Library data and learner analytics

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Extracting data from OCLC Systems for Learner Analytics
Jisc Library Labs

24 Higher Education institutions

28 expert practitioners

12 week Agile development process

https://business-intelligence.ac.uk/analytics-labs/get-involved/
Q: How does usage of each resource change over three years?

Q: Which Departments are using which Resource most heavily?

Library eResource Suite
Team Elizabeth (Charles)
Library Loans
Suite
Team Ian (Harter)
xAPI – an open standard

```
"actor": {  
  "objectType": "Agent",  
  "account": {  
    "name": "**UNAME**",  
    "homePage": "**HOMEPAGE**"  
  }  
},

"verb": {  
  "id":  
  "http://id.tincanapi.com/verb/viewed",  
  "display": {  
    "en": "viewed"  
  }  
},

"context": {  
  "platform": "UxAPI",  
  "extensions": {  
    "http://xapi.jisc.ac.uk/sessionId": "**SESSION_ID**",  
    "http://id.tincanapi.com/extensions/ip-address": "**IP**",  
    "http://id.tincanapi.com/extension/referrer": "**HTTP_REFERRER**",  
    "http://xapi.jisc.ac.uk/recipeVersion": "libraryV1.0"  
  }  
},

"version": "1.0.0",  
"timestamp": "**TIMESTAMP**",  
"result": {"response": "**HTTP_RESPONSE**"}

"object": {  
  "objectType": "Activity",  
  "id": "**HTTP_URL**",  
  "definition": {  
    "type": "http://id.tincanapi.com/activitytype/resource",  
    "name": {  
      "en": "eResource"  
    },  
    "description": {  
      "en": "an eResource made available via a proxy service"  
    }  
  }  
}
```
library-borrowed

- USER_ID [1]
- ITEM_ID [1]
- ITEM_TYPE [1]
- ITEM_NAME [1]
- OCLC_NUMBER [1]
- CALL_NUMBER [0..1]
- BRANCH_NAME [0..1]
- PERMANENT_SHELVING_LOCATION [0..1]
- TEMPORARY_SHELVING_LOCATION [0..1]
- BORROWER_CAT [0..1]
- LOAN_POLICY [0..1]
- BRANCH [0..1]
- RENEWAL_COUNT [0..1]

Full Example:

```
"version": "1.0.0",
"actor": {
  "objectType": "Agent",
  "name": "John Smith",
  "account": {
    "name": "PATRON BARCODE",
    "homePage": "HOMEPAGE"
  }
},
"verb": {
  "id": "http://activitystrea.ms/schema/1.0/borrowed",
  "display": {
    "en": "borrowed"
  }
},
"object": {
  "objectType": "Activity",
  "id": "https://Library.universityofjisc.ac.uk/0123456789"  (what would the iri of a book look like? how do we know)
  "definition": {
    "type": "http://id.tincanapi.com/activitytype/book",  (how do we work out from the data the type of object)
    "name": { "en": "Intro to Java" },
  }
  "extensions": {
    "http://oclc.com/number": "OCLC_NUMBER",
    "http://xapi.jisc.ac.uk/dewey_code": "CALL_NUMBER",
    "http://xapi.jisc.ac.uk/item_location": {
      "http://id.tincanapi.com/extension/location": "ITEM_BRANCH_NAME",
      "http://xapi.jisc.ac.uk/permanent_shelving": "ITEM_PERMANENT_SHELVING_LOCATION",
      "http://xapi.jisc.ac.uk/TEMPORARY_SHELVING_LOCATION"  
    },
  }
},
"timestamp": "2015-09-18T01:54:51.484Z",
"context": {
  "extensions": {
    "http://xapi.jisc.ac.uk/library_borrower_category": "UG",  // should this be a code
    "http://xapi.jisc.ac.uk/library_loan_policy": "short",  // should this be a code
    "http://xapi.jisc.ac.uk/library_branch": "Main library", // should this be a code
    "http://xapi.jisc.ac.uk/library_return_date": "2015-09-18T01:54:51.484Z",
    "http://xapi.jisc.ac.uk/library_renew_count": 3
  }
}```
"statement": {
  "version": "1.0.0",
  "timestamp": "2017-05-01T00:00:16.00Z",
  "object": {
    "objectType": "Activity",
    "definition": {
      "type": "http://id.tincanapi.com/activitytype/resource",
      "name": "en": "eResource",
      "description": "en": "an eResource made available via a proxy service"
    }
  },
  "actor": {
    "objectType": "Agent",
    "account": {
      "homePage": "https://lak.jisc.ac.uk",
      "name": "sXXXXXXXXX"
    }
  },
  "verb": {
    "id": "http://id.tincanapi.com/verb/viewed",
    "display": "en": "viewed"
  },
  "result": {"response": "200"}
}
Visualisations
Combining LDH data
Limited Granularity – do we need EZPaarse?
Jisc’s Data Explorer

Module Overview: Advanced Jiscing for Business


Staff: Michael Webb, Tom Glanville, Lee Raylis, Paul Bailey, Jemma Greener, Tim Stratton, Rob Bristow, Test Admin, Test Tutor

Select Visualisation  Select Data

Sort by:  Name  Activity Count

Activity by Student (29/11/2017 – 29/01/2018)

Assessments

Marked Assessments Count

Library

VLE

Start Date 2017-11-29

End Date 2018-01-29

Consent Service (tbc)

Student App: Study Goal

Staff dashboards in Data Explorer

Learning Data Hub

Data Aggregator

EMEARC18 #OCLCEMEARC18
Thank you

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