to Support Discussion](http://goo.gl/LLGxgZ):  A best-practice guide informed by a great body of research that puts the pieces together for any who might wonder about the use of blogs for in- and out-of-classroom learning and teaching experiences, and plainly states why students should be involved in discussion at almost any grade and for almost any ability level. |  |
| [Basic English III](http://basicenglish3.blogspot.com/):  A real-world use case for using blogs to connect students with each other. |  |
| [ATSD Workshop Blog](http://alexandriaschooldistrict.blogspot.com/):  A real-world use case for using blogs to connect within (or between) districts on a teacher-to-teacher basis. |  |
| [An Assortment of Screencasts](https://drive.google.com/folderview?id=0B3ILRzcy3BPcZ29tWDFxdmthejg&usp=sharing):  A series of exemplars for real-world use cases in implementing screencasts as one artifact of an LMS promoting Personal Learning Networks (PLNs). These range from using screencasts to address specific literacy concerns to coaching individual teachers’/students’ needs. |  |
| [What is R.A.C.E.S., Anyway?](https://sites.google.com/site/amsrunningtheraces/):  A mash-up of a screencast and a blog addressing the popular writing response strategy of R.A.C.E.S. for a lower-middle school audience of students and their parents/caregivers. |  |
| [OEQs, Tools, and Resources](https://sites.google.com/site/ferranteotr/home):  This is a resource page where one can place an increased emphasis on hyperlinks for purposes of web page access, screencasting, blogging, etc. |  |
| [Preparing for Writing in PARCC and CCSS](http://goo.gl/abLR5Y):  This is a downloadable PowerPoint presentation that not only addresses the many shifts involved in the PARCC assessments and the Common Core State Standards responsible for the shift, but also has embedded screencasts explaining how to effectively |  |
| In this article, Bruce Campbell from Nova Southeastern University interviews Professor Ricardo Torres Kompen regarding Personal Learning Environments (PLEs). The interview is important for our studies because it differentiates between PLEs and virtual learning environments (VLEs) also known as learning management systems (LMSs). The article focuses on innovative leadership. By introducing our students to VLEs through the use of our district-wide LMS it may be possible to encourage them to eventually build their own PLEs. |  |

Appendix E

Professional Development Plan for

Blended Learning & Personal Learning Networks: Year 1

|  |  |  |
| --- | --- | --- |
| **District Name** | **Superintendent Name** | **Plan Begin/End Dates** |
| **Alexandria Township School District** | **Dr. Matthew Jennings, Ed.D.** | **August 2015 - July 2016** |

**1: Professional Learning (PL) Goals**

|  |  |  |  |
| --- | --- | --- | --- |
| **PL**  **Goal**  **No.** | **Goals** | **Identified**  **Group** | **Rationale/Sources of Evidence** |
| **1** | To use Personal Learning Networks among instructional staff based on Blended Learning experiences, all staff will receive professional development on how to use screencasts and blogs to create their own lessons, mini-lessons, and workshops targeted to specific content area concerns—specifically that of note-taking, visualization while reading, meta-cognition, questioning while reading, and summarizing while reading, as well as using higher-order vocabulary, using response strategies, providing textual evidence, and supporting argumentative responses with clear, coherent, and logical claims. (Mentor 🡪 Mentor; Mentor 🡪 Mentee) | * Supervisor of Technology * Supervisor of Curriculum & Instruction * Reading Specialist * Technology Leader Committee Members | Rationale:  Teachers will receive training on how to create BL environments, how to use BL to subordinate iterative or lower-order tasks to the home domain (e.g., reading, note-taking) in order to foster high-order engagement during classtime; additionally, teachers will learn how to use BL experiences to connect learning to the real world and how to seek out help from their peers and educators in synchronous and asynchronous modes.  Sources of Evidence:   * PD Workshop Evaluation Surveys * Grades * In-district beginning-, middle, and end-of year benchmark assessments * LinkIt assessments * NJASK/PARCC assessments   **N.B.**: After a recent survey polling instructional staff about their knowledge of Blended Learning approaches of learning and teaching, it was revealed that many faculty members might not be aware of the changes and challenges technology has brought to education. As such, staff would benefit most from PD experiences informing them about BL. |
| **2** | To use Personal Learning Networks among the student body based on Blended Learning experiences, all teacher-approved, student-created exemplar screencasts addressing the most frequently reported problem areas for literacy concerns will go into an in-district “crowdsourced” folder on the district’s Google Drive account that will be accessible by all students and educators at all grade levels (with a “view-only” permission). (Mentee 🡪 Mentee) | * Team leaders * Instructional teachers * Supervisor of Curriculum & Instruction * Reading Specialist * Technology Leader Committee Members | Rationale:  As students learn from content area teachers and begin establishing their own personal learning networks, they will also begin to instruct each other on the more nuanced and complex areas of instruction such as using just the right pieces of evidence to support a warrant or what type of connection to make when using the R.A.C.E.S. response strategy; in this way, students can begin learning from each other across disciplines, ability levels, language barriers, and even grade levels.  Sources of Evidence:   * End-of-Marking-Period Student Evaluation Surveys * Grades * In-district beginning-, middle, and end-of year benchmark assessments * LinkIt assessments * NJASK/PARCC assessments   **N.B.**: After a recent activity requiring students reflecting on their own possible areas for growth on the upcoming PARCC assessments, students self-identified the following areas as being most crucial to focus on (in order of importance from most to least):  1. Incorporating advanced/higher-order vocabulary 2. Supporting/Explaining/Elaborating  3. CWE/Ensuring body paragraphs relate to topic paragraph  4. Clarity of Thought/Making Sense  5. Weak Opening/Weak Conclusion  6. Repetition/Sentence Structure (Choppy/Lack of transitions)  7. Off-Topic (mixed up or misread the prompt)  8. Time Management |

**2: Professional Learning Activities**

|  |  |  |
| --- | --- | --- |
| **PL**  **Goal**  **No** | **Initial Activities** | **Follow-up Activities (as appropriate)** |
| 1 | * For the 5 days of dedicated PD learning embedded in the academic calendar, staff will receive training on how to create Blended Learning experiences appropriate to their content area and grade level. * Administration will also attend these trainings and will participate in the faculty’s PLCs throughout the year to facilitate the creation of building- and district-level Personal Learning Networks through Blended Learning experiences. | * If additional time is required for training, staff will be permitted to use faculty meeting times (one hour twice a month) to meet in their teams and PLCs; in addition, they will be permitted to use the 4 hours each employee is contractually owed to the district for additional Blended Learning training. * During the summer team leaders will be convened to review end-of-year faculty surveys on their reactions to the year-long initiative of creating Blended Learning within their own classrooms, and will suggest ways to move forward with the initiative in a summative report titled: “Blended Learning & Personal Learning Networks: Year 1 Report (Faculty/Staff).” |
| 2 | As screencasts and other Blended Learning artifacts are gathered, reviewed, and are approved for inclusion in the Personal Learning Network (PLN) Google Drive Folder, the Technology Leader Committee and Supervisor of Technology and Instruction will create grade-level screencasts of how to access and use the PLN Google Driver Folder for in- and out-of-school learning. These will then be shared with students. | The Supervisor of Technology and Instruction and Technology Leader Committee will meet at the conclusion of the academic year in June to review student surveys on when, how, and for what purposes students used the PLN as well as students reactions to the PLN. They will suggest ways to move forward with the initiative in a summative report titled: “Blended Learning & Personal Learning Networks: Year 1 Report (Students).” |

**3: PD Required by Statute or Regulation**

|  |
| --- |
| **State-mandated PD Activities** |
|  |

**4: Resources and Justification**

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| --- |
| **Resources** |
|  |
| **Justification** |
|  |

**Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Superintendent Signature Date**