

### **I. School Library Information:**

We succeeded in finding 19 titles for a total cost of \$796.45, not including two free websites. Our group chose John Acton's library collection from Mod 5. It is the J. W. Leary Junior High (grades 7 and 8) in Massena Central School District located in Massena, New York. It can be accessed at <http://mcj.sllboces.org/bin/home>. In Mod 5 John chose to analyze his 600 – Technology category. It consists of 610 books, 40 reference titles, three periodicals and two databases. The 600 books and reference titles comprise about 6.98% of the total collection in John's Jr. High library. There are 454 students in this building and every one of them accesses some information in the 600 Dewey series at least once per year due to a inventors/inventions unit done in 7<sup>th</sup> grade Technology classes and a Manufacturing Design unit done in 8<sup>th</sup> grade Tech classes. All classes for these units are brought to the library for several days to perform their research. In addition, smaller projects in Health classes result in some 600 category use.

### **II. Description of Needs, Rationale of Collection Management Plan:**

The current 600 portion of this collection has a fair number of titles (1.43 per student) and shows pretty heavy use over the year (110% PRU for non-reference, the bulk of the area). In addition, the 600 titles are used a lot by other schools in the region through ILL – this school receives \$1000/year from the regional library system just for adding 600 titles to its collection. The primary problem seen with the 600 titles is its age – an average of 14 years. This is not a good practice for this Dewey group due to the rapidly changing nature of technology itself. The 600 titles are going to be aggressively weeded by the SLMS this year and new replacement titles from the \$800 budget will help reduce this 600 collection age problem.

Suggested criteria that should be used when spending the \$800 include:

- Grade 5-9 reading level (YA may work for some titles)
- Only 1 non-English language (there are no ELL students in this school)
- Only 1 Fiction title – the FIC area of this collection is large and current
- 600 Reference works or sets to be included only if a perfect “fit” is found
- Only 1 AV title (we have access to thousands from a regional AV library 15 miles away)
- Curricular needs require an emphasis on inventors/inventions and manufacturing design (620 and 670-690)

- A conference with Health and Tech teachers revealed upcoming revisions to the Health curriculum (taught to all 8<sup>th</sup> graders.) The details of changes are unknown at this time but the Health teacher asked that the 610 subgroup be updated with newer titles.

### **III. *Process for Locating Resources and List of Tools Used***

All four group members contributed to the Annotated list. Per the rubric, our tools used included:

**Review site or print index:** *Booklist Online*; used advanced search, Youth Nonfiction/Technology in taxonomy, *inventions* as keyword, Booklist print issue, 2006-2010, Book published 2005-2010, Dewey 600-699 and Grade 5-9 ( for the **Young** title.)

**Commercial database/online inventory:** Follett *Titlewave* online (**multiple** titles), Marshall Cavendish Publishing, Heinemann-Raintree Publishing, Bound To Stay Bound online (**multiple** titles and Amazon.com online (**Young** title.) The process generally consisted of using advanced search, keywords (Inventions, Inventors, Health, Manufacturing, Applied Science, Young Adult, Middle School, Technology, etc.), Dewey 600, Nonfiction and Reference, Grade 5-8 Interest Level, recent years and all reviews/awards.

**Core list or topical bibliography:** *Children's Books In Print* via OCLC First Search via Mansfield SL&IT database ( the **Parker** title.) Also, *Wilson Middle and Junior High Core Collection* via EBSCO via Mansfield SL&IT database (**Bearce** and **Gifford** titles.) Advanced searches using health or technology>subject, reproduction or inventors>keyword, active ISBN, book, recent years and Dewey 600 parameters were used.

### **Annotated List**

#### **Books:**

Bearce, Stephanie. *All About Electric and Hybrid Cars*. Mitchell Lane Publishers, 2009. *Wilson Mid & Jr H Core Collection*. Web. 22 Mar. 2010.

ISBN:978-1-58415-763-2 (lib bdg) Price: \$21.50

Dewey: 629.222 Reading Level (Grade):4 5 6 7 Interest Level: 3-6

Reviewed: *Booklist* (October 1, 2009 (Vol. 106, No. 3))

This title describes how hybrid and electric cars work as well as new inventions in the automotive industry, including vehicles powered by hydrogen and solar powered cars. It has many pictures and stories about celebrities with their hybrid cars. Information about the inventions of various kinds of cars should contribute to a 7<sup>th</sup> graders inventions project.

Bunch, Bryan H. The History of Science and Technology: A Browser's Guide to the Great Discoveries, Inventions, and the People Who Made Them, From The Dawn of Time To Today. Houghton Mifflin, 2004. 76p.

ISBN#: 0-618-22123-9 Price: \$33.96

Dewey: 509 Interest Level: AD Reading Level: N/A

Reviewed: *School Library Journal* (October 2004)

With a great use in the area of inventions and manufacturing design this book will provide an in depth look at a variety of topics. This book is divided into 10 periods, each beginning with an overview of major advances, many of which caused controversy in political, social, and religious arenas. The introductions are followed by yearly chronicles of specific accomplishments ranging from the time when hominoids used pebble tools through 2003. In all there are more than 7000 brief entries under such broad headings as "Tools," "Construction," "Astronomy," "Food & Agriculture," "Physics," and "Mathematics."

Camp, Carole Ann. American Women Inventors. Enslow Publishers, 2004. 104p.

ISBN#: 0-7660-1913-6 Price: \$19.95

Dewey: 609 Interest Level: 5-8 Reading Level: 7.4

Reviewed: *Horn Book* (October 2004)

With only an average of 1.34 books per student, the collection was in need of more books in terms of quantity for this section. Books on inventors and inventions are needed to update this collection. This book profiles 10 women inventors in the U. S., from Madam C. J. Walker, the child of former slaves whose hair products made her a millionaire, to astronaut Ellen Ochoa, who served on the first crew to the International Space Station. The accounts are little more than dull, dutiful chronologies, and there's not much about the inventors' personal lives. More exciting are the discussions of the work and the women's breakthrough roles in male-dominated professions. The profile of Gertrude B. Eilon is a triumph. Denied a job in the 1930s because "she might

distract the male workers”, she never earned a Ph.D., but she went on to share the Nobel Prize in Medicine for her work with chemotherapy and anticancer drugs. Documentation is a big part of all the narratives, with full chapter notes at the back leading readers on to Web sites.

Currie, Stephen. African-American Inventors and Inventions. Lucent Books, 2009.

ISBN#: 1-42050-121-6 Price: \$25.96

Dewey: 608 Interest Level: 5-8 Reading Level: Unknown

Reviewed: *Booklist* (February 2010)

After looking at the list of books in the collection, it is in need of books on inventions by minorities. This book is currently not available, but will be available for purchase next month.

Finkelstein, Norman H. Three Across : the great transatlantic air race of 1927. Calkins Creek, 2008.

ISBN#: 9781590784624 Price: \$18.92

Dewey: 629.13/N Interest Level: 9-12. Reading Level: 8

Reviewed: *Kirkus* (08/15/08)

This is a great source that could be used for many classes within the school building. It is a great addition to the technology section because it showcases the story of three pilots and planes that were competing to be the first to fly nonstop between Paris and New York. Students within their technology classes could use it as a way to look into inventions and inventors. History students could also use the book when looking into new technology and advancements during different time periods (1920s). This is a great book for the collection because it is a newer release yet touches on events of the past.

Gifford, Clive, and David Cousens, il. 10 Inventors Who Changed the World. Kingfisher, 2009.  
*Mid & Jr H Core Collection*. Web. 22 Mar. 2010.

ISBN-13: 978-0-7534-6259-1 Price: \$12.74

Dewey: 609 Interest Level: 5-8 Reading Level: 5.9

Reviewed: *Booklist* (October 15, 2009 (Vol. 106, No. 4))

The innovative efforts of nine men and one woman are presented here. Some of the names will be familiar (Galileo, Franklin, Edison, Curie) while others will prove less so (Isambard Kingdom Brunel, Glenn Curtiss, Sergei Korolev). Each section offers a succinct yet thorough biography of the inventors. Striking graphic-novel-style art is a visual aid to draw readers into each setting and era. Again, more choices for Technology students researching inventors and inventions.

Landon, Rocky. A Native American Thought of It: Amazing Inventions and Innovations. 48p.

ISBN#: 1-55451-155-0 Price: \$16.96

Dewey: 609.7 Interest Level: 5-8 Reading Level: 6.5

Reviewed: *Resource Links* (February 2009)

This book was chosen because we have a significant students population of Native American descent and it is relevant to the designated topic. This book describes more than seventy inventions and innovations from Native Americans, and includes information on totem poles, fishing nets, birch-bark megaphones, syringes, lacrosse, and more.

Parker, Steve, and Adam Miller. The Reproductive System (2<sup>nd</sup> Edition). Body Focus Ser. Chicago: NA-h [Imprint], July 2009. 48p.

ISBN: 9781432934217 Price: \$22.00

Dewey: 612.6 Grade Level: 6-8 Ages: 11-13

No review could be found, including at the publisher website. Similar works by this publisher are highly regarded, in general. Preview will be required.

This title explores how humans reproduce themselves, including the structure of the male and female systems. It explains the different illnesses and injuries that can affect the reproductive system, from sexually transmitted diseases to problems during pregnancy. It is needed to replace a 1994 book of the same title to upgrade the relevancy of the health curriculum collection.

Podesto, Martine. Inventions. Gareth Stevens, 2009. 104p.

ISBN#: 0-8368-9214-3 Price: \$23.25

Dewey: 600 Interest Level: 5-8 Reading Level: 5.3

Reviewed: *Library Media Connection* (May 2009)

This book was chosen to update and enhance the collection in relation to inventions. The book describes how a number of inventions came to be, and covers fire, ice skates, money, soap, chocolate, toys, toothpaste, music, and more; and is presented in question and answer format. The book includes print and Web resources for further information.

Sutherland, Jonathan. Aircraft Carriers. Gareth Stevens, 2008

ISBN#: 9780836883763 Price: \$24.55

Dewey: 623.825/N Interest Level: 8-12 Reading Level: 6.3

Reviewed: *School Library Journal* (00/01/08)

This resource focuses on the main features of aircraft carriers and the missions that took place in them. It was noted that every student within the Technology classes spends one week in the LMC on invention/inventors for a research project. This is one source that might grab the attention of students who are interested in air and space technology. The source uses pictures and descriptions to showcase how different parts of the carriers work together.

Sutherland, Jonathan. Submarines. Gareth Stevens, 2008.

ISBN#: 9780836883794 Price: \$24.55

Dewey: 623.825/N Interest Level: 8-12. Reading Level: 5.9.

Reviewed: *School Library Journal* (00/01/08).

This resource was chosen because it would appeal to students who are interested in marine life. Within the pages it describes the key features of underwater ships. The book provides pictures to showcase how different parts work in relation with one another. This source would be a great addition for technology and history classes within the school.

Wheeler, Jill C. Alternative Cars. ABDO, 2008.

ISBN#: 9781599288031 Price: \$18.22

Dewey: 629.22/N Interest Level: 8-11 Reading Level: 6.5

Reviewed: *Booklist* (02/15/08)

This book examines alternative ways to fuel internal combustion engines. It would be a great addition to the LMC because it relates to present day environmental issues. This book could be used by many departments in the school including: technology, science, and history. Many

students who are interested in automobiles and/or the environment would find this resource interesting. The book uses graphics and pictures that relate to the students in present day schools.

Woolf, Alex. Death and Disease. Lucent Books, 2004. 48p.

ISBN#: 1-59018-533-1 Price: \$23.96

Dewey: 610 Interest Level: 5-8 Reading Level: 7.9

Reviewed: *Library Media Connection* (August 2005)

This book will help update collection for the upcoming revisions to the Health Curriculum. It examines issues of health and disease in the Middle Ages, discussing the medical knowledge inherited from the ancient world, medicine and treatments, famine and death, leprosy and plague, the Black Death, the development of medical schools and hospitals, and other topics.

Young, Jeff C. Inspiring African-American Inventors: Nine Extraordinary Lives. *First Search*, Myreportlinks.com, 2009. 128p.

ISBN: 978-1598450804 Price: \$33.27

Dewey: 608.996 (by publisher, could also be 920) Grades: 5-8 Ages: 9-12

Reviewed: *Booklist* (February, 2010)

This collective biography profiles nine African-American inventors: Lewis Howard Latimer, Jan E. Matzeliger, Granville T. Woods, George Washington Carver, Madam C. J. Walker, Garrett A. Morgan, Percy Lavon Julian, Patricia Era Bath, and Lonnie G. Johnson. The book discusses inventions such as the shoe-lasting machine, the three-way traffic signal, synthesized cortisone, and laser surgery for cataracts. Well illustrated, the nice graphics will attract the attention of most juvenile readers. The census of African-American students in our school is growing and this multi-cultural title is needed for the inventors/inventions unit.

### **Reference Set:**

Inventors and Inventions. Marshall Cavendish, 2008. *Wilson Mid & Jr H Core Collection*. Web. 22 Mar. 2010.

ISBN: 978-0-7614-7761-7 Price: 5 volume set, \$399.95 (discounted, verified on 3/26/10)

Dewey: 609 Reading Level (Grade): 6 -10

**Starred** Review: *Booklist* (March 1, 2008)

In its starred review, *Booklist* writes “The choice of inventors, the inclusion of more than 1,000 full-color illustrations, and the highly readable and engaging text all create a valuable reference for students and browsers alike. Schools and public libraries serving upper-elementary through high-school students where the study of inventors and inventions is a curriculum topic will want to give full consideration to this resource. ” This review and others by *School Library Journal* and *Library Journal* can be found at [http://www.marshallcavendish.us/marshallcavendish-us/reference/catalog/science/technology/InventorsandInventions\\_fr.xml#](http://www.marshallcavendish.us/marshallcavendish-us/reference/catalog/science/technology/InventorsandInventions_fr.xml#). The description and recommendation fit the needs of this collection perfectly and we feel this set should be on the \$800 purchasing list. A phone call to Marshall Cavendish on March 26 revealed that they update their non-encyclopedia reference sets every five years, approximately. This set will not need to be replaced until at least 2014.

#### **Periodical:**

*OWL*. OWL KIDS, Toronto, ONT., yearly subscription

Publisher URL: <http://www.owlkids.com> US Price: \$29.95 per year – 10 issues

Dewey: 500.9-7 Interest Level: Ages 9-12

Although this magazine is published out of the country it seemed like a good application for middle school students to find fun facts about science and technology. The articles provide information on the science of how things work. It also contains puzzles, quizzes and contests for active engagement of the reader. Although this magazine’s Dewey classification is 500, it allows for the exploration of how things work.

#### **DVD:**

Inventions and Inventors. Learning Media of America, p. 2001, c. 2001, 30 min. DVD

UPC: 8252070000390 Price: \$24.95

Dewey: 609 Interest Level: 5-8

This 30 minute DVD provides background information on some of the greatest inventors of our time, including Benjamin Franklin, Thomas Edison, the Wright brothers, and others. This informational DVD provides a brief overview of some of the greatest accomplishments of our time. This would be of great benefit to the teacher introducing the unit on inventions and inventors.

**Fiction Title:**

Hedstrom-Page, Deborah. From Telegraph to Light Bulb with Thomas Edison. B&H Publishing, 2007. 84p., ill. (some col.)

ISBN#: 978-0-8054-3271-8 Price: \$8.49 (Hardcover)

Dewey: Fiction Interest Level: 5-8 Reading Level: 6.0

Item found in Titlewave, but not review by *SLJ*, *Booklist* or *Bound to Stay Bound* – must preview.

This fiction title will provide prospective on the life of Thomas Edison, the story is presented through the eyes of Thomas Edison's apprentice Jimmie. Fiction is a great way to introduce a lesson and engage students to the topic of inventors.

**ELL/Easy Read:**

Seachrist, Darren. Inventions and Inventors. Crabtree, 2009. 32p., col. ill.

ISBN#: 978-8-80778-418-62 Price: \$13.32

Dewey: 609.73 Interest Level: 8-10 years old Reading Level: 3.5

Item not reviewed – must preview

This graphic novel introduces the reader to Edison, Marconi, Bell and other scientist. The graphic novel format is a great way to capture the interest of an ELL student or a struggling reader. This book provides informational access to all readers.

**Free Websites:**

1. [www.kidskonnnect.com/subject-index/15-science/86-inventors-a-inventions.html](http://www.kidskonnnect.com/subject-index/15-science/86-inventors-a-inventions.html)

Price: Free website Produced by: Kids Konnect / hosted by JIK Ometrix.net c. 2010

Interest Level: 5-8

This portal provides a listing of related websites that have been reviewed for safety and content. Links provide access to inventor's biographies, and how things work. These links provide access to many famous inventors and their inventions. An advanced Google search was utilized, using "inventors and inventions" and "youth", as parameters. This advance search yielded many hits. This portal was reviewed by teachers for content and safety.

2. [www.howstuffworks.com](http://www.howstuffworks.com)

Price: Free website Produced by: Discovery Communication, c.1998-2010 Howstuffworks, Inc.

Interest level: 5 - Adult

This unique website explores how things work using easy to understand language. The use of videos, quizzes, puzzles and pictures provide an interactive experience on functions of everyday items, from automobiles to people. This website provides answers to many technological advances and the question of how things work. An advanced Google search was utilized, using "inventors and inventions" and "youth", as parameters. This advance search yielded many hits. This site is produced by Discovery Communications, which is reviewed by professionals in specific content areas. Discovery is a major content contributor to the field of education.