



Alma Analytics Comparative Collection Analysis



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How does it work?

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Real preliminary test case

Introduction

- In 2017 Benchmark Analytics was released and is continuously being enriched with additional KPIs (Key Performance Indicators).
- In 2019 there are plans to release Comparative Collection Analysis

Introduction

- Benchmark Analytics focuses on **breadth** of comparison, using a large a span of coverage comparing **many** institutions.
 - Data is high level KPI such as Electronic Journal usage or number of overdue returns in the last year
- Comparative Collection Analysis will focus on **depth** of comparison, using a **small number** of predefined mutually-consenting institutions
 - Data is detailed such as list of titles in a specific LC classification held by my institution and the peer institutions



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Real preliminary test case

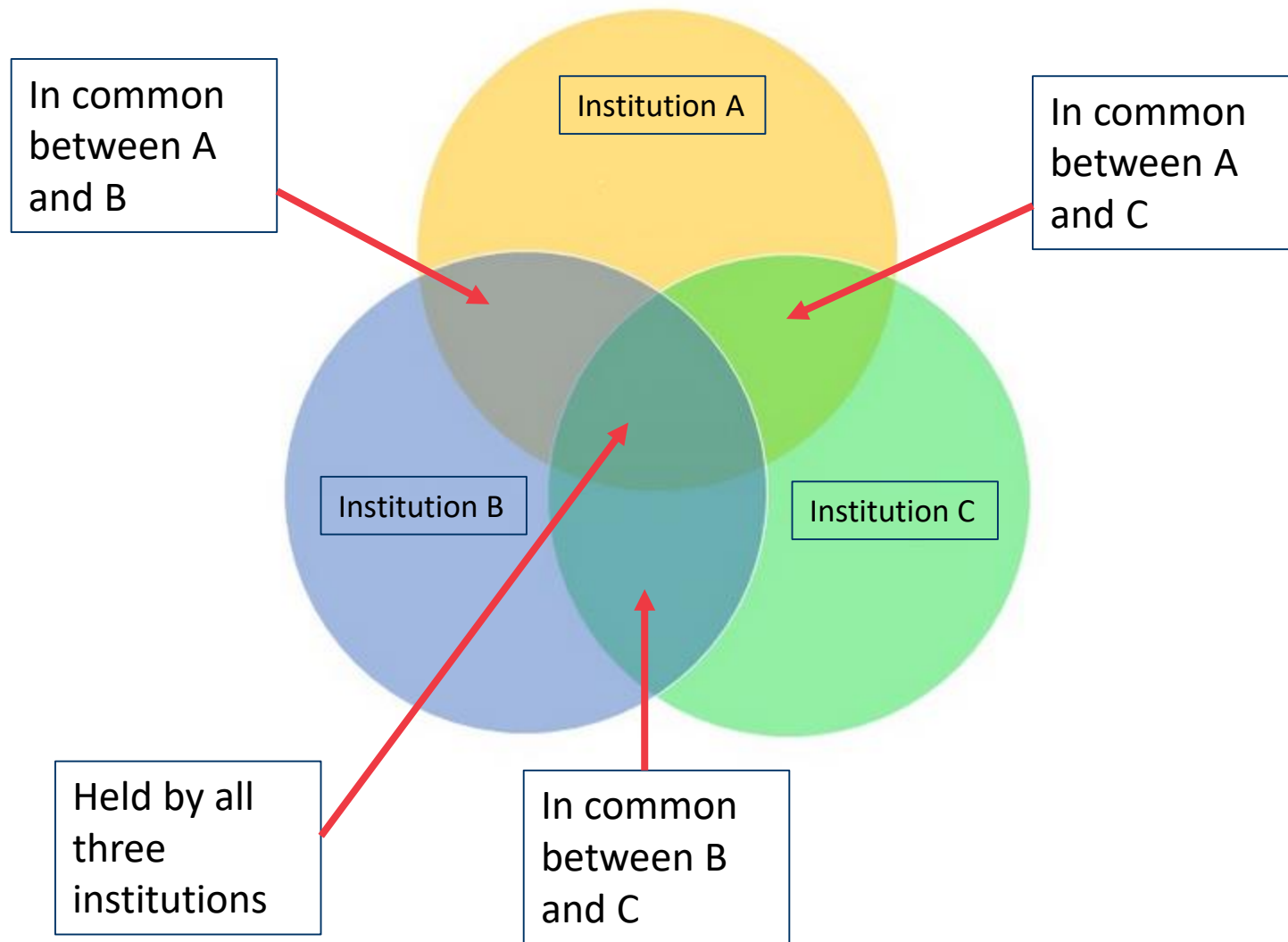
Comparative Collection Analytics - Overview

- The overall goal and idea of the Comparative Collection Analytics is for the institution to be able to understand the collection relative to a set of peer institutions
- Peer institutions have agreed (mutually) to work together in a known and identified manner
- This will enable the institution to, for example
 - Create weeding (withdrawal) plans
 - Effectively create a collection development policy by knowing what subjects are held by other institutions which are my peers and thus accessible to my patrons.

Comparative Collection Analytics

- Bibliographic and inventory data is compared with that of other predefined peer institutions.
- Example 'queries':
 - How much overall overlap is there between your collection and those of your peers?
 - How many of your items are unique among your set of predefined peers?
 - How old is your collection compared to those of your peers?

Comparative Collection Analytics



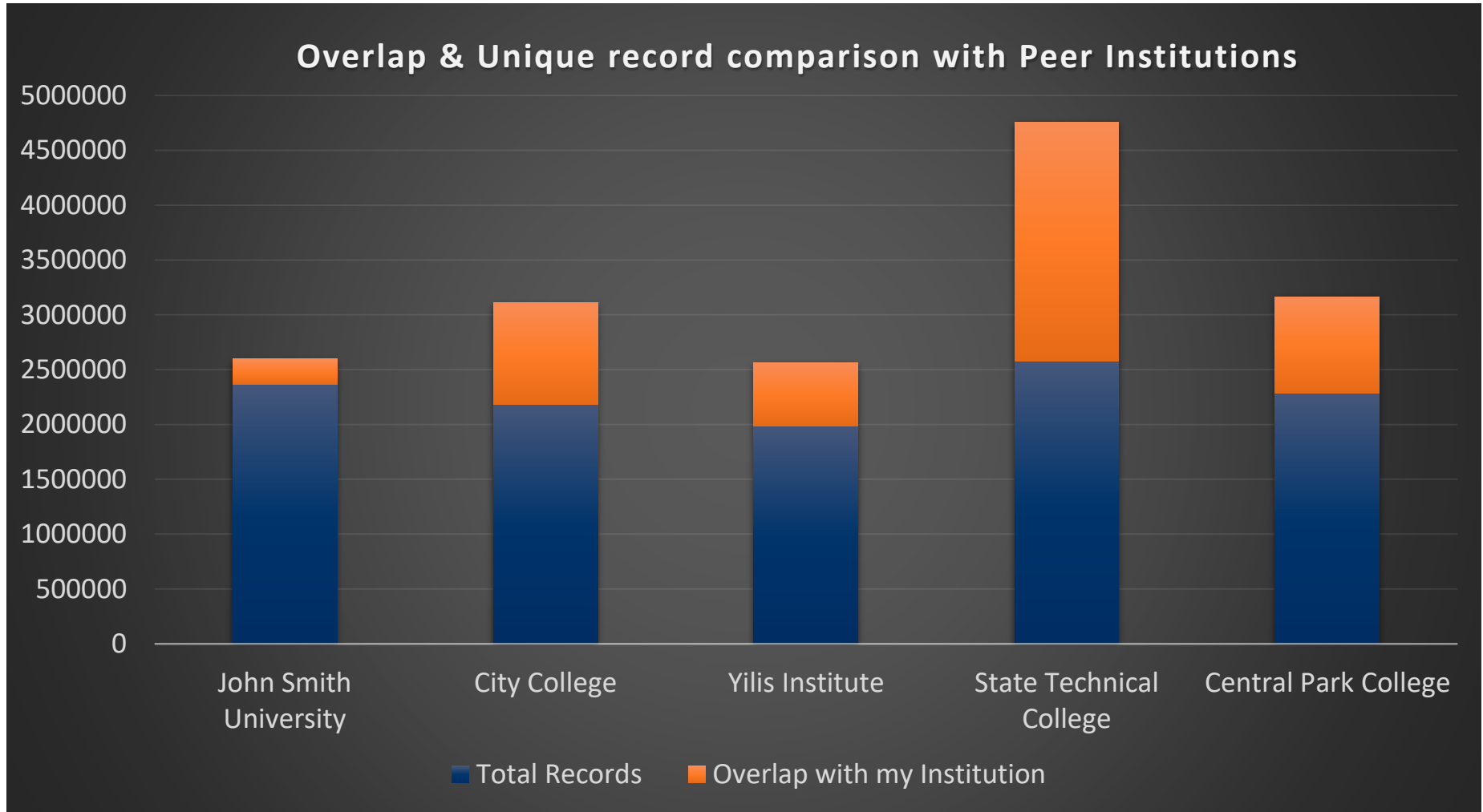
Comparative Collection Analytics - Peer Institutions

- Typically the “peer institutions” are institutions which
 - Are located in the same geographical area
 - Have resource sharing or other cooperative fulfillment policy agreements
 - May also have e-resource licensing and other acquisition cooperative programs
 - May engage in common digitization projects

Comparative Collection Analytics - Peer Institutions

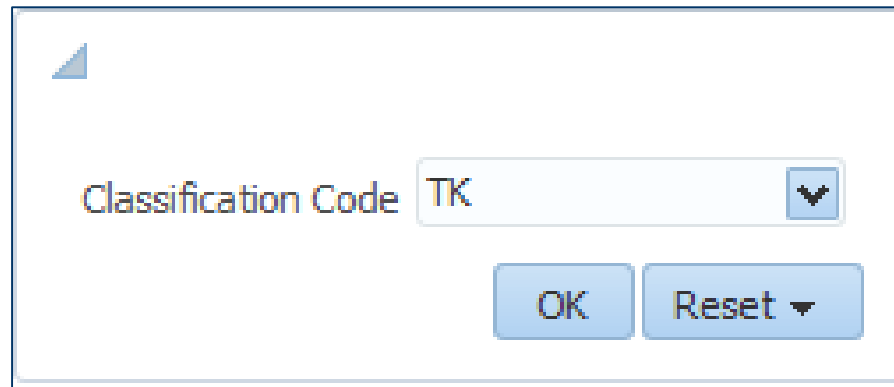
- In the example here the “Sarah Khan Technical College” has five peers:
 - John Smith University
 - City College
 - Yilis Institute
 - State Technical College
 - Central Park College
- These peers all form a group of six institutions which collaborate with each other on various levels.
- For example patrons in each of the six institutions and can loan items from the other five institutions (either through resource sharing or a fulfillment network).

Comparative Collection Analytics – General Overlap



Comparative Collection Analytics – LC Classification Overlap

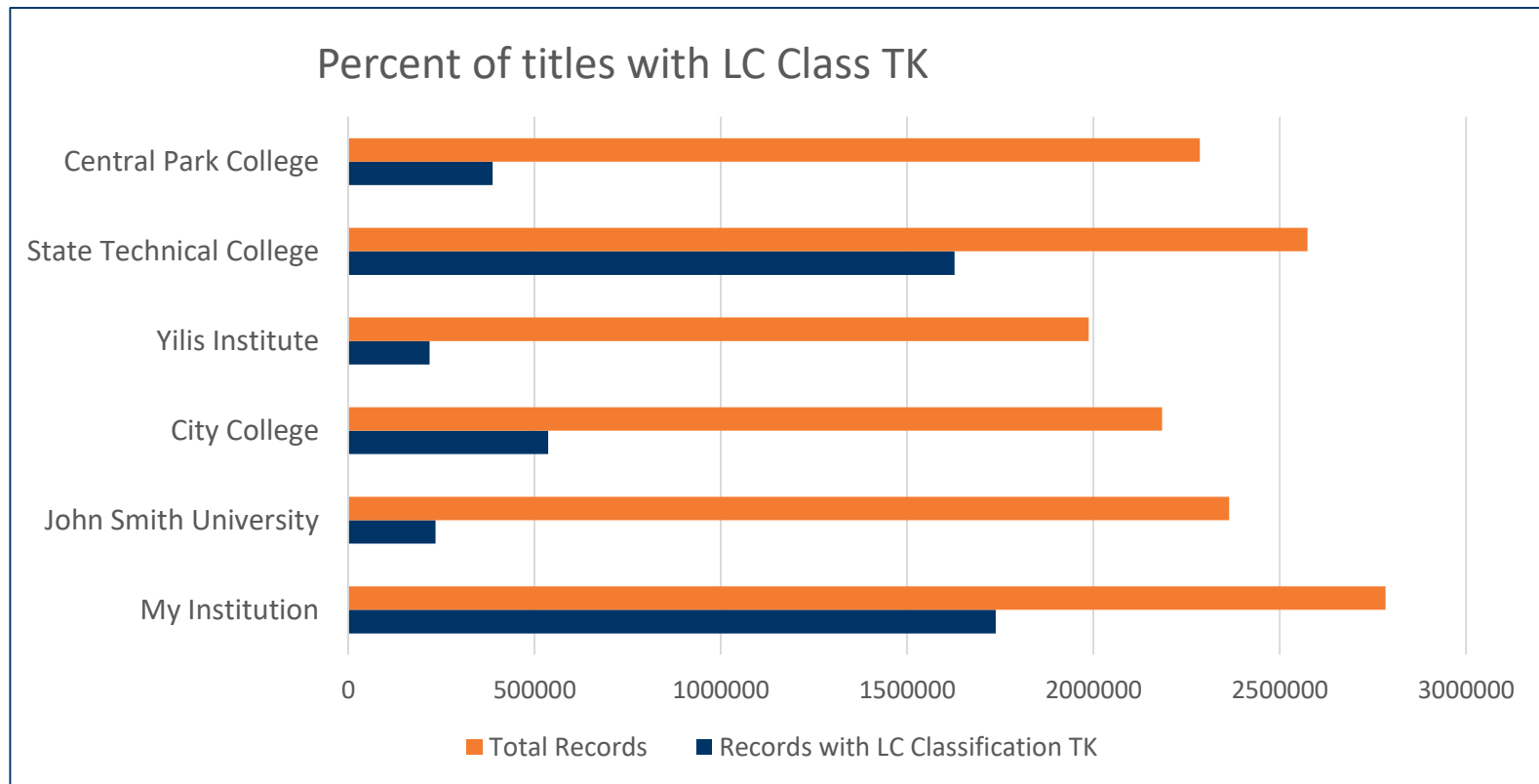
- It will also be possible to query which institutions have “how many” bibliographic records with particular call numbers or subjects.
- Example: TK is the LC Classification code for Electrical Engineering



A screenshot of a web form interface. The form contains a label "Classification Code" followed by a text input field containing the value "TK". To the right of the input field is a small blue square button with a white downward-pointing triangle. Below the input field are two blue buttons: "OK" and "Reset". The "Reset" button has a small white downward-pointing triangle to its right.

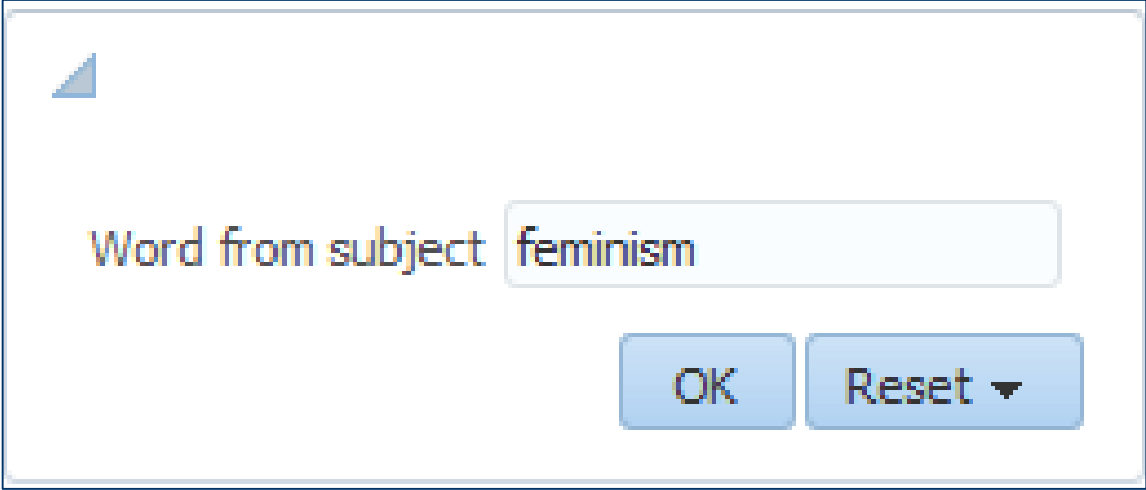
Comparative Collection Analytics – LC Classification Overlap

- Here we clearly see that "My Institution" and "State Technical College" both have many records (more than half of total) which are for "Electrical Engineering"



Comparative Collection Analytics – Subject Overlap

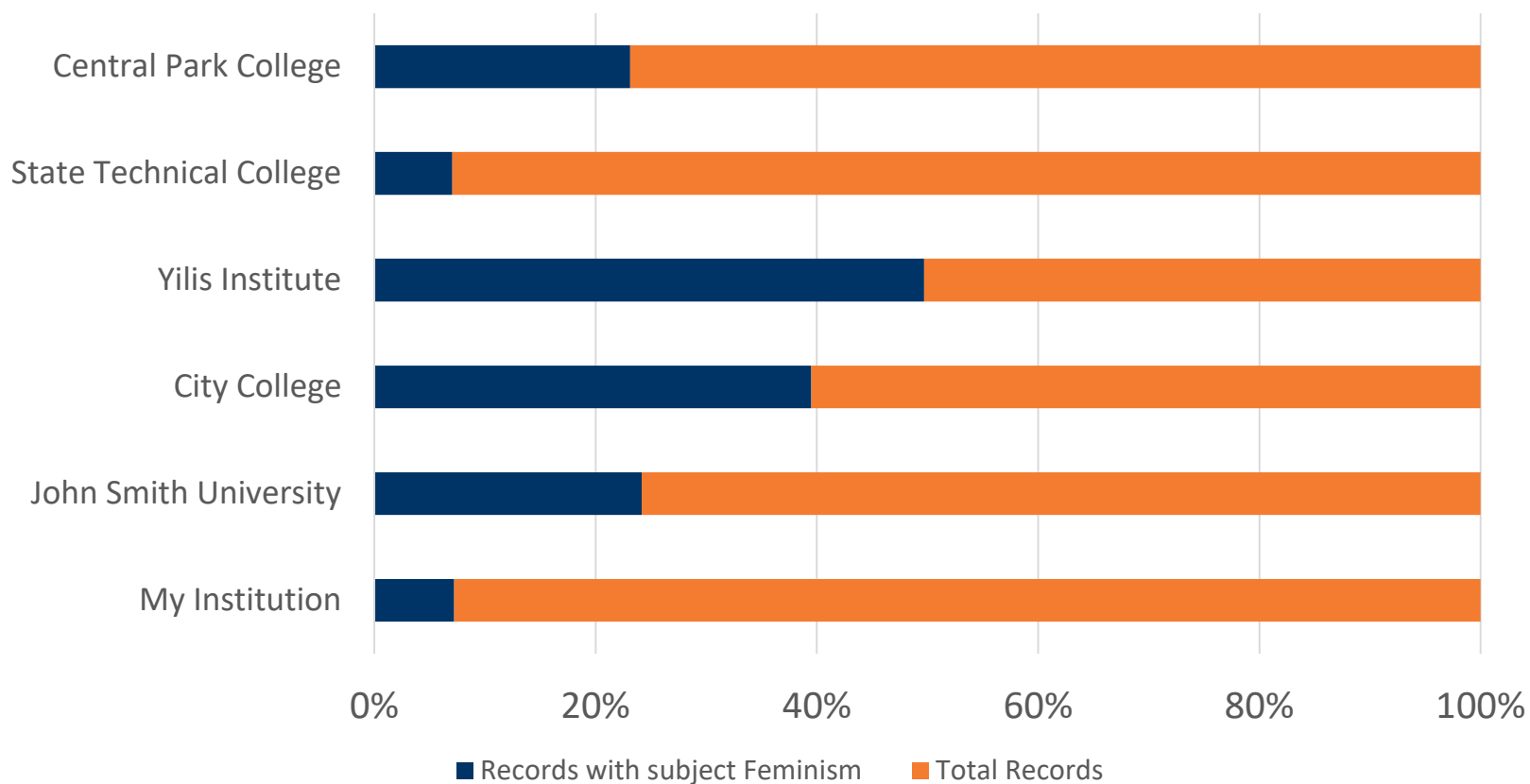
- On the other hand ... if we compare the institutions on “word from subject = feminism” ...



A screenshot of a web form with a light blue border. In the top-left corner, there is a small blue triangle icon. The form contains a text input field with the label "Word from subject" and the value "feminism". Below the input field are two buttons: "OK" and "Reset" with a downward-pointing arrow.

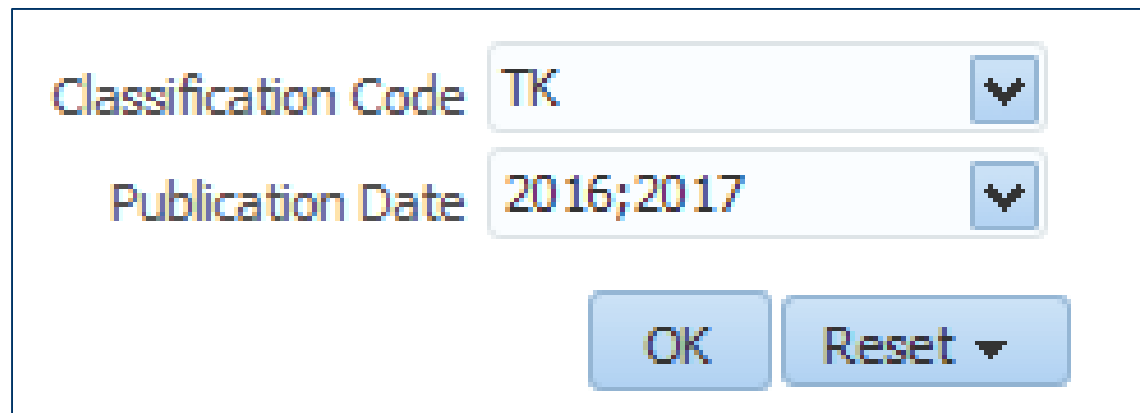
Comparative Collection Analytics – Subject Overlap

Records with subject Feminism



Comparative Collection Analytics – LC and Year Overlap

- There are some cases where it is important to also be able to filter by year.
- For example we previously saw that both "My Institution" and the "State Technical College" have a lot of material with LC Category "TK" which is "Electrical Engineering".
- We may further want to know how much of that material is from the last two years.

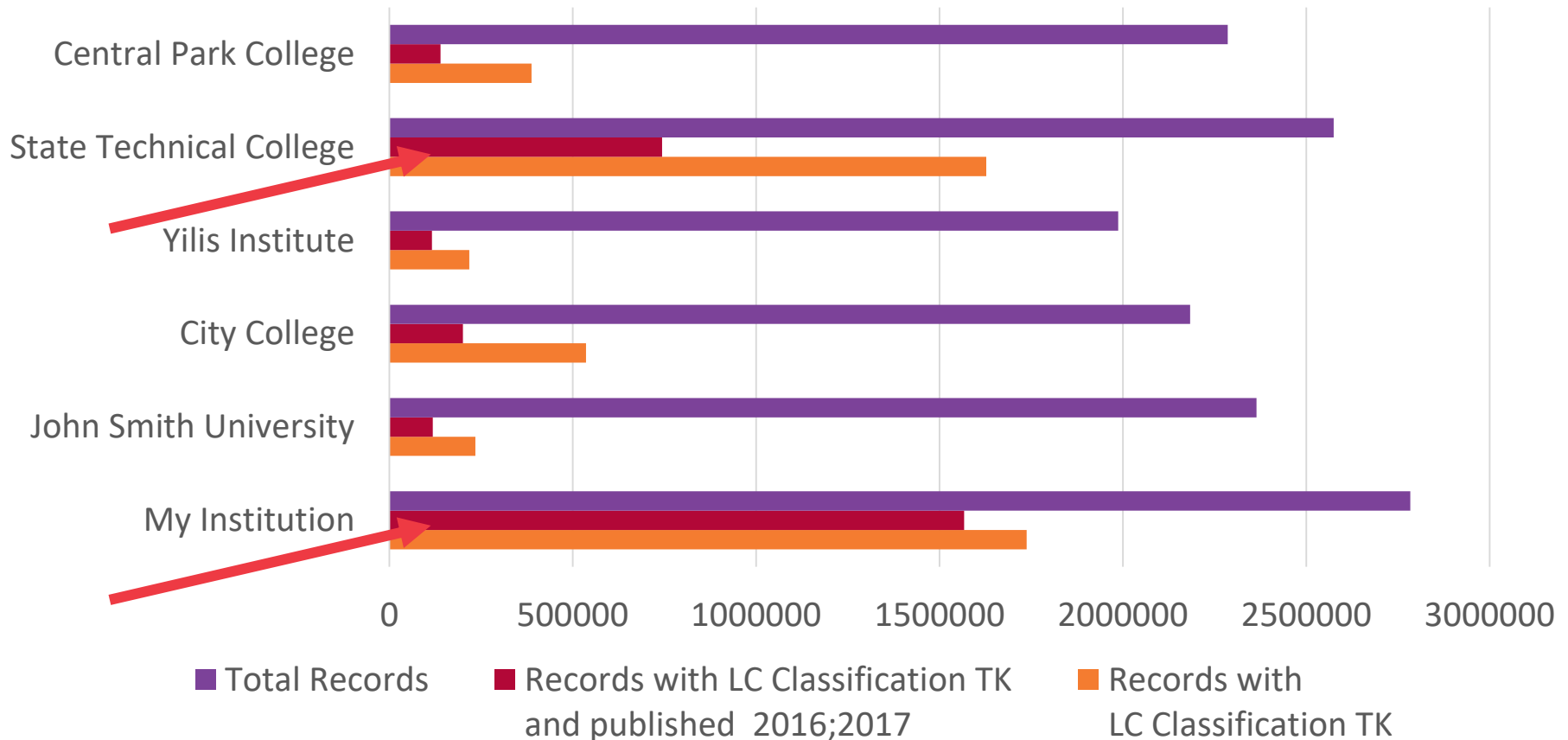


The image shows a search filter interface with two dropdown menus and two buttons. The first dropdown menu is labeled "Classification Code" and has "TK" selected. The second dropdown menu is labeled "Publication Date" and has "2016;2017" selected. Below the dropdowns are two buttons: "OK" and "Reset".

Comparative Collection Analytics – LC and Year Overlap

- Here are the results in graph format

Percent of titles with LC Class TK published 2016;2017





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Real preliminary test case

Real preliminary test case

- Here is a sample test case. This is not necessarily how the development will actually be done but it is a test case to show the usefulness of such a venture.
- This test case is using real Alma institutions which of course are anonymized here and thus unidentifiable.
- We will call them “Institution A” and “Institution B”

Real preliminary test case

- “Institution A” and “Institution B” are in the same city and the main campuses are about a 40 minute walk from each other, or 10 minutes on public transportation.
- Students in each of the institutions can borrow items from the other institution via resource sharing.
- Institution A has no official program in Engineering.
- Institution B includes a college of engineering and an undergraduate degree in engineering.

Real preliminary test case

- Both institutions have material on engineering.
- Institution A does not regularly need this material, certainly not for courses or academic degrees.
- Institution A could potentially weed out anything they have in this area which is also held by institution B. In the event that a user from Institution A needs one of the resources it could be loaned from Institution B. Alternatively institution A could potentially send this material to remote storage.

Real preliminary test case

- A report is made and then run in both institutions for all records with LC Classification TJ or TK.
 - TJ = Mechanical engineering and machinery
 - TK = Electrical engineering. Electronics. Nuclear engineering
- The following four fields are included in the report:
 1. LC Classification
 2. Normalized Title
 3. Normalized Author
 4. Normalized Year of Publication (removes the following characters: [,], ., -, c, ©)

Real preliminary test case


- In institution A there are 10,981 records
- In institution B there are 24,164 records
- A comparison is made using all four fields combined
- Of the 10,981 records in institution A:
5,468 (approximately half) are also in institution B.
- Perhaps these 5,468 records could be weeded from Institution A and if needed loaned from institution B. Alternatively they could be sent to remote storage.

Real preliminary test case

- Here is for example a record in each institution. The record number is blocked out for anonymization purposes. Same title, author, publisher, place and date. Note that in the first record there is no ISBN, but based on other fields we have a match

1 [Lasers: light amplifiers and oscillators; this edition edited by O. S. Heavens, \[translated from the German by Scripta Technica\]](#)
Book (Book - Physical) By Röss, Dieter, (London, Academic Press 1969.) **Language:** English
Subject: Lasers. Lasers--Bibliography. **Record number:** [REDACTED]

Physical (1) Electronic Digital Other details

1  [Lasers: light amplifiers and oscillators; this edition edited by O.S. Heavens, \[translated from the German by Scripta Technica\].](#)
Book (Book - Physical) text; unmediated; volume By Röss, Dieter, (London, Academic Press 1969.) **Language:** English
Subject: Lasers--Bibliography. Lasers. Laser. and others **ISBN:** 0125981503 and others **Record number:** [REDACTED]

Physical (1) Electronic Digital Other details

Real preliminary test case

- Here is another example of same record in both institutions

1 **Off the record : the technology and culture of sound recording in America / David Morton.**

Book {Book - Physical} By Morton, David, (New Brunswick, N.J. : Rutgers University Press c2000.)

Subject: Sound--Recording and reproducing--United States--Case studies. Sound recording industry--United States--Social aspects.

Language: English

ISBN: 0813527465 (cloth : alk. paper) and others

Record number: [REDACTED]

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