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### A Primer in Science and Engineering Collection Development

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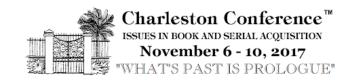


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# A Primer in Science and Engineering Collection Development



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# **Academic Subject Background**

### Example - Wind power, Civil & Environmental Engineering

### But Selectors may also cover:

- Applied & Engineering Physics
- Biomedical Engineering
- Chemical and Biomolecular Engineering
- Computer and Information Science
- Electrical engineering
- Earth and Atmospheric Sciences
- Materials Science
- Mechanical & Aerospace Engineering
- Operations Research and Information Engineering
- Systems Engineering



http://rodmartin.org/

Learn about faculty research, reference books, primary publishers, engineering societies, student research projects; attend seminars, promote services.

Use Scopus or WOS to see where faculty publish and where they cite.

# **Usage Statistics**

Important to consult COUNTER stats

Look at critically



www.projectcounter.org

High use – one month or multiple; Current (JR1), Denials (JR2) and Archive (JR5)

Denials – for items you have – may mean discovery issue

Consult with individual faculty if department doesn't respond

Don't be afraid to cancel



Patrons have other options – many books published on the same topic, ILL

# **Technical Services**

Learn as much as you can about technical services. Will help with discovery and access.



- GOBI, OASIS ordering systems
- Library management system
- Discovery layers
- How often records get loaded
- Proxy
- Updated IP ranges
- APIs
- Cataloging issues

May discover you don't have access to what you're paying for.... - can follow-up to get this resolved.



www.prnewswire.com blogs.library.duke.edu



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# Faculty and the Collection

# **Collections Philosophy**

- Responsive research collection
- Decision making grounded in strategic choices
- Greatest good for greatest number
- Incorporates ethical considerations and values
- Incorporates guiding principles for various types of resources

# **Drivers that Influence Decisions**

- Users
- Data
- Librarians
- Market
- Business
- Values

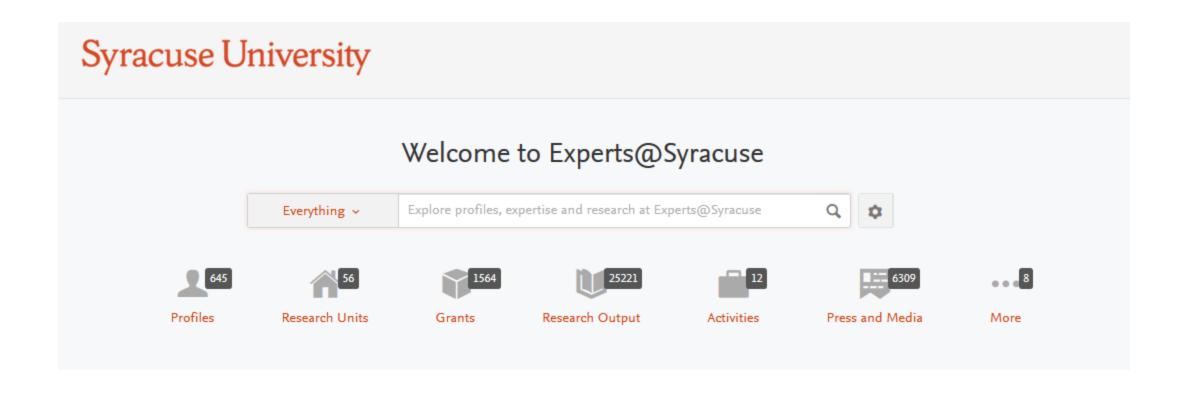
# **User Driven Decisions**

- Research and teaching of institution
- Faculty grants and institutional focus
- Suggest a title
- Evidence-based buying models
- Interlibrary loan
- Buy not borrow

# **Subject Librarians**



## **Current Research**



# **Explaining the Budget to Faculty**

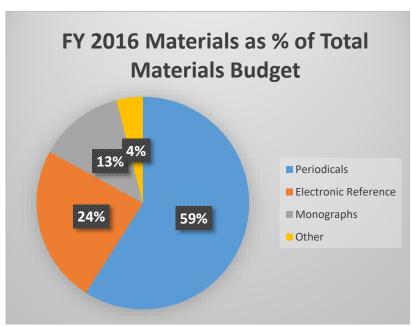
- Ratio of print/electronic: approximately 25/75
- Most of budget already committed at start of fiscal year
- 3-5% unplanned each year
- To increase the unplanned portion would require:
  - Cancelling subscriptions
  - Buying fewer books
  - Hobbling infrastructure

# **Important Factors**

- Transparency
- Communication
- Relationships

Collecting Monographs Print & Electronic



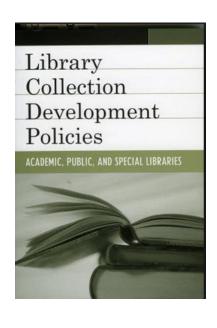


# Collection Librarian must have knowledge of:



- Mission Vision of Institution
- Curriculum/Research
- The Approval Plan Process
- Budget
- Collection Management
   Policies
- Acquisitions
- Weeding

### **Collection Development Policies for Print – Elements of**



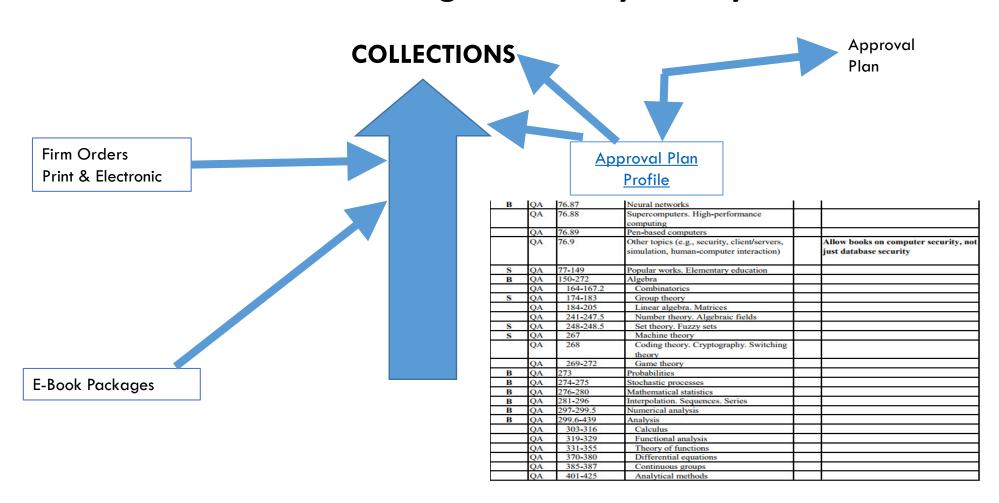
- Purpose
- Language
- Chronology
- Geography
- Publication Date
- Treatment of Subject
- Types of Materials and Formats
- Area Resources
- Subjects and Collecting Levels

### **Collection Development Policies for E-Books – Elements of**

What matters when considering Collection Development Policies for title-by-title E-formats?

- Functionality of the platform
- Number of Simultaneous users
- Course Reserves
- E-Book exact content as print
- Images –are they sharp?
- Competitive Pricing
- Duplication of Formats
- Perpetual Access of purchased titles
- Access through Campus-wide IP
- Weeding is it necessary?

## **Collection Building in a Variety of Ways**



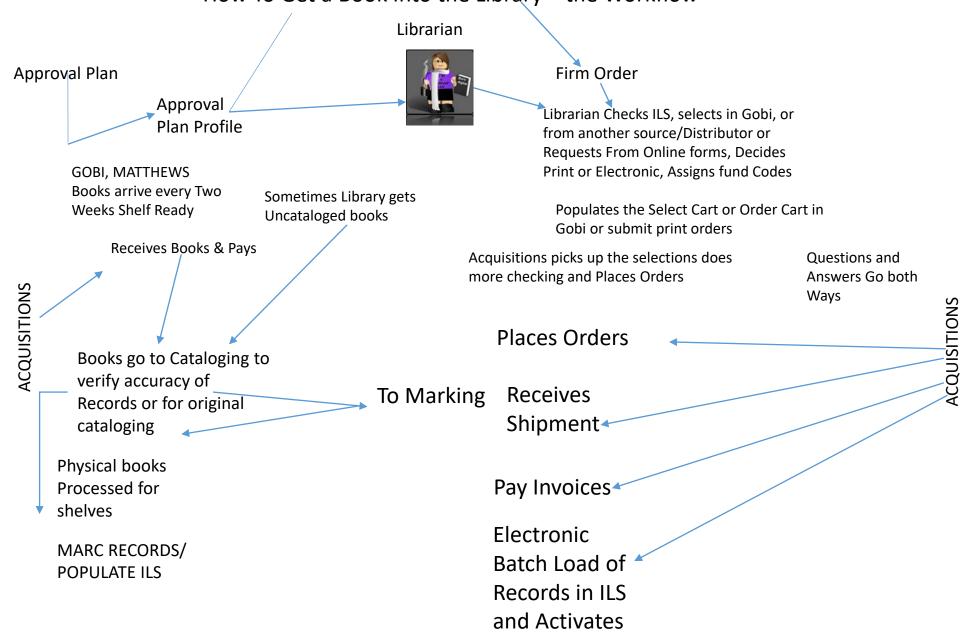
# A Section of the Approval Plan Profile -VCU

|        |    | TJ        | Mechanical Engineering &   |          |  |
|--------|----|-----------|--|----------|--|
|        |    |           | Machinery  |          |  |
| Action | -  | LC Range  | Description  | Fund     | Exceptions                                   |
| В      | TJ | 1-1570    | Mechanical Engineering &   | 1 1      | Price ceiling exception-\$175;               |
|        |    |           | Machinery  |          | ePreferred                                   |
|        | TJ | 1-162     | General. History   |          |  |
|        | TJ | 163-169   | Power resources. Energy conservation                                       |          |  |
|        | TJ | 170-211   | Mechanics of machinery. Movements. Robotics                                |          |  |
|        | TJ | 212-226   | Control engineering  |          |  |
|        | TJ | 227-253   | Machine design and construction  |          |  |
|        | TJ | 254-267   | Combustion engineering. Heat engines.<br>Turbines                          |          |  |
|        | TJ | 268-750   | Steam engineering  |          |  |
|        | TJ | 751-806   | Miscellaneous motors and engines   |          |  |
|        | TJ | 807-835   | Renewable energy sources. Solar energy                                     |          |  |
|        | TJ | 836-939   | Hydraulic machinery  |          |  |
|        | TJ | 940-1039  | Vacuum technology. Pneumatics  |          |  |
|        | TJ | 1040-1124 | Machinery exclusive of prime movers<br>(Brakes, bearings, tribology, etc.) |          |  |
| S      | TJ | 1125-1349 | Machine shops  | $\vdash$ |  |
| S      | TJ | 1350-1424 | Hoisting and conveying machinery   | $\vdash$ |  |
| S      | TJ | 1425-1479 | Lifting and pressing machinery   |          |  |
| S      | TJ | 1480-1500 | Agricultural machinery   |          |  |
| X      | TJ | 1501-1529 | Sewing machines  |          |  |
| S      | TJ | 1530-1570 | Other special machinery (e.g.: coin operated machines)                     |          |  |
|        |    | TK        | Electrical Engineering. Electronics. Nuclear Engineering                   |          |  |
| Action |    | LC Range  | Description  | Fund     | Exceptions                                   |
| В      | TK | 1-9971    | Electrical Engineering. Electronics.<br>Nuclear Engineering                |          | Price ceiling exception-\$175;<br>ePreferred |
|        | TK | 1-440     | General. History   |          |  |
|        | TK | 441-451   | Management of electrical enterprises                                       |          |  |

### Publishers' List

| В                 | 3380-11           | APPROVAL    | .s   |
|-------------------|-------------------|-------------|------|
| IMPERIAL COLLEG   | E PRESS           | Imprint ID: | 714  |
|                   |                   |             |      |
| В                 | 3380-11           | APPROVAL    | .S   |
| INANNA PUBLICATI  | ONS               | Imprint ID: | 2943 |
|                   | ASSOCIATION PRICE | ING PUBLIS  | HER. |
| В                 | 3380-11           | APPROVAL    | .S   |
| INDIANA UNIV PRES | ss                | Imprint ID: | 791  |
|                   |                   |             |      |
| В                 | 3380-11           | APPROVAL    | .S   |
| INDUSTRIAL PRESS  | 3                 | Imprint ID: | 2255 |
|                   | ASSOCIATION PRIC  | ING PUBLIS  | HER. |
| В                 | 3380-11           | APPROVALS   |      |
| INFINITY SCIENCE  | PRESS             | Imprint ID: | 2962 |
|                   |                   |             |      |
| В                 | 3380-11           | APPROVAL    | .S   |
| INFORMA HEALTHO   | CARE              | Imprint ID: | 7929 |
|                   | LIST PRICE PUBLIS | HER.        |      |
| s                 | 3380-11           | APPROVAL    | .S   |
| INFORMATION AGE   | PUB               | Imprint ID: | 1235 |
|                   | LIST PRICE PUBLIS | HER.        |      |
| В                 | 3380-11           | APPROVAL    | .s   |
| INFORMATION SCI   | REFER/IGI         | Imprint ID: | 2957 |
|                   |                   |             |      |
| s                 | 3380-11           | APPROVAL    | s    |
|                   |                   |             |      |

### How To Get a Book Into the Library – the Workflow



### **Electronic Resources**

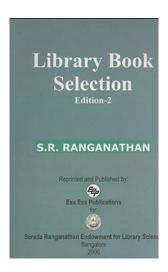
### **E-Book Packages**

Choosing a Vendor/Aggregator

- -Reputation
- -Customer Care
- -Platform
- -Communication turn around time What to negotiate?
- DRM Free
- Ability to download Chapters
- Ability to loan chapters
- Interlibrary loan
- Consortium Access
- Course Reserves
- Regular Updates



- Databases
- Functionality
- Images -are they sharp enough?
- Do a trial before signing the license
- Consortium Access



What to consider in Selection?

- Curriculum
- Level
- Research
- Interdisciplinary
- Cost
- Print Vs Electronic
- Publication Date

# How do you judge quality of your collection?

Faculty Feedback from LibQual<sup>TM</sup>

Faculty and Graduate Students Focus Groups

 WorldCat Collection Evaluation – benchmarking against collections of peers and inspirational peers

# It is all about negotiation...

# Know what you want

- Do your homework know options for formats, providers & local compatibilities - consequences if not added to collection
- Think how product is to be used every title is potential Reference work & textbook
- Consider whether this is a local or consortia purchase
- Arrange for a trial before committing
- Price may determine needs
  - Cost per use
- Terms of license
  - What is critical?
  - What can you live without?

# Varied resources are critical in STEM coverage

- Journals key content from professional societies (Engineering/Computer Science) & commercial publishers
- Conference papers/proceedings also important
- Standards & specifications critical content from technical bodies (ASTM, societies, government agencies, international bodies)
- Books & book chapters eBooks preferred
  - Packages/collections from publishers, aggregators & 3<sup>rd</sup> party providers (Knovel)
- Media growing interest & many examples of multi-media
- Case Studies, Tech Reports from academe, industry, government
- Images & models

# Read license carefully

- Model license terms can be negotiated for local needs (<u>UC/CDL</u>, <u>CRL</u>, <u>NERL</u>
- Important issues
  - Perpetual access for what you pay
  - Usage statistics
  - Walk-in users
  - Repurposing
  - Downloading / copying rights
  - ILL access
  - Remote access
- Work with colleagues in Acquisitions or eResource team
- Institutional deal breakers indemnification is major issue

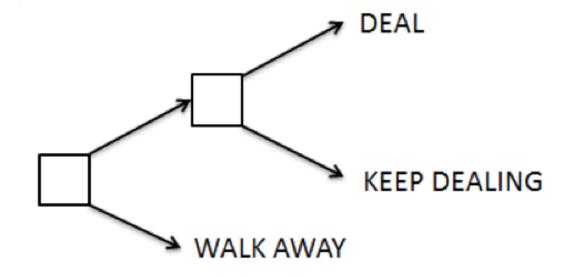




- Solutions may take time
- Learn relationships between publishing families
- Consider local processing procedures
  - Individual records MARC
  - Frequency of new content being added
- Assessment exercises time to renew
- User satisfaction
- Impact on collection

# Options & Consequences

- Be prepared to walk away
- Don't be pressured into anything
- Do your due diligence ahead of time
- Ask for other customers to contact about user experience
- Know competition in marketplace



# Other Hints

- Develop personal licensing toolkit
- Become familiar with vendors / suppliers / distribution channels
- Acquisition models for both print & eBooks
  - Vocabulary
  - Acronyms
- Jurisdiction matters
- Tie in to Copyright, Fair Use practices