

**Pittsburgh Public Schools  
Library Services  
K-12 Scope and Sequence**

**Information Literacy for  
Life-Long Learning**

**May 2020**

## **Chapter 1 Preliminary Documents** [Revised May 2020]

### **1.1 Rationale for *Information Literacy for Life-Long Learning***

Skills and techniques learned and practiced in the library will lead our students towards information literacy, i.e., the wherewithal needed to collect, evaluate, process, and appropriately utilize information of all sorts throughout their lives. While the library may be at the center of the “web of learning,” the long-term mission of the Pittsburgh Public School (PPS) library program is to provide our students with the resources and skills needed to succeed in today’s information-based society.

Methods and strategies for information retrieval and processing – as well as the love of literature and reading – promulgated by the PPS library program cannot stand in isolation and should not be considered ends in themselves. The librarians of the District are fully cognizant of this and expend a great deal of time and energy working collaboratively with other teachers in the learning community. In other words, the entire library experience should supplement – not supplant – any learning done within other curricula.

This scope and sequence – created for the PPS library program – provides librarians with the roadmap needed to plan our students’ library experiences, thus ensuring students an exposure to the range of information literacy and library-specific skills needed for life-long learning.

## **1.2 What was the Pittsburgh Public Schools' Library Network?**

The Pittsburgh Public Schools' Library Network was the active group of librarians and administrative staff of Library Services who worked together to create this Scope and Sequence in 2009. This document is now shared with all PPS librarians who may revise it on an ongoing basis. This most recent version was updated in May 2020.

## **1.3 Mission Statement of PPS Libraries** [Revised June 2017]

The mission of the Pittsburgh Public Schools' team of professional librarians is to provide instruction in information and digital literacy within a safe and welcoming environment where students, their families, and staff may access materials that promote a love of reading and lifelong learning. The school library in each school is a workshop in which our learning community researches, collaborates, and creates. Each librarian is the information specialist who curates a collection that supports the school's mission and the needs and interests of its students. The ultimate goal for librarians is the promotion of skills to ensure that our students are prepared as 21st-century learners and as users and creators of information.

## 1.4 Preface

This document was created by – and at the behest of – PPS librarians to help them to address the needs of our school-learning-community.

Pittsburgh, like many other urban school districts, has a mobile student population. The librarians want to help to provide a uniformity of skills learned during the students' progression through the grades, so that no child will be left behind when they move between grades, teachers or schools.

There are differences among schools within the PPS. These differences are based upon some combination of the following:

- the physical differences of the school buildings;
- the demographics of the student population;
- the academic and social needs of the students within those buildings;
- the differences in the site-based budgets;
- mandated services;
- mandated usage of varying resources; and/or,
- the scheduling of student classes.

Consequently, there are great differences among the school levels in the school libraries – and the roles of the librarians – from school-to-school. Most elementary and middle schools have a librarian on faculty only half-time. Few elementary and middle schools have a full-time librarian. Some elementary and/or middle school librarians teach each student once per week while some teach each student three or even five times per week. In fact, within any given school in the district, there may be differences as to how various grade levels utilize the library. This is at the discretion of the school principal, administrators, and schedule.

It should also be noted that in secondary schools, there are varying amounts of open scheduled time to provide the learning-community individual access to library resources. For the open schedule periods, instructional time is based upon the academic teachers collaborating with the librarians. Most of the instructional time given at this level is one-on-one or small group.

Individual lessons conforming to this sequence have been developed by the department and continue to be developed by individual librarians.

**Therefore, this document has been designed to be used as a set of recommended guidelines and lessons – rather than as a list of requirements – for individual librarians.**

## **1.5 The Role of the School Library and the Librarian** [Updated May 2020]

The school library is the center of each school's "web of learning." The library is a place that is alive with literature, learning, and the collective dreams and thoughts of our students and of authors down through the ages. It is not just a room filled with books but is a place where the patrons – our students and staff – are encouraged to indulge their curiosity and explore the avenues of their imaginations.

The library is the place to come to learn how to learn. It is a place to learn, to learn to do research and then to do research. School libraries facilitate teaching students the requisite skills necessary to become independent life-long learners.

Each school library is staffed by a certified school librarian to promote, coordinate, and facilitate these goals. The role of the librarian is six-fold:

- to make the library a safe and welcoming place within the school;
- to promote reading and the love of literature;
- to promote each student's imagination and cognitive abilities;
- to promote each student's independent, informational literacy;
- to manage the library's collection of books and other materials, including:
  - purchasing new and appropriate materials for the collection within the strictures of departmental guidelines and the library's budget;
  - circulating materials;
  - providing other management functions, per departmental policies and procedures;and,
- to collaborate with the school's faculty and administration to provide each student with additional avenues for learning.

## 1.6 Research Supporting the Role of the School Library [Added: June, 2009]

There is a significant body of research which shows a direct correlation between a well-stocked and properly staffed school library and an improvement in both standardized test scores and broad-based learning. This body of knowledge includes research conducted by the education departments of nineteen US states, as well as the education ministry of one Canadian province.

In a study first published in 2000, Keith Curry Lance determined that schools in Pennsylvania absolutely benefited from properly staffed school libraries. **In schools whose libraries had at least one full-time certified librarian and one full-time support staff member, the study showed a statistically significant increase in Pennsylvania System of School Assessment (PSSA) reading scores across all three grades tested.** Of Pennsylvania elementary schools with adequately staffed libraries, three out of five reported average or above-average reading scores. In schools with inadequate libraries, the same proportion of students was found to have below-average reading scores.<sup>1</sup> A similar study conducted in Massachusetts in 2002 showed that across all grade levels, schools with library programs consistently had higher scores on the Massachusetts Comprehensive Assessment System (MCAS).<sup>2</sup>



*Scholastic Library Publishing. School Libraries Work! 2008 edition*

The Lance study also emphasized the importance of the library collection in promoting student performance. Among Pennsylvania middle schools, the schools with the highest PSSA reading scores spent twice as much money on school library budgets as the lowest-scoring schools. However, Lance also found that the presence of a large school library collection was not enough to increase student achievement on its own. Rather, the collections made a positive contribution to the academic environment only when they were integrated into school-wide initiatives to

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<sup>1</sup> Lance, Keith Curry, Marcia J. Rodney, and Christine Hamilton-Pennell. (2000). Measuring up to Standards: The Impact of School Library Programs & Information Literacy in Pennsylvania Schools. Greensburg, PA: Pennsylvania Citizens for Better Libraries. <http://www.statelibrary.state.pa.us/libraries/lib/libraries/measuringup.pdf>

<sup>2</sup> Baughman, James. (2002). School Libraries and MCAS Scores, (Preliminary Edition). A Paper Presented at a Symposium Sponsored by the Graduate School of Library and Information Science, Simmons College. Boston, MA. <http://web.simmons.edu/~baughman/mcas-school-libraries/Baughman%20Paper.pdf>

promote information literacy across curricula. Certified librarians are uniquely qualified to initiate these collaborations.

In fact, the Lance Study in Pennsylvania showed that the size of the school library staff and collection is one of the best overall predictors of academic achievement. **Among school and community predictors, the size of the school library staff and collection is second only to the absence of at-risk conditions, particularly poverty and the low educational attainment among adults. Students who score higher on standardized tests tend to come from schools with more school library staff and more books, periodicals and videos, *regardless of other factors including economic ones.*** They also found that PSSA scores tended to increase by 10 to 15 points when all library predictors are maximized.

Another similar study in Illinois<sup>3</sup> showed that “**flexible scheduling** continues to exert a positive effect on test scores, **regardless of per pupil spending, teacher-pupil ratio, or students’ race/ethnicity. Elementary Schools with flexibly scheduled libraries performed 10% better in reading and 11% better in writing** on the ISAT tests of fifth graders than schools with less flexibly scheduled libraries.... **High schools with more flexibly scheduled libraries also had 5% higher ACT scores** than schools with less flexibly scheduled libraries.”<sup>4</sup>

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<sup>3</sup> Lance, Keith Curry, Marcia J. Rodney, and Christine Hamilton-Pennell. (2005). Powerful Libraries Make Powerful Learners: The Illinois study. 2005. Canon, IL: Illinois School Library Media Association. <http://www.islma.org/pdf/ILStudy2.pdf>

<sup>4</sup> School Libraries Work! Updated 2008 (Third Edition). Scholastic Library Publishing. p. 20.

## **1.7 Collaboration Throughout the School-Learning-Community**

As discussed earlier, skills learned in the library do not just belong within the domain of the library. More to the point, every skill learned and practiced in the library is cross-curricular, teaches critical-thinking skills, and is in service of at least one other academic subject. The library is the locus of the intersection where all of the academics of the school make up the rest of the Venn diagram.

It only makes sense, therefore, that the librarians collaborate closely with all of the other teachers of the school-learning-community to tailor the lessons taught in the library to teach information literacy skills. This collaboration will promote the students' development towards enhancing and expanding upon the lessons and topics taught elsewhere in the school. To that end, classroom exercises that are done in the library should be shared by the librarian with the corresponding teacher so that these additional assignments can be added to the academic grade. It becomes superfluous for a librarian to then assign an additional academic grade to a student.

Academic grades, in point of fact, should not be given for library work. It is this committee's experience that "library grades" tend to be counter-intuitive, counter-productive and quite often de-motivate students from having a life-long appreciation and enjoyment of the library and that for which it can be used: the enjoyment of literature, the enhancement of academic studies and research (whether personal, academic or for business).



## 1.8 How to Use This Document

Librarians teach cross-curricular critical-thinking skills. Therefore, this Information Literacy Scope and Sequence touches upon every part of a student's education.

The document is not meant as a detailed roadmap that will take each librarian and their classes, step-by-step, lesson-by-lesson, through the year. **Instead, it should be viewed as a generalized guide which each individual librarian will adapt to the circumstances, curricula, and student population in their school(s).**

It should also be noted that the skills that are referenced herein, and which are part of this Scope and Sequence, are tasked to the librarians so that they may enhance – and not supplant – the work of the teachers within the rest of the learning community. The aim of each librarian is to teach the skills that will help the students succeed in their other academic subjects (and in their lives), rather than teaching them the subject matters being studied in the other classes. For that reason, librarians aim to collaborate with their colleagues within the learning community.

As mentioned previously, it is understood that due to the lack of uniformity within the district, not every librarian will be able to cover every topic listed in the Instructional Timelines for each grade every year. This means that librarians need to monitor and reassess their students' abilities and needs each year, and throughout the year. If a student – or a class – did not learn a prerequisite skill, then the librarian should actively introduce or reinforce the “missing” skill or knowledge.

The Instructional Timelines found within each chapter provide the librarians with guidelines to determine:

- when students should be introduced to procedural knowledge (at their intellectual levels), and
- which Pennsylvania Department of Education (PDE) Academic Standard(s) correlate(s) with the listed skill or knowledge.

It is important that it be understood that the Instructional Timelines in each chapter are strictly guidelines, and librarians cannot be expected to adhere to them without deviation. For example, in Chapter 6 it is suggested that bibliography/Works Cited be formally introduced in fifth and sixth grade, with the topic to be reinforced after that. This is not to say that the general topic cannot be introduced informally – or even formally, if the students can handle it – at a much earlier age. In fact, it may be a good idea to begin informal, age appropriate discussions of the need to give credit for borrowed ideas and/or borrowed text as early as first grade. On the other hand, in a case where the librarian does not yet feel that the class is ready for a formal introduction to formal bibliographies or Works Cited by fifth grade, (s)he could work towards that goal with less formal references and/or lessons.

The subsequent section within each chapter (Discussion and Guided Questions) provides a more in-depth look at the procedural knowledge concepts to be taught. Along with each concept, questions are suggested to help stimulate learning activities and discussions. These are only suggested questions, as each librarian will have to adjust the questions to the level of the class

and the depth to which that class can comprehend the conceptual framework and the material. Also, within these matrices is a listing of which of the Pennsylvania Department of Education (PDE) Academic Standard(s) correlate(s) with the listed skill or knowledge.

This Scope and Sequence is a dynamic document that will be updated by PPS librarians as technology and/or practices change. As such, each section has its own page numbering system. The most recent revision date will be found in the bottom left of each page. Along with notices to each of the librarians when an update occurs, the most recent versions of each section will be available for download from the district's website.

## 2.1 Instructional Timeline - Orienting Students to Use the Library and its Resources

This document is a guide, not a list of requirements. Each concept should be interpreted based upon the students' grade level and integrated with the curriculum.

(I = Introduce R=Reinforce E=Expand/Expect)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Identify the librarian and any helpers.	I	I	I	R	R	R	R	R	E	E	E	E	E
Identify the purposes and functions of a library	I	I	I	R	R	R	R	R	E	E	E	E	E
Recognize and understand the role of the librarian	I	I	I	R	R	R	R	R	E	E	E	E	E
Demonstrate appropriate behavior	I	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Select, borrow and return materials</i>	-	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Demonstrate the appropriate care and handling of materials</i>	I	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Synthesize information and not plagiarize</i>	-	-	-	I	I	R	R	R	R	E	E	E	E
Locate, identify and utilize the parts of the library (if applicable)													
- <i>Circulation desk</i>	I	I	I	R	R	R	R	R	E	E	E	E	E
- <i>OPAC (Destiny®)</i>	-	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Book return</i>	I	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Computers / computer lab</i>	I	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Videos</i>	I	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Fiction collection</i>	I	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Non-fiction collection</i>	I	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Reference collection</i>	-	-	I	I	R	R	R	R	E	E	E	E	E
- <i>Picture books</i>	I	I	I	R	R	R	R	R	E	-	-	-	-
- <i>Easy Reading books</i>	I	I	I	R	R	R	E	E	E	-	-	-	-
- <i>Audio Books</i>	I	I	I	R	R	R	R	R	R	E	E	E	E
- <i>Periodicals / Magazines</i>	-	-	I	I	R	R	R	R	E	E	E	E	E
- <i>Biography</i>	-	-	I	R	R	R	R	E	E	E	E	E	E
- <i>Library webpage and its resources</i>	I	I	I	R	R	R	R	R	E	E	E	E	E

## 2.2 Discussion and Guided Questions - Orienting Students to Use the Library and its Resources

<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Questions for Discussion</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
Identify the librarian and any helpers.	What is the name of the librarian?	13.1.3.E 13.1.3.H	I.A.2 II.D.2
Identify the purposes and functions of a library	- What specific items can be found in a library?	CC.1.1.KA CC.1.1.1.B CC.1.2.K.E	I.A.2 II.A.2
Recognize and understand the role of the librarian	- What is the role of the librarian within the school and within your learning experience?	CC.1.1.KA CC.1.1.1.B CC.1.2.K.E	I.A.2
Demonstrate appropriate behavior	- What is appropriate library behavior?	13.2.5.A 13.3.3.A-C	III.B.1-2
<i>- Follow library rules and procedures</i>	- What are the library rules and procedures? - What are the rules concerning circulation? - What is the District’s Acceptable Internet Use Policy?	5.1.5.B 5.3.2.A	III.B.1-2 III.C.2 III.D.2
<i>- Select, borrow and return materials</i>	- How can materials be selected based on personal needs and interests? - How long do books/materials circulate? - How are books/materials renewed? - Where are books/materials returned? - What happens when books/materials are lost or damaged? - What are library fines? Why are they assessed?	CC.1.K.A CC.1.3.1.K	IV.A.1 IV.B.1 IV.B.2 IV.B.4 V.A.1
<i>- Demonstrate the appropriate care and handling of materials</i>	- How should library books be taken care of? - How does appropriate book care influence the life of a book? - How does taking care of books affect the school community? - What happens if books are returned damaged?	CC.1.2.K.E	III.B.3 III.D.2 IV.A.2

<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Questions for Discussion</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
<ul style="list-style-type: none"> <li>- <i>Synthesize information and not plagiarize</i></li> </ul>	<ul style="list-style-type: none"> <li>- What is plagiarism?</li> <li>- What are other forms of copying violations?</li> <li>- What are the consequences of plagiarism or copying violations?</li> <li>- How can you avoid plagiarism?</li> <li>- How can you avoid copying violations?</li> <li>- What is a citation?</li> </ul>	CC.1.4.6.W CC.1.4.7.W	IV.C.2. VI.A.1-3 VI.B.1-2 VI.D.3
<p>Locate, identify and utilize the sections/resources of the library (if applicable)</p> <ul style="list-style-type: none"> <li>- <i>Circulation desk</i></li> <li>- <i>OPAC (Destiny®)</i></li> <li>- <i>Book return</i></li> <li>- <i>Computers / computer lab</i></li> <li>- <i>Videos</i></li> <li>- <i>Fiction collection</i></li> <li>- <i>Non-fiction collection</i></li> <li>- <i>Reference collection</i></li> <li>- <i>Picture books</i></li> <li>- <i>Easy Reading books</i></li> <li>- <i>Audio Books</i></li> <li>- <i>Periodicals/Magazines</i></li> <li>- <i>Biography</i></li> <li>- <i>Library webpage and its resources</i></li> </ul>	<ul style="list-style-type: none"> <li>- Where are specific items located in the library?</li> <li>- How can we locate specific items?</li> <li>- How can knowing the organization of the library help you to locate and use materials?</li> <li>- Why is it important to know where materials are located?</li> <li>- What is the purpose of the call number?</li> <li>- What is the purpose of the prefix locator?</li> <li>- What resources are available linked via the library webpage?</li> </ul>	CC.1.2.8.L CC.1.3.1.K 16.1.6-8.5R	I.B.1-2 I.C.1 I.D.1-2 II.A.3 II.B.3 IV.A.1-2 IV.B.1 IV.B.4 IV.D.1-2

### 3.1 Instructional Timeline - Encouraging Reading and the Love of Literature

This document is a guide, not a list of requirements. Each concept should be interpreted based upon the students' grade level and integrated with the curriculum.

(I = Introduce R=Reinforce E=Expand/Expect)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Identify the characteristics of both fiction and non-fiction books.	I	I	R	R	R	E	E	E	E	E	E	E	E
Select appropriate fiction and non-fiction books for informational needs	-	-	-	I	I	R	R	R	R	R	E	E	E
Select appropriate books for recreational and personal enjoyment	-	I	I	R	R	R	R	R	E	E	E	E	E
Identify and appreciate the various styles of illustration.	I	I	I	R	R	R	R	R	E	E	E	E	E
Identify the story elements (e.g., characters, setting and story sequence). Be able to re-tell the story.	I	I	R	R	R	E	E	E	E	-	-	-	-
Respond to a story by writing or drawing.	I	I	R	R	R	E	E	E	E	-	-	-	-
Apply and integrate comprehension skills to answer questions related to previously reviewed materials	I	I	R	R	R	E	E	E	E	-	-	-	-
Identify those persons and organizations involved in the creation of a book and in publishing process	I	I	I	R	R	R	R	E	E	E	E	E	E
Locate and read award-winning titles in the library.	-	-	I	I	R	R	R	E	E	E	E	E	E
Select, read, listen to and/or view literature for enjoyment	I	R	R	R	R	R	R	R	E	E	E	E	E
Identify age-appropriate series	-	-	I	I	R	R	R	E	E	E	E	E	E
Identify age-appropriate authors	-	-	I	I	R	R	R	E	E	E	E	E	E

### 3.2 Discussion and Guided Questions - Encouraging Reading and the Love of Literature

<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Discussion and Guided Questions</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
Identify the characteristics of both fiction and non-fiction books.	- What are some of the characteristics of fiction or non-fiction literature?	CC.1.3.1.K	II.B.2 IV.B.2 IV.D.2
Select appropriate fiction and non-fiction books for informational needs	What are some of the reasons for choosing to read a fiction or a non-fiction book?	CC.1.3.1.K	II.B.2 IV.B.2 IV.D.2
Select appropriate books for recreational and personal enjoyment	What does genre mean? (Utilize the dictionary definition of the term, where genre is defined as a broad category of literature.) What are various genres of literature? What genres exist within this library?	CC.1.3.1.K	V.A.1 V.A.3 V.C.3 V.D.1-2 VI.D.1
Identify and appreciate the various styles of illustration.	- What type of illustrations does this book contain? - What do they look like to you? What does this style tell you?	CC.1.3.G	I.B.1 I.C.1 III.D.1 IV.B.1
Identify the story elements (e.g., characters, setting and story sequence). Be able to retell the story.	What are story elements?	CC.1.2.K.A CC.1.2.K.B CC.1.3.E	
Respond to a story by writing or drawing.	- What did the story make you feel or think about? - What do you think happened before the story began or after it ended?	CC.1.3.K.A CC.1.3.1.A CC.1.3.3.A CC.1.3.3.B CC.1.3.3.C	I.A.2. I.B.1-3 I.C.1 I.D.3-4 II.B.3 II.C.1-2 III.A.1-2 III.B.1-2 IV.A-2 VI.B.2
Apply and integrate comprehension skills to answer questions related to previously reviewed materials	- Can you explain what you just read? - What just happened in the story? - What do you think will happen next?		
Identify those persons and organizations involved in the creation of a book and in publishing process	- What is a book? - What is the publishing process? - What is an author? - What is an illustrator? - What is an editor?	CC.1.3.K.D	III.B.1-2 IV.B.2
Locate and read award-winning titles in the library.	What are some of the book awards given to books for young people? Why? (i.e., Newbery, Caldecott, Coretta Scott King, Nebula, Hugo, YALSA, Michael Printz)	CC.1.2.L	I.A.1-2 I.B.1-2 I.C.1 I.D.1-2 II.A.2-3

<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Discussion and Guided Questions</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
Select, read, listen to and/or view literature for enjoyment	<ul style="list-style-type: none"> <li>- How do you select literature that promotes life-long reading?</li> <li>- How can you share and promote literature to others?</li> <li>- How can you preview materials to meet your needs/desires? (skimming and scanning)</li> <li>- How can reviews help you decide whether a book (or other resource) might be interesting, relevant or worth borrowing or purchasing?</li> </ul>	CC.1.2.3.E CC.1.2.4.G	I.A.1 I.B.2 I.D.1-4 III.A1 III.B.1 III.C.1 IV.A.1-3 IV.B.2 IV.B.4
Identify age-appropriate series	What series are available for readers of your age and your interests?	CC.1.2.L CC.1.3.1-12.K	
Identify age-appropriate authors	What authors have written literature that is appropriate for readers of your age and your interests?		



## 4.1 Instructional Timeline - Teaching Students to Access Information

This document is a guide, not a list of requirements. Each concept should be interpreted based upon the students' grade level and integrated with the curriculum.

(I = Introduce R=Reinforce E=Expand/Expect)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Identify and locate the resources available from the school library	-	-	I	I	R	R	R	R	E	E	E	E	E
Identify how library resources are arranged in order to select materials	-	I	I	R	R	R	R	R	E	E	E	E	E
Recognize and define the purpose of library classification systems, including Dewey Decimal and Library of Congress	-	-	-	I	I	R	R	R	R	R	E	E	E
Use the OPAC (Destiny <sup>®</sup> ) to find specific titles, authors and/or subject	-	-	I	I	R	R	R	R	E	E	E	E	E
Locate relevant materials within the library utilizing the OPAC (Destiny <sup>®</sup> )	-	-	-	I	I	R	R	E	E	E	E	E	E
Explain how one item can be available in multiple formats (print, eBooks, or other media).	-	-	I	I	I	R	R	R	E	E	E	E	E
Locate relevant data and information utilizing databases	-	-	-	I	I	I	R	R	R	R	R	E	E
<i>- Identify the differences between a database and a search engine</i>	-	-	-	I	I	I	R	R	R	R	R	E	E
<i>- Understand that search engines utilize the concept of databases to secure results</i>	-	-	-	-	I	I	I	R	R	R	R	E	E
<i>- Define and utilize Boolean operators</i>	-	-	-	-	-	I	I	I	R	R	R	E	E
Conduct a search using PA POWER Library	-	-	-	I	I	I	I	R	R	R	E	E	E
Conduct a county-, regional- and state-wide search for resources not available in the school library	-	-	-	-	-	I	I	R	R	R	E	E	E
Generate a list of relevant resources	-	-	-	I	I	R	R	R	R	R	E	E	E

## 4.2 Discussion and Guided Questions - Teaching Students to Access Information

Building Skills and Procedural Knowledge – Students will be expected to:	Discussion and Guided Questions	PDE Standards	AASL Standards
Identify and locate the resources available from the school library	<ul style="list-style-type: none"> <li>- What different resources exist?</li> <li>- Where are they located?</li> </ul>	CC.1.2.G CC.1.2.8.G CC.8.5.6-8	I.B.1-2 I.C.1 I.D.1-3
Identify how library resources are arranged in order to select materials	<ul style="list-style-type: none"> <li>- Where are specific types of resources and collections located in our library?</li> <li>- How are books arranged on the library shelves?</li> </ul>		II.B.2 III.A.3 III.B.2 IV.A.1 IV.C.3
Recognize and define the purpose of library classification systems, including Dewey Decimal and Library of Congress	<ul style="list-style-type: none"> <li>- What is a call number?</li> <li>- Why is it used?</li> <li>- What is the Dewey Decimal System?</li> <li>- What is the Library of Congress Classification System?</li> <li>- Why do libraries (usually) use one or the other? Why?</li> <li>- Why does the Carnegie Library of Pittsburgh use both? What problems can this cause?</li> </ul>	CC1.1 CC.8.5.G CC.8.5.I	
Use the OPAC (Destiny <sup>®</sup> ) to find specific titles, authors and/or subject	How can you access resources to meet your personal and/or informational needs/ (OPAC (Destiny <sup>®</sup> ), shelf browsing, online catalog,...)	CC.14.W CC.1.5.C CC.3.5.H CC.3.6.F-H 15.4.8.L	I.A.1 I.B.1-2 I.C.1 I.D.2 II.B.1-2
Locate relevant materials within the library utilizing the OPAC (Destiny <sup>®</sup> )	<ul style="list-style-type: none"> <li>- What is the OPAC (Destiny<sup>®</sup>)?</li> <li>- What is a MARC record?</li> <li>- How can you search the OPAC (Destiny<sup>®</sup>) to find a book in the library?</li> <li>- What information in the OPAC (Destiny<sup>®</sup>) helps to locate library materials?</li> <li>- What are different ways that you can search the OPAC (Destiny<sup>®</sup>)? (i.e., author, title, subject, keyword, category...)</li> <li>- What is the <i>Resource List</i> feature of the OPAC (Destiny<sup>®</sup>)?</li> <li>- How would you further narrow a search using Boolean operators?</li> <li>- What is a card catalog? Why do some libraries still use them?</li> </ul>	CC.1.4.W CC.1.5.C CC.3.5.H CC.3.6.F-H CC.8.6.F-H	II.D.1-2 III.A.1 III.B.1 IV.A.1-3 IV.B.1 IV.B.4 IV.D.1 V.A.1 V.C.1 V.D.1 VI.A.1 V.A.3

<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Discussion and Guided Questions</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
Explain how one item can be available in multiple formats (print, eBooks, or other media).	<ul style="list-style-type: none"> <li>- What are some of the formats in which an item might be available?</li> <li>- Will the library necessarily have multiple formats of the same title?</li> <li>- What is an eBook?</li> <li>- How do I read or access an eBook?</li> <li>- What other media are available?</li> </ul>	CC.14.W CC.1.5.C CC.3.5.H CC.3.6.F-H CC.8.6.F-H	I.A.1 I.B.1-2 I.C.1 I.D.2 II.B.1-2 II.D.1-2 III.A.1
Locate relevant data and information utilizing databases  <i>- Identify the differences between a database and a search engine</i> <i>- Understand that search engines utilize the concept of databases to secure results</i> <i>- Define and utilize Boolean operators</i>	<ul style="list-style-type: none"> <li>- What is a <i>search engine</i>?</li> <li>- What is a database?</li> <li>- What is an electronic database?</li> <li>- What is an online database?</li> <li>- When using search engines are you actually using a database?</li> <li>- What other databases are available to you?</li> <li>- Why should you need/use them? - How would you further narrow a search using Boolean operators?</li> </ul>	CC.1.4.W CC.1.5.C CC.3.5.H CC.3.6.F-H CC.8.6.F-H	III.B.1 IV.A.1-3 IV.B.1 IV.B.4 IV.D.1 V.A.1 V.C.1 V.D.1 VI.A.1 V.A.3
Conduct a search using PA POWER Library	<ul style="list-style-type: none"> <li>- What is the POWER Library?</li> <li>- What resources are available?</li> <li>- How can you access it?</li> </ul>	5.3.4.C 5.3.6.C	
Conduct a county-, regional- and state-wide search for resources not available in the school library	<ul style="list-style-type: none"> <li>- What is a union catalog?</li> <li>- How do you access it through the OPAC (Destiny®)?</li> <li>- What is Access PA?</li> <li>- What can I use it for?</li> <li>- How can I access it?</li> </ul>	CC.1.4.W CC.1.5.C CC.3.5.H CC.3.6.F-H CC.8.6.F-H	
Generate a list of relevant resources	<ul style="list-style-type: none"> <li>- What resources are relevant to your topic?</li> <li>- How do you know?</li> <li>- How should you list them?</li> </ul>		

## 5.1 Instructional Timeline - Teaching Students to Identify and Evaluate Resources

This document is a guide, not a list of requirements. Each concept should be interpreted based upon the students' grade level and integrated with the curriculum.

(I = Introduce R=Reinforce E=Expand/Expect)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Use various types of reference resources													
- Learn the arrangement of various resources (alphabetical order, keywords, etc.)	-	-	I	I	I	R	R	R	R	E	E	E	E
- Use an index and table of contents (TOC) to locate information.	-	-	I	I	R	R	R	E	E	E	E	E	E
- Select appropriate resources to satisfy a specific informational need	-	-	I	I	R	R	R	E	E	E	E	E	E
- Utilize the following parts of a book													
----- title page	I	I	I	R	R	E	E	E	E	E	E	E	E
----- table of contents (TOC)	-	I	I	R	R	R	R	E	E	E	E	E	E
----- appendix	-	-	-	-	-	I	I	R	R	R	E	E	E
----- index	-	-	I	I	R	R	R	R	E	E	E	E	E
----- cross references	-	-	-	-	-	I	I	R	R	R	R	R	E
----- bibliography / Works Cited	-	-	-	-	-	I	I	R	R	R	E	E	E
----- glossary	-	-	I	I	R	R	R	E	E	E	E	E	E
- Utilize the following parts of the text:													
----- outlines	-	-	-	-	I	I	I	R	R	R	E	E	E
----- charts	-	I	I	R	R	R	R	E	E	E	E	E	E
----- legends	-	-	-	-	-	I	R	R	E	E	E	E	E
----- text boxes,	-	-	-	I	I	R	R	R	E	E	E	E	E
----- picture captions,	-	-	-	I	I	R	R	R	E	E	E	E	E
- Use the formatting of text to locate information													
----- bold	-	-	-	I	I	R	R	R	E	E	E	E	E
----- italics	-	-	-	I	I	R	R	R	E	E	E	E	E

	K	1	2	3	4	5	6	7	8	9	10	11	12
----- <i>tables</i>	-	-	-	I	I	R	R	R	E	E	E	E	E
----- <i>headings</i>	-	-	-	I	I	R	R	R	E	E	E	E	E
----- <i>subheadings</i>	-	-	-	I	I	R	R	R	E	E	E	E	E
- <i>Identify or utilize the following types of reference resources:</i>													
----- <i>almanacs</i>	-	-	-	-	-	I	I	R	R	R	R	E	E
----- <i>atlases</i>	-	-	-	I	I	I	R	R	R	R	E	E	E
----- <i>general encyclopedias</i>	-	-	-	I	I	R	R	R	E	E	E	E	E
----- <i>specialized encyclopedias</i>	-	-	-	-	-	I	I	R	R	R	R	R	E
----- <i>thesauruses (a.k.a. thesauri)</i>	-	-		I	I	R	R	R	E	E	E	E	E
----- <i>dictionaries</i>	-	I	I	I	R	R	R	E	E	E	E	E	E
----- <i>specialized dictionaries</i>	-	-	-	-	-	I	I	R	R	R	R	R	E
- <i>Generate a list of relevant resources for any given specific project</i>	-	-	-	-	-	I	I	R	R	R	R	E	E
Select appropriate resources for specific informational needs	-	-	-	I	I	R	R	R	E	E	E	E	E
Compare and contrast sources of information to select appropriate resources for specific informational needs.	-	-	-	I	I	R	R	R	R	R	E	E	E
Use a variety of electronic sources to access information (POWER Library, subscription databases, search engines)	-	-	-	I	I	R	R	R	R	R	E	E	E
Interpret information to evaluate relevancy and appropriateness of the sources, materials, etc.	-	-	-	-	I	I	I	R	R	R	E	E	E
Establish the authenticity, validity and the integrity of a source (electronic or print)	-	-	-	-	I	I	I	R	R	R	R	E	E
Evaluate a website – or other resource – for currency, accuracy and authority	-	-	-	-	I	I	I	R	R	R	R	E	E
Understand the organization/navigation of a web site/page for research purposes	-	-	-	-	-	I	I	R	R	R	R	E	E
Explore post-secondary life-skills													
- <i>Complete an online application</i>	-	-	-	-	-	-	-	I	I	R	R	E	E
- <i>Collect and compile career information</i>	-	-	-	-	I	I	R	R	R	R	R	E	E

	K	1	2	3	4	5	6	7	8	9	10	11	12
- <i>Collect and compile job information</i>	-	-	-	-	-	-	-	-	I	I	R	R	E
- <i>Collect and compile information on post-secondary training, education, apprenticeship, etc.</i>	-	-	-	-	-	-	-	-	I	I	R	R	E
- <i>Locate and compile scholarship information</i>	-	-	-	-	-	-	-	-	I	I	R	R	E
- <i>Locate examples and compile information for personal resume</i>	-	-	-	-	-	-	-	-	-	I	I	R	R

## 5.2 Discussion and Guided Questions - Teaching Students to Identify and Evaluate Resources

Building Skills and Procedural Knowledge – Students will be expected to:	Discussion and Guided Questions	PDE Standards	AASL Standards
Use various types of reference resources	<p>What kinds of reference resources exist? (print and online)</p> <ul style="list-style-type: none"> <li>- almanacs</li> <li>- atlases</li> <li>- general encyclopedias</li> <li>- specialized encyclopedias (e.g., - Groves Dictionary of Music...)</li> <li>- thesauruses (a.k.a. thesauri)</li> <li>- dictionaries</li> <li>- biographical dictionaries</li> <li>- Spanish/English</li> </ul> <p>What kind of information do you find in each?</p> <ul style="list-style-type: none"> <li>- How is the data/information arranged? (e.g., alphabetical order, keywords, etc.)</li> </ul> <p>When and how do you use each of these?</p> <ul style="list-style-type: none"> <li>- title page</li> <li>- table of contents</li> <li>- appendix</li> <li>- index</li> <li>- cross references</li> <li>- bibliography / Works Cited</li> <li>- glossary</li> </ul>	CC.1.2.8.L CC.1.3.1.K CC.1.4.W CC.1.5.C CC.3.5.H CC.3.6.F-H CC.8.6.F-H 16.1.6-8.5R	I.A.1 I.B.1-2 I.C.1 I.D.2 II.B.1-2 II.D.1-2 III.A.1 III.B.1 IV.A.1-3 IV.B.1 IV.B.4 IV.D.1 V.A.1 V.C.1 V.D.1 VI.A.1 V.A.3
Select appropriate resources to satisfy a specific informational need	<ul style="list-style-type: none"> <li>- What types of resources will help you meet your informational needs?</li> <li>- How will “brainstorming” help you?</li> <li>- Where can you find this information?</li> </ul>		
Compare and contrast sources of information to select appropriate resources for specific informational needs.	<p>How should you decide what source(s) to use? In what format(s)?</p>		

<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Discussion and Guided Questions</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
Use a variety of electronic sources to access information (POWER Library, subscription databases, search engines)	<ul style="list-style-type: none"> <li>- What databases are available to you?</li> <li>- Which databases should you use for your project?</li> <li>- How would you get information that you need from those databases and/or through these search engines?</li> </ul>	CC.1.2.8.L CC.1.3.1.K CC.1.4.W CC.1.5.C CC.3.5.H CC.3.6.F-H CC.8.6.F-H 16.1.6-8.5R	I.A.1 I.B.1-2 I.C.1 I.D.2 II.B.1-2 II.D.1-2 III.A.1 III.B.1 IV.A.1-3
Interpret information to evaluate relevancy and appropriateness of the sources, materials, etc.	What makes one piece of information more relevant to you – at any given point – than another?	CC.1.4.4.W CC.1.4.5.W	IV.B.1 IV.B.4 IV.C.1-3 IV.D.1
Establish the authenticity, validity and the integrity of a source (electronic or print)	<ul style="list-style-type: none"> <li>- Is the information current?</li> <li>- Is the source credible?</li> <li>- Who is responsible for the information?</li> <li>- What is bias?</li> <li>- Is there any observable bias?</li> <li>- Is there subrosa bias?</li> <li>- Does it provide information necessary?</li> </ul>	CC.1.4.5-8.I CC.1.4.8.J CC.8.6.6-8.A	IV.D.4 V.A.1 V.C.1 V.D.1 VI.A.1-2 VI.B.1 VI.D.2
Evaluate a website – or other resource – for currency, accuracy and authority?	<ul style="list-style-type: none"> <li>- How do I evaluate a website? What are the five criteria used to evaluate information found on a website?</li> <li>-- currency</li> <li>-- accuracy</li> <li>-- objectivity</li> <li>-- authority</li> <li>-- coverage</li> </ul>		
Utilize the following parts of the text: <ul style="list-style-type: none"> <li>- outlines</li> <li>- charts</li> <li>- legends</li> <li>- text boxes</li> <li>- picture captions</li> </ul>	What are the benefits of each of the following? <ul style="list-style-type: none"> <li>- outlines</li> <li>- charts</li> <li>- legends</li> <li>- text boxes</li> <li>- picture caption</li> </ul>	CC.1.2.4.E CC.1.2.4.G	I.B.2 III.B.1 V.A.1
Use the formatting of text to locate information: <ul style="list-style-type: none"> <li>- bold</li> <li>- italics</li> <li>- tables</li> <li>- headings</li> <li>- subheadings</li> </ul>	What do different text formats represent within a document? <ul style="list-style-type: none"> <li>- bold</li> <li>- italics</li> <li>- tables</li> <li>- headings</li> <li>- subheadings</li> </ul>	CC.1.2.1.E CC.1.2.2-4.G	



<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Discussion and Guided Questions</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
Understand the organization/navigation of a web site/page	<ul style="list-style-type: none"> <li>- What are several ways that a webpage could be organized? (tree-hierarchy, using sidebar as sitemap...)</li> <li>- Where are the standard navigational buttons? (left and top navigation buttons or tabs?)</li> <li>- What are pop-ups?</li> <li>- Are those ads and pop-ups that are visible on a page a part of the site? Or, are they using rented space?</li> </ul>	CC.1.2.L CC.1.2.5.G	III.B.1 IV.A.1-2 IV.B.4 IV.C.1 IV.D.2 V.A.2
<p>Explore post-secondary life-skills</p> <ul style="list-style-type: none"> <li>- Complete an online application</li> <li>- Collect and compile career information</li> <li>- Collect and compile job information</li> <li>- Collect and compile information on post-secondary training, education, apprenticeship, etc.</li> <li>- Locate and compile scholarship information</li> <li>- Locate examples and compile information for personal resume</li> </ul>	<p>Where can you find applications for the post-secondary opportunities of your choice?</p> <hr/> <p>Where is information available within your library and online? Outside this library?</p> <hr/> <p>Where can I find information on a full-time or part-time job?</p> <hr/> <p>Where can you find information on post-secondary opportunities of your choice?</p> <hr/> <ul style="list-style-type: none"> <li>- Where can you find scholarship opportunities?</li> <li>- Did you check the PPS website's Link-Library?</li> <li>- What is the FAFSA? - Did you complete and submit it?</li> </ul> <hr/> <ul style="list-style-type: none"> <li>- Did you find resources to help you build your resume?</li> <li>- Did you have it proofread by someone else?</li> </ul>	13.1.B 13.1.F 15.2.8.F 15.2.12.G 15.2.12.F	1.A.2 1.B.1 I.B.3 IV.A.2 IV.B.1

## 6.1 Instructional Timeline - Teaching Students to Search for Information

This document is a guide, not a list of requirements. Each concept should be interpreted based upon the students' grade level and integrated with the curriculum.

(I = Introduce R=Reinforce E=Expand/Expect)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Define the question or subject	-	I	I	R	R	R	R	R	E	E	E	E	E
Decide what information is needed to answer a given question or subject	-	I	I	R	R	R	R	R	E	E	E	E	E
Construct retrieval strategies to answer the question	-	-	-	-	I	I	R	R	R	R	R	E	E
Identify, compare and contrast multiple search engines	-	-	-	-	-	-	I	I	R	R	R	E	E
Locate relevant information from appropriate sources	-	-	-	-	I	I	R	R	R	R	R	E	E
Conduct searches that differentiate among author, title, keyword and subject searches.	-	-	-	-	I	I	R	R	R	R	R	E	E
- Use the OPAC (Destiny <sup>®</sup> ) catalog record to locate the item, title, call number and availability of the resource.	-	-	-	-	I	I	R	R	R	R	R	E	E
- Conduct various OPAC (Destiny <sup>®</sup> ) searches to obtain the best results dependent on the information problem (author, title, keyword, call number, subject, Power).	-	-	-	-	I	I	R	R	R	R	R	E	E
- Construct a search utilizing Boolean operators or truncation	-	-	-	-	-	-	I	I	R	R	R	E	E
Compile a list of appropriate sources using a <i>Resource List</i> in the OPAC (Destiny <sup>®</sup> )	-	-	-	-	I	I	R	R	R	R	R	E	E

## 6.2 Discussion and Guided Questions - Teaching Students to Search for Information

<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Discussion and Guided Questions</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
Define the question or subject	What are you looking for?	CC.1.2 CC.1.4.V CC.1.5.B-C	I.A.1 I.B.1-2 I.C.1 I.D.2
Decide what information is needed to answer a given question or subject	- How much detail do you need? - What do you need it for?	CC.1.2.8.L CC.1.3.1.K CC.1.4.W CC.1.5.C	II.B.1-2 II.D.1-2 III.A.1 III.B.1
Construct retrieval strategies to answer the question	- Where might you find the information that you need? - How can I determine whether the information is located within those sources? - How can I retrieve that information? - Where else can I search?	CC.3.5.H CC.3.6.F-H CC.8.6.F-H 16.1.6-8.5R	IV.A.1-3 IV.B.1 IV.B.4 IV.C.1-3 IV.D.1 IV.D.4 V.A.1 V.C.1 V.D.1
Identify, compare and contrast multiple search engines	- What are the advantages and disadvantages of the search strategies used by the different search engines? Why?		VI.A.1-2 VI.B.1 VI.D.2
Conduct searches that differentiate between author, title, keyword and subject searches. - Use the OPAC (Destiny®) catalog record to locate the item, title, call number and check the availability of the resource. - Conduct various OPAC (Destiny®) searches to obtain the best results dependent on the information problem (author, title, keyword, call number, subject, Power). - Construct a search utilizing Boolean operators or truncation	- What databases and/or resources are available? Via your school portal? Elsewhere? - What is a keyword search? - How do you construct a keyword search? - How do you select the best resource from available databases? - What are Boolean operators? How should they be used? - What is truncation? When should it be used?		

<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Discussion and Guided Questions</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
<p>Compile a list of appropriate sources using the <i>Resource List</i> feature within the OPAC (Destiny®).</p>	<p>- What is Destiny’s <i>Resource List</i> feature? How can you use it to aid your search process?  - From your list, how can you identify the most useful resources?</p>	<p>CC.1.2.8.L  CC.1.3.1.K  CC.1.4.W  CC.1.5.C  CC.3.5.H  CC.3.6.F-H  CC.8.6.F-H  16.1.6-8.5R</p>	<p>I.A.1  I.B.1-2  I.C.1  I.D.2  II.B.1-2  II.D.1-2  III.A.1  III.B.1  IV.A.1-3  IV.B.1  IV.B.4  IV.C.1-3  IV.D.1  IV.D.4  V.A.1  V.C.1  V.D.1  VI.A.1-2  VI.B.1  VI.D.2</p>

## 7.1 Instructional Timeline - Teaching Students the Research Process

This document is a guide, not a list of requirements. Each concept should be interpreted based upon the students' grade level and integrated with the curriculum.

(I = Introduce R=Reinforce E=Expand/Expect)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Define research	I	I	R	R	R	R	E	E	E	E	E	E	E
Define the research process	-	-	-	I	I	R	R	R	E	E	E	E	E
Define, develop and refine the question or project	-	-	-	I	I	R	R	R	E	E	E	E	E
- Analyze what is already known or experienced to form research questions, tentative thesis, theses, hypothesis, or hypotheses	I	I	R	R	R	R	R	E	E	E	E	E	E
- Formulate thesis or hypothesis to guide research	-	-	-	I	I	R	R	R	E	E	E	E	E
Develop or interpret the criteria by which your project will be evaluated (rubric)	I	I	R	R	R	R	R	E	E	E	E	E	E
Determine how much and what types of information are required to answer the question and/or complete the task	-	-	-	I	I	R	R	R	E	E	E	E	E
Assess whether primary and/or secondary sources are needed	-	-	-	-	-	-	I	I	R	R	R	E	E
Determine what types and quantities of information are available for the project	-	-	-	I	I	R	R	R	E	E	E	E	E
Plan project timeline	-	-	-	-	I	I	R	R	R	R	E	E	E
Develop appropriate search strategies	-	-	-	I	I	R	R	R	R	R	R	E	E
Locate and explore resources	-	-	-	I	I	R	R	R	R	R	E	E	E
- Examine, select and reject individual resources	-	-	-	-	I	I	R	R	R	R	E	E	E
- Utilize skimming and scanning	-	-	-	I	I	R	R	R	R	R	E	E	E
Extract and compile information	-	-	-	I	I	R	R	R	R	E	E	E	E
- Utilize appropriate note-taking skills and/or recording technologies	-	-	-	I	I	R	R	R	R	E	E	E	E
-Use appropriate tools to manipulate and process data and report results	-	-	-	-	-	I	I	R	R	R	E	E	E
Organize notes, data, and information	-	-	-	I	I	R	R	R	E	E	E	E	E
- Record data needed for the Works Cited/bibliography or for parenthetical citations	-	-	-	-	I	I	R	R	E	E	E	E	E

	K	1	2	3	4	5	6	7	8	9	10	11	12
Summarize and integrate all notes, data and information into own words	-	-	-	I	I	R	R	E	E	E	E	E	E
- <i>Create an outline</i>	-	-	-	-	I	I	R	E	E	E	E	E	E
- <i>Prepare a working draft</i>	-	I	I	I	R	R	R	R	E	E	E	E	E
- <i>Edit and refine draft</i>	-	I	I	I	R	R	R	R	E	E	E	E	E
- <i>Shape information into an appropriate format for presentation/communication</i>	-	-	-	I	I	R	R	R	E	E	E	E	E
Create a Works Cited/bibliography	-	-	-	I	I	R	R	R	E	E	E	E	E
Produce and present final product utilizing information from research	-	I	I	R	R	R	R	R	E	E	E	E	E
Participate in the evaluation processes	-	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Engage in reflective self-evaluation</i>	-	I	I	R	R	R	R	R	E	E	E	E	E
- <i>Engage in peer evaluation</i>	-	I	I	R	R	R	R	R	E	E	E	E	E

## 7.2 Discussion and Guided Questions - Teaching Students the Research Process

Building Skills and Procedural Knowledge – Students will be expected to:	Discussion and Guided Questions	PDE Standards	AASL Standards
Define research	What is research? <i>(The collecting of information about a particular subject.)</i>	CC.1.4.I CC.1.4.V CC.1.4.W	I.A.1-2 I.B.1-2 I.C.1
Define the research process	-What <i>is</i> the research process? - What are some examples of how to conduct research? <sup>5,6</sup>	CC.1.5.B CC.1.5.C CC.3.5.A	I.D.1-2 II.B.1-2 II.D.1-2
Define, develop and refine the question or topic  - Analyze what is already known or experienced to form research questions, tentative thesis or tentative hypothesis  - Formulate thesis or hypothesis to guide research	- What is <u>your</u> research question or topic? - What is your purpose for conducting your research? - What do you expect to learn from this?	CC.3.5.G CC.3.5.H CC.8.5.A CC.8.5.G CC.8.5.H CC.8.6.F CC.8.6.G CC.8.6.H 15.3.A 15.3.C 15.3.E 15.3.I 15.3.M 15.3.M 15.3.T 15.3.W	III.A.1 III.B.1 IV.A.1-3 IV.B.1-4 IV.C.1-3 IV.D.1 IV.D.4 V.A.1 V.C.1 V.D.1 VI.A.1-2 VI.B.1 VI.D.2
Develop or interpret the criteria by which your project will be evaluated (rubric)	- What is a rubric? - How is a rubric developed? By whom? - What are the requirements of <u>this</u> rubric?	CC.1.5.C CC.3.6.H CC.8.6.G	I.B.3 I.D.4 IV.D.2 VI.C.2
Determine how much and what types of information are required to answer the question and/or complete the task	- What is required to satisfy your informational needs or the project’s requirements? - How much detail is needed to succeed? - What specific formats or information are required by your teacher?		

Building Skills and Procedural Knowledge – Students will be expected to:	Discussion and Guided Questions	PDE Standards	AASL Standards
Assess whether primary and/or secondary sources are needed	<ul style="list-style-type: none"> <li>- What are primary sources?</li> <li>- Why are primary sources important?</li> <li>- When, and how, can we use them?</li> <li>- What are secondary or tertiary resources?</li> </ul>	CC.3.5.A CC8.5.A CC.8.5.1	I.B
Determine what types and quantities of information are available for the project	<ul style="list-style-type: none"> <li>- What types of information can you find? In what formats?</li> <li>- Is <u>enough</u> information available?</li> </ul>	CC.1.5.C CC.3.6.H CC.8.6.G	I.B.1-3 III.A.1 III.B1 IV.A.2 IV.B.1-3
Plan project timeline	<ul style="list-style-type: none"> <li>- What are your deadlines?</li> <li>- Who set the deadline? Why?</li> </ul>	15.3.C 15.3.5	I.B.2 I.D.4 II.B.2 V.B.1
Develop appropriate search strategies	[See <i>Evaluation and Search Strategies</i> ]	CC1.4.I CC.1.4.V	IV.A.1-3 IV.B.1-4
Locate and explore resources - Examine, select and reject individual resources - Utilize skimming and scanning	[See <i>Identify and Evaluate Resources</i> ]	CC1.4.W CC.1.5.B CC1.5.C CC3.5.A CC.3.5.G CC.3.5.H CC.8.5.A CC.8.5.G CC.8.5.H CC.8.6.F CC.8.6.G CC.8.6.H 15.3.A 15.3.C 15.3.E 15.3.I 15.3.M 15.3.M 15.3.T 15.3.W	IV.D.1-2



<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Discussion and Guided Questions</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
Extract and compile information - Compile an outline - Utilize appropriate note-taking skills and/or recording technologies - Use appropriate tools to manipulate and process data and report results	- Have you put your notes in your own words? - Did you prepare an outline? - What tools do you need to manipulate and process your data? - Do you have the tools that you need? If not, where can you get them?	15.3.I 15.3.M 15.4.B 15.4.K 15.4.L	IV.A.3 IV.B.2-4 IV.C.2 IV.D.4
Organize notes, data, and information - Record data needed for the <i>Works Cited</i> /bibliography and for parenthetical citations	- What is the difference between data and information?	CC.1.2.E CC.1.2.G CC.1.2.L CC.1.2.2.E CC.3.5.11-12.G CC.3.6.6-8	IV.A.1-3 IV.B.1-4 IV.C.1-3 IV.D.1-3 VI.A.1-3 VI.B.1-3
Summarize and integrate all notes, data and information into own words - Modify working-outline - Prepare a working draft - Edit and refine draft - Shape information into an appropriate format for presentation/communication	- How do you take notes accurately so that you have enough information to give credit to the source(s) and avoid plagiarism?	15.3.5.A 15.3.5.I 15.3.8.I	III.B.1 IV.B.3-4 IV.D. 1-3 V.B.1-2
Create a <i>Works Cited</i> /bibliography	- What are the various citation styles? Which are you required to use? - What technologies can help you format your <i>Works Cited</i> ?	CC.1.4.7.U CC.8.5.6-8.A 15.4.8.L 15.4.12.L	IV.A.1-3 IV.B.1-4 IV.C.1-3 IV.D.1-3 VI.A.1-3 VI.B.1-3
Produce and present final product utilizing information from research	- Is the format that you have selected the most appropriate method of presentation? (PowerPoint®, paper, speech, pamphlet, podcast, ...) - Have you included <u>every</u> required element for your final product?	CC.1.2.8.G CC.12.11-12.G CC.3.6.E-F	I.B.3 I.D.4 IV.D.2 VI.C.2
Participate in the evaluation processes - Engage in reflective self-evaluation - Engages in peer evaluation	- Can you demonstrate that you met the established criteria? - Did you meet each criterion included in the rubric?	CC.1.4.V.9-12	I.B.1-3 III.A.1 III.B.1 IV.A.2 IV.B.1-3

## 8.1 Instructional Timeline - Teaching Students Social Responsibility

This document is a guide, not a list of requirements. Each concept should be interpreted based upon the students' grade level and integrated with the curriculum.

(I = Introduce R=Reinforce E=Expand/Expect)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Demonstrate the appropriate care and handling of materials.	I	I	R	R	R	E	E	E	E	E	E	E	E
Use information ethically	I	I	R	R	R	R	R	R	E	E	E	E	E
<i>- Define and demonstrate respect for the concept of intellectual property (...The ideas and works of others)</i>	I	I	R	R	R	E	E	E	E	E	E	E	E
<i>- Respect license agreements/copyright and refrain from copying software and other media (e.g., images, music, video, movies, stories, books... )</i>	I	I	R	R	R	E	E	E	E	E	E	E	E
<i>Give appropriate credit for work(s) used (Refrain from plagiarizing information, graphics or ideas)</i>	I	I	R	R	R	E	E	E	E	E	E	E	E
<i>Practice fair use guidelines while photocopying and scanning</i>	-	-	-	-	-	-	-	-	-	I	I	R	R
Uses information technology responsibly	I	I	R	R	R	R	R	R	E	E	E	E	E

## 8.2 Discussion and Guided Questions - Teaching Students Social Responsibility

Building Skills and Procedural Knowledge – Students will be expected to:	Discussion and Guided Questions	PDE Standards	AASL Standards
Demonstrate the appropriate care and handling of materials.	Why does it matter how you treat a book?	CC.1.1.A	VI.A.1
Use information ethically	<ul style="list-style-type: none"> <li>- What does <i>use information ethically</i> mean? What are some examples?</li> <li>- Why should information be used ethically?</li> <li>- Who could be affected?</li> <li>- Could someone be physically or emotionally harmed?</li> <li>- Who could be hurt? How?</li> </ul>	15.3.M 15.3.I 15.3.T 15.4.L CC.1.A.I.C.17	VI.A.1-2
Define and demonstrate respect for the concept of intellectual property (...The ideas and works of others)	<ul style="list-style-type: none"> <li>-What is intellectual property?</li> <li>- Why should you care?</li> <li>- Are there legal ramifications?</li> </ul>	3A.AP.20	VI.B.2 VI.C.1
Respect license agreements/copyright and refrain from copying software and other media (music, video, movies, stories, books...)	<ul style="list-style-type: none"> <li>- What are license agreements?</li> <li>- Why should you care?</li> <li>- Are there legal ramifications?</li> </ul>	3A.AP.20	VI.D.3
Give appropriate credit for work(s) used (Refrain from plagiarizing information, graphics or ideas)	<ul style="list-style-type: none"> <li>- Have you given appropriate credit to your source?</li> <li>- Are there legal ramifications?</li> </ul>	CC.1.4.6-12.W CC.3.6.6-12/G	VI.B.2
Practice fair use guidelines while photocopying and scanning	What is the District's Fair Use Policy?	15.3.T 15.4.B	VI.C.1-2
Uses information technology responsibly	<ul style="list-style-type: none"> <li>- What is the District's Acceptable Use Policy?</li> <li>- What are the potential ramifications of misuse?</li> </ul>	15.3.M	VI.A.1-2 VI.B.2

## 9.1 Instructional Timeline - Teaching Students to be Safe Online

This document is a guide, not a list of requirements. Each concept should be interpreted based upon the students' grade level and integrated with the curriculum.

(I = Introduce R=Reinforce E=Expand/Expect)

	K	1	2	3	4	5	6	7	8	9	10	11	12
Abide by the District's Acceptable Use Policy in all respects	I	I	R	R	R	R	R	R	E	E	E	E	E
Use programs and Internet responsibly and ethically	I	I	R	R	R	R	R	R	E	E	E	E	E
Observe Internet safety procedures, including safeguarding personal information	I	I	R	R	R	R	R	R	E	E	E	E	E
<i>- Discuss and understand that irresponsible or naïve use of online resources might result in personal harm</i>	I	I	R	R	R	R	R	E	E	E	E	E	E
<i>- Discuss and understand that personal information can/will stay on the Internet, and may be used against you when <u>you</u> are looking for a job</i>	I	I	I	R	R	R	R	R	R	E	E	E	E
Identify ways of avoiding viruses and other malware	-	-	-	I	I	R	R	R	E	E	E	E	E

## 9.2 Discussion and Guided Questions - Teaching Students to be Safe Online

<b>Building Skills and Procedural Knowledge – Students will be expected to:</b>	<b>Discussion and Guided Questions</b>	<b>PDE Standards</b>	<b>AASL Standards</b>
Abide by the District’s Acceptable Use Policy in all respects	<ul style="list-style-type: none"> <li>- What is the District’s Acceptable Use Policy?</li> <li>- What are the potential consequences of misuse?</li> </ul>	15.3.M 15.3.T 15.4.B 10.3.3.A	IV.C.2 VI. A.1-3 VI.B.1-3 VI.C.1 VI.D. 3
- Use programs and Internet responsibly and ethically	<ul style="list-style-type: none"> <li>- What is cyber-bullying?</li> <li>- What is an online predator?</li> </ul>		
Observe Internet safety procedures, including safeguarding personal information	<ul style="list-style-type: none"> <li>- What safety procedures can you follow?</li> <li>- What software is out there to help to protect you and your machine? (firewalls, anti-virus software, anti-spyware software...)</li> <li>- What is a cookie?</li> </ul>		
- Discuss and understand that irresponsible or naïve use of online resources might result in personal harm	<ul style="list-style-type: none"> <li>- How?</li> <li>- What can I do to safeguard myself?</li> </ul>		
- Discuss and understand that personal information can/will stay on the Internet, and may be used against you when <u>you</u> are looking for a job	Why should you care that you (or someone else) posted personal information and/or photos of you on social networking sites or elsewhere on the Internet?		
Identify ways of avoiding viruses and other malware	<ul style="list-style-type: none"> <li>- What are different types of malware?</li> <li>- Why should you not click on pop-ups?</li> </ul>		

## **Appendix A – Parts of a Book** [Revised, May 2020]

Students – age-appropriately – will be able to identify, define and discuss the utility of each of the following:

1. Appendix (appendices)
2. Author
3. Copyright date
4. Covers, front and back (hard- versus soft- or paperback)
5. Date(s) of publication
6. Dedication
7. Dewey decimal code or other relevant code
8. Dust cover or plastic jacket
9. End pages
10. Foreword
11. Frontispiece
12. Glossary
13. Half title page
14. Illustrations
15. Illustrator
16. Index
17. Other tables (figures, illustrations, etc.)
18. Place of Publication
19. Preface
20. Publisher
21. Spine
22. Spine label
23. Table of Contents
24. Title
25. Title page
26. Verso
27. Where extant: library barcode (versus publisher's barcode)

## Appendix B - Glossary

Term	Definition
Abstract	A brief summary of the major points of a nonfiction work
Acceptable Use Policy	Document that sets forth the rules and regulations for use of the school's computers, network, and internet
AccessPA	Statewide system used to locate library materials in school, public, academic libraries across the state of Pennsylvania
Almanac	Compilation of useful information and statistics, usually published every year
Alphabetical Order	Arranged in the order of the letters of the alphabet
Anthology	Collection of literary pieces by one or more authors, such as poems, plays or short stories
Appendix (part of a book)	Supplementary material usually located at the end of a book, such as a list of references, statistical tables, or explanatory matter (Plural is appendices)
APA	American Psychological Association
APA Format	One format often required for papers and bibliographies (works cited, works consulted, page setup...)
APA Guide	online and print document with directions and examples of the APA format, printed by the American Psychological Association
Article	<ul style="list-style-type: none"> <li>- brief information on a topic</li> <li>- parts of an article can include:               <ul style="list-style-type: none"> <li>· links to fact boxes</li> <li>· headings</li> <li>· subheadings</li> <li>· sidebars</li> <li>· web pages (or links to web pages)</li> <li>· related information</li> <li>· graphics</li> </ul> </li> </ul>
Atlas	book of maps
Audio	source of information that you can hear
Audio Book	version of a book that can be listened to
Audiovisual	electronic forms of information and entertainment that provide sounds and/or images to the listener or viewer
Author	person who writes the words in a book or other literary work
Authority	criterion used in evaluating the quality of information
Autobiography	true story of a person's life written by himself or herself
Availability	<ul style="list-style-type: none"> <li>- whether a material is on hand or not</li> <li>- part of the record in OPAC (Destiny<sup>®</sup>) that tells whether a material is on hand</li> </ul>
Barcode	<ul style="list-style-type: none"> <li>- small label that can be read by a computer scanner</li> <li>- used on books and student IDs to check out materials from the library</li> </ul>
Beginning (parts of a story)	event that happens at the start of the story
Bias	<ul style="list-style-type: none"> <li>- a personal, sometimes unreasoned or unsubstantiated, prejudice</li> <li>- an organizational, sometimes unreasoned or unsubstantiated, prejudice</li> </ul>

<b>Term</b>	<b>Definition</b>
Bibliographic Entry	Information on a work listed in the bibliography/works cited; usually includes author, title, source, place and date of publication
Bibliography / Works Cited	list of sources used for research purposes
Bibliography / Works Consulted	list of works looked at during the course of research, but not actually quoted in the paper
Bibliography, Annotated	notes that provide critical or descriptive information on the works listed
Big 6	tool for organizing the research process
Biographical Notation	note or citation to a publication, book or article
Biography	true story of a person's life written by someone other than the subject of the work
Biography, Collective	collection of written histories of various peoples' lives that are compiled into one resource
Blog	- a Web site containing an online personal journal (noun) - to blog is to write or create a blog
Blogger	a person who blogs
Bluetooth	a wireless protocol that allows two, or more, appropriately configured, low power devices to communicate over short distances. Examples include: Bluetooth earpieces and some cellular phones, wireless keyboards and wireless mice, etc.
Book Care	handling books and materials appropriately
Book Jacket	usually a decorative paper book cover to catch the readers' attention
Book Pocket	paper pocket used to hold Charge Card or Date Due Slip (Card)
Book Return	the location designated for returned library materials
Book Selection	process of choosing books to borrow
Bookmark	thin paper placed in a book to mark the place
Bookmark, Electronic	- the process of marking a chosen website for future reference - an electronic shortcut to reach a chosen website
Boolean Searching	logical system that uses operators such as "AND", "OR", and "NOT" that either broaden or narrow the results of a search
Borrower	someone who checks something out and returns it by the due date
Browse	to look through a collection of materials with or without a particular goal
Browser	software used to locate and display Web pages
Call Number	combination of letters and numbers assigned to a book that gives it a unique location in the library (See also Dewey and Library of Congress)
Captions	text used to explain pictures and illustrations
Catalog	- searchable online database which provides a listing of the materials owned by a library - indicates location and loan status of the materials (See also OPAC)
Characters	- individuals who take part in the events of the story - graphic symbols used in writing or printing



<b>Term</b>	<b>Definition</b>
Charge Card	card that patron fills out when checking out materials from library (where extant)
Check Out	process of borrowing materials (How do librarians die? <sup>7</sup> )
Circulation	process of selecting and borrowing library materials that are later returned to the library media center
Circulation Desk	service area where books and materials are checked out and returned
Computer	electronic machine used for inputting, processing, storing and retrieving data
Content Page	Information page(s) of a web site; linked to the homepage on a multi-page website
Controlled Vocabulary	- for librarians' purposes, either authorized or agreed upon terms used for subject indexing - vocabulary based upon reading level
Copyright	legal right granted to the creator of a work to control its use
Copyright Date	year in which the author applies to the Library of Congress for a copyright on the book
Cover	protects the pages of the book from damage
Cross Reference	a term that leads to another term or name where additional or similar information can be found (as in "see," "see also" or a hyperlink)
Currency / Current	a criterion used to evaluate quality of information; whether or not the information is up to date
Data	- factual information (as measurements or statistics) used as a basis for reasoning, discussion, or calculation - information output by a sensing device or organ that includes both useful and irrelevant or redundant information and must be processed to be meaningful - information in a numerical form that can digitally transmitted or processed ( <a href="http://www.m-w.com/dictionary/data">www.m-w.com/dictionary/data</a> )
Datum	- singular of data - something used as a basis for calculating or measuring ( <a href="http://www.m-w.com/dictionary/datum">www.m-w.com/dictionary/datum</a> )
Date Due Slip	notice placed in book pocket at time of check-out reminding patron of materials due date
Date(s) of Publication	year(s) when a work was published
Database	searchable index or catalog in electronic form [examples: Gale Resources, Facts on File, OPAC (Destiny <sup>®</sup> )]
Dedication	the inscription at the front of a book, by the author(s) as a mark of respect or affection for another person
Destiny <sup>®</sup>	the OPAC software, created by the Follett software company, currently in use by the Pittsburgh Public Schools.
Dewey Decimal Classification System	system used for organizing library materials by subject content
Dewey Decimal Code (or Number)	number or code used to locate specific library material by Fiction or Non-Fiction

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<sup>7</sup> They check-out. Gotcha!

<b>Term</b>	<b>Definition</b>
Diagram	photograph or drawing with important parts labeled
Dictionary	an alphabetical listing of words and their meanings, pronunciations, syllabication, etymology, etc.
Dictionary, Abridged	condensed dictionary, fewer entries
Dictionary, Biographical	dictionary of people, with short descriptions
Dictionary, Foreign Language	definitions of non-English words
Dictionary, Geographical	dictionary of places, with short descriptions
Dictionary, Subject	dictionary terms for one area of knowledge
Dictionary, Unabridged	expanded dictionary, more entries
Dictionary, Visual	dictionary with pictures rather than text
Dongle	A device that plugs into and protrudes (dangles) from a computer. Examples include USB drives, USB blue-tooth transmitters, external USB wireless adaptors, devices that act as a security measure to enable the use of certain software, etc.
Due Date	the date material must be returned to the library
Dust cover	usually a clear plastic (mylar) cover to protect the book
Dust Jacket	see book jacket
DVD	Digital Video Disk – larger storage capacity than a CD
E	location prefix for Everybody book (a.k.a. “Easy Book”)
eBook	book in digital format
email	electronic mail sent over a network
Encyclopedia	work containing informative articles on subjects in every field of knowledge in logical, searchable order, usually alphabetical by subject
Encyclopedia, Electronic	encyclopedia that is in electronic format (CD-ROM or web-based)
Encyclopedia, Subject	reference book with all articles on one area of knowledge
End (parts of a story)	culmination of events that happen during the last few pages of the story
End pages	the pages that attach the front and back covers to the book – essential for binding
Everybody Books	easy-to-read and picture books

Term	Definition
Everybody Section	section of the library where Everybody Books are located
FIC	location prefix for Fiction
Fable	a narrative intended to convey a moral. Animals or inanimate objects with human characteristics often serve as characters in fables
Fair Use	a legal concept that allows for the reproduction of copyrighted material for certain purposes without obtaining permission and without paying a fee or royalty
Fiction	an invented or imagined story (e.g., historical fiction, science fiction, fantasy, realistic fiction, mystery, romance, horror, etc.)
Field	space allocated for a particular item of information in a database
File sharing	the practice of making files available for other users to download over the Internet and smaller networks (Sharing files often infringes copyright and/or fair use)
Firewall	Software and hardware designed to filter inbound and (hopefully) outbound communications to/from users' computers and/or a network to keep out "spam" and malware.
Folktales	stories originally told orally for many generations to teach lessons such as how to act, right or wrong, and the history of the people
Footer	- part of the web page, usually at the bottom which contains the author, institution, date created and/or date updated along with contact information (footer may only appear on the homepage of the site) - part of a printed page that appears at the bottom of every page in that document
Foreword	-a <b>foreword</b> is a short (or long) piece of writing often found at the beginning of a book, and written by someone other than the author of the book
Frontispiece	a decorative illustration which precedes and usually faces the title page
Full Record	(in the OPAC) contains information about the selected item such as the call number, subjects, summary, number of pages, etc.
Full Text	complete contents of a journal article online
Genre	<ul style="list-style-type: none"> <li>• a category of artistic, musical, or literary composition characterized by a particular style, form, or content</li> <li>• style of literature that has specific conventions of writing: e.g., <ul style="list-style-type: none"> <li>- Biography</li> <li>- Fable</li> <li>- Fairytale</li> <li>- Fantasy</li> <li>- Fiction</li> <li>- Fiction, Historical</li> <li>- Fiction, Realistic</li> <li>- Fiction, Science</li> <li>- Folklore</li> <li>- Legend</li> <li>- Nonfiction</li> </ul> </li> </ul> Poetry
Glossary	alphabetical list, in a book, that contains definitions of special or difficult words

<b>Term</b>	<b>Definition</b>
Half Title Page	the title of a book as printed, in full or in brief, on the leaf preceding the title page, usually in a smaller size of the font in which the title proper is printed on the title page
Hold Shelf	- shelf where book(s) await the patron who requested it
Hyperlink	an electronic link from one place in a document to another place in that document or to a site on the Web
Hypothesis	- an assumption made for the sake of argument - the supposition made to test against
Illustration	a picture or diagram that helps make something clear or attractive
Illustrator	the person that illustrated a book or written work
Instant messaging	an online tool that allows text messages to be sent bi-directionally between two people
Interlibrary Loan (ILL)	process of requesting and borrowing materials from another library
Internet	- a computer communication network used to retrieve information from a variety of computer systems - uses TCP/IP as its networking protocol
Index	- a list of items (names, topics, etc.) found at the end of a printed work that tells the page number(s) on which information can be found on that subject - a portion of a database file that is used to speed up the sorting of that file
IP Address	- Internet Protocol Address - the address of a computer on a network (for example: 192.168.1.735)
ISBN	A unique 10- or 13-digit number given by the publisher to identify a specific book, which uses a system recommended for international use
Journal	scholarly periodical
Keyword	word used as a reference point for finding information; a significant or descriptive word
Keyword Search	search which is not field specific
Legend	story about mythical or supernatural beings or events, or a story coming down from the past, especially one popularly regarded as historical although not verifiable
Legend	explanation of symbols used on a map
Librarian	professional trained in the management and organization of materials and in collection development
Library Assistant	library support person
Library Barcode	a printed label containing machine-readable data encoded in vertical lines, which are read into an attached computer by an optical scanner and used to identify books and other materials for circulation
Library Homepage	Internet page which organizes electronic access to the library's resources for the patrons: library links to pathfinders, online references and related web sites
Library of Congress	- the unofficial national library of the United States, located in Washington, D.C - acts as the research library for the Legislative Branch - administers the U.S. copyright system - <a href="http://www.loc.gov">http://www.loc.gov</a>
Library of Congress Subject Headings	Standard list of terms published by the Library of Congress which are used as subject headings for the library (See Controlled Vocabulary)

<b>Term</b>	<b>Definition</b>
Limiters	parameters set to narrow a search
Link	Electronic connection between two pieces of information
Literary Award	Honor given to a book, author, or illustrator for outstanding work based on specific criteria
Literary criticism	Analysis of works of literature by professionals
Location Prefix	part of the assigned call number that designates the collection an item will be located in as well as the format
Luddite	- vernacular term for a person that avoids, or opposes, change – especially technological change - historically: one of a group of early 19th century English workmen – during the Industrial Revolution – that destroyed knitting machines, steam engines, and other labor-saving devices as a protest against modernity that would eliminate jobs and destroy their way of life (Name is thought to be derived from Ned Ludd from Leicestershire workman who destroyed a knitting frame)
Magazine	periodical on specific topics intended for the general public
Main Headings	major subjects listed in an index
MARC Record	MAchine Readable Cataloging -- the record for each library item
Malware	Any malicious software. Usually these are placed onto computer users' machines without her/his consent or knowledge and are used to make the users' machines a "zombie" or to steal personal or corporate information. Types of malware include spyware, viruses, trojans, key loggers, etc.
Media (plural of Medium)	(see medium)
Medium (singular of media)	- the physical material – or the method of conveyance -- on which an artistic expression (i.e., book, story, picture, song, etc.), performance, information or data file is conveyed - book, periodical, painting, printed photo, digital photo, CD, DVD, online digital source, vinyl record, papyrus, clay, stone
Middle (parts of a story)	Events that happen between the beginning and the end of a story
MLA	Modern Language Association
MLA Format	one format often required for papers and bibliographies (works cited, works consulted, page setup...)
MLA Guide	online and print document with directions and examples of MLA format published by the Modern Language Association
Newspaper	type of periodical covering current events (see also periodical)
Nonfiction	prose writing that is factual or true
Non-print	sources that are not printed on paper
Notes	important information written down in the reader's words
Online Periodicals	periodicals accessed via the computer from the library homepage

<b>Term</b>	<b>Definition</b>
Online Reference	reference source in web-based format that may exist as a print reference as well
Online Subscription	Electronic resource which is paid for
OPAC	Online Public Access Catalog - computer catalog of the books and materials owned by a library. Pittsburgh Public Schools uses Follett's Destiny <sup>®</sup> as its OPAC.
Overdue	library material that is not returned to the library by the due date
Overdue Notice	notification that library material is overdue
Page Elements	headings, subheadings, outlines, legends, print cues (bold, italics, underlines...), charts, tables, text boxes, picture captions, etc.
PB	location prefix for Paperback books
PDF (Portable Document Format)	file format that allows files to be viewed as images, maintaining the original look of the document
Periodical	published at regular intervals under the same title (see also newspaper, magazine, journal)
Photographs	pictures that have been taken with a camera
Place of Publication	city where a material is published
Plagiarism	an act of literary theft; using something created by another individual without acknowledgement
Plot (story elements)	<ul style="list-style-type: none"> <li>- structure of a story</li> <li>- sequence in which the author arranges events</li> <li>- may have a protagonist who is opposed by an antagonist, creating what is called a conflict</li> <li>- often includes the rising action, the climax, the falling action and the resolution</li> </ul>
Poetry	<ul style="list-style-type: none"> <li>- Writing that aims to present ideas and evoke an emotional experience in the reader through the use of meter, imagery, connotative and concrete words, and a carefully constructed structure based on rhythmic patterns</li> <li>- Typically relies on words and expressions that have several layers of meaning</li> <li>- Oftentimes makes use of the effects of regular rhythm and may make a strong appeal to the senses through the use of imagery</li> </ul>
POWER Library	free online subscriptions to digital resources (including specialized search engines and databases) available via public and school libraries that have been made available from the Commonwealth of Pennsylvania
Power Search	search in OPAC or other search engine utilizing Boolean logic
Preface	a preliminary statement at the beginning of a book, usually written by the author, stating the origin, scope, purpose, plan, and intended audience of the work and including any afterthoughts and acknowledgements of assistance.
Print Media	print media include such forms as newspapers, periodicals, magazines, books, newsletters, advertising, memos, business forms, etc.
Producer	person or agency responsible for play, motion picture, video
Publisher	person or company that produces printed or non-print materials
Publisher's Barcode	ISBN in barcode format
Q	<ul style="list-style-type: none"> <li>- location prefix for an oversized book</li> <li>- quarto (printed on a quarter of a large sheet of printing paper)</li> </ul>
R	location prefix for Reference

<b>Term</b>	<b>Definition</b>
Record	computer entry for each title in the library which provides the user with the item's call number, author, and title
Recreational Need	selecting books for leisure reading
Reference Book	nonfiction book used for information and/or research
Reference Section	area in the library where reference materials are shelved
Reference, Specialized	reference book specializing in limited subject area
Remote Access	access from an off-site location
Renew	To extend the due date for a material
Research	process of investigating a subject by using various resources
Reserve Collection	group of library materials placed into a temporary collection for a specific group of students, faculty or for an assignment
Reserve Shelf	storage shelf for reserve materials set aside for a class assignment
Resource List	- a way to create a list of books in the OPAC (Destiny®) - useful for location and bibliography
Responsibility	- the legal and moral accountability to do the right thing - trustworthiness
Rubric	an evaluation tool, with point values assigned which helps students cover the components of the assignment
Scanner	- device that converts text or pictures into an electronic format - device for reading barcodes and translating them into a form usable by the computer
School Librarian	professional teacher trained in the management and organization of information and materials and in collection development for the library
Search Engine	program on the Internet that locates web resources
Search Strategy	the selection of keywords, subject headings, broader and narrower terms, limiters, sources to search
Search Textbox	place where a subject, title, author, or keyword is typed to begin a search
Search, Advanced or Power	search using Boolean operators or limiters to narrow or focus the search
Search, Basic	searching by a single term
See Also	cross reference term directing searcher to additional locations
Sequence (part of a story)	series of events in a story that follow each other in a particular order
Setting (part of a story)	location and time where a story takes place
Shelf Labels	signs placed on each shelf of the library to help students locate materials
Shelf Marker	plastic marker used to indicate the place of a book temporarily removed from the shelf
Shelf Place Marker	plastic marker used to indicate the place of a book temporarily removed from the shelf

<b>Term</b>	<b>Definition</b>
Sketch	rough drawing that shows only the main features of an object
Social Networks	online social networks create communities of people who share interests and activities, or who are interested in exploring (online) the interests and activities of others. Most social networking services are web based and provide a various way for users to interact online, such as personal webpages, email, video, file sharing, blogging, discussion groups.
Source, Primary	text and/or artifacts that tell or show a firsthand account of an event; original works used when researching
Source, Secondary	- text and/or artifacts used when researching that are derived from something original - materials that interpret, assign values to, interpret, conjecture upon and draw conclusions about the events reported in primary sources
Spine	backbone of the book which holds the pages together
Spine Label	label on the spine which tells where the book is located in the library; contains the call number
Spyware	malicious computer code that is downloaded by users via the Internet, email, instant messaging, or via other programs. This type of malevolent program now accounts for more than 75% of the malware circulating. Spyware usually does provide financial gain to its originators, whether via a marketing scheme or outright identity theft. Spyware has taken the place of the “traditional computer virus” in today’s online world.
Stacks	tall shelves in the library where most of the books are shelved
Status	part of the record in an OPAC that tells whether a material is on hand (see also: availability)
Story Collection	books which contain more than one story
Story Elements	includes characters, setting, the problem, events, and the solution
Subheading	secondary topic related to the original heading
Subject	topic of a book or other work
Subject Headings	standardized words or phrases assigned to books and articles and used to index these items by topic (see also: controlled vocabulary)
Summary	briefly tells what the book or article is about
Table of Contents	list of chapters, their titles and page numbers
Tables	figures, illustrations, etc
TCP/IP	- transmission control protocol / Internet protocol - the network protocols used by the Internet and Ethernet
Thesaurus	dictionary of synonyms
Thesis Statement	- basic argument advanced by a speaker or writer who then attempts to prove it - subject or major argument of a speech or composition
Title	name of the book or other work
Title Page	page at the beginning of a book that includes author, illustrator, title, and publisher
Union Catalog	the listing of holdings of library network (i.e., in more than one library)
URL (Uniform Resource Locator)	address of a website



<b>Term</b>	<b>Definition</b>
Truncation	substituting an asterisk for a letter in an online search or shortening the word in order to find various endings
Validity	criterion used to evaluate quality of information; whether or not it has authority
Verso	- back of any page - often used to refer to the page of a book with all of the copyright information
Video	magnetic tape used for recording both picture and sound
Volumes	individual books in a set
Web Guides	list of websites pre-selected by experts in the field
Website	the web pages associated with a particular organization or function
Wiki	An online site that allows the visitors to the site to directly edit it.
Wikipedia	An online encyclopedia that is a wiki. Readers and users have the ability to both access and edit the entries. Any user can set him/herself up as an authority to edit. This means that while many entries are excellent (because they have been edited by an authority on a subject), many others contain factual and/or interpretive errors, and many entries have a noticeable or subtle bias.
Works Cited / Bibliography	list of works used for research
Works Consulted	list of works looked at during the course of research, but not actually quoted in the paper
World Wide Web (WWW)	portion of the Internet consisting of interconnected, linked documents accessible via web browsers
Web-of-Learning	