Implementing voluntary, online, participatory research administration and bibliometric tools to develop meaningful and inclusive research metrics to assess university research impact

Using Research Tools in the University

ADMN 598 Project
School of Public Administration
University of Victoria

Submitted by: Kristen Korberg

Client: Dr. Gordon Binsted, Acting VPR (2013-15), and Dean, Faculty of Health and Social Development, The University of British Columbia Okanagan

Academic Supervisor: Dr. James MacGregor, School of Public Administration, University of Victoria

Second Reader: Dr. Lynne Siemens
School of Public Administration, University of Victoria

Chair: Dr. Barton Cunningham
School of Public Administration, University of Victoria

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Thanks also to my UBCO faculty participants who are used to dealing with me in an entirely different fashion, to Joe Ferguson for the Excel tutoring that got me through statistics class, and to the staff of the UBCO Office of Research Services (ORS), especially to Candace Martyn, and to Mary (and Eleanor) Butterfield for their encouragement and invaluable support through the homestretch.
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EXECUTIVE SUMMARY

INTRODUCTION

The quality of a university is measured increasingly by its research impact (Butler, 2011). Universities need objective, standardized, quantitative and qualitative measures of research impact to maintain continued access to public funding as well as attract and support the best research personnel (Louis & Reed, 2013). This project will analyse three innovative tools that can be used to measure research impact, and the obstacles faced in successfully using them to capture meaningful data.

The University of British Columbia Okanagan (UBCO), who is the client in this project, will benefit from the information generated in this study in that it will assist the university to make decisions about the most suitable research tools to deploy on campus on a permanent basis. In attempting to increase and facilitate research activity and to assist researchers, some very new, with their research programs, UBCO’s Vice Principal Research (VPR) is interested in adding to the campus some new and innovative tools that can provide valuable feedback on research activity (metrics) but also assist researchers with research application tasks and inspire research collaborations among them.

It is hoped that identifying obstacles to the researcher uptake of these tools will engender solutions to overcome them.

METHODOLOGY

The literature review informed a primarily quantitative survey with a sample of UBCO professors who trialled, used, or continue to use, the UNIWeb and/or MORE map tools in order to determine whether such a participatory tool would fulfill the needs of faculty as described above, and identify any obstacles that prevent widespread uptake by the campus community as a whole. A second, more qualitative survey (interview) asked the representatives of the software companies behind these tools (UNIWeb, PlumX, and MORE) about any limitations they have encountered when working with campuses to adopt these technologies.

A third group of individuals, administrators who have attempted to adopt these or other similar tools in their own institutions were asked similar questions about tool implementation and finally, in the inventory of obstacles I have included anecdotal observations of my own university colleagues who are also involved in the deployment of these tools for the university, including the Library, and IT services.

FINDINGS

It is clear from the researcher data, discussions with administrators, and UBCO’s experience in attempting to implement research tools in the university that there are significant challenges in obtaining researcher participation. While the researcher may admit the tool is interesting, novel, easy to use, useful, and can even clearly see the benefits of using such tools, they are reluctant to engage. Findings from the survey and interviews are covered in detail in this report, but the
primary reasons that faculty do not wish to engage with participatory tools is that they have too much to do as it is, too many forms to complete, and too little time to do so. Faculty are also reluctant to engage with a new technology or demand on their time when they do not see any increased value to their research in participating.

RECOMMENDATIONS

It remains challenging to overcome the single biggest obstacle in implementing research tools that rely on researcher input, though as UBCO’s experience suggests, continual innovation by the university in adding value and features to the tools while reducing the points of entry that researchers need to observe is a solid way to move forward and gain users.
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1.0 INTRODUCTION

1.1 GENERAL PROBLEM

The quality of a university is measured increasingly by its research impact (Butler, 2011). Universities need objective, standardized, quantitative and qualitative measures of research impact to maintain continued access to public funding as well as attract and support the best research personnel (Louis & Reed, 2013). Research metrics can be an invaluable tool in assessing research impact, researcher productivity and success, however many tools for capturing research metrics are limited in the type of information they can provide, and the disciplines they can highlight. For example, some tools are better suited to capturing metrics for those in the science, technology, engineering and medicine (STEM) fields predominantly through traditional academic journal citations. Other tools mine ‘Altmetrics’ sources to capture a broader (and less traditional in academic fields) range of impacts such as ‘likes’ and “mentions” or “views” (Jobmann et al, 2014). Still other tools can provide a metrics ‘dashboard’ for the institution while providing the user with an entirely different sort of service like curriculum vitae (CV) management or research asset inventory. In order to capture the breadth of impact across University disciplines, a variety of tools should be developed and deployed.

This project will analyse three innovative tools that can be used to measure research impact, and the obstacles faced in successfully using them to capture meaningful data. One obstacle, for example, is that that these tools require voluntary researcher participation to gather data. UNIWeb by Proximify, PlumX™ from Plum Analytics, and a unique mapping tool developed at UBCO, MORE are being trialled to capture researcher success, and this project will examine obstacles to their successful deployment on the UBCO campus. It is also hoped the project will generate solutions to these obstacles based on researcher data.

1.2 RESEARCH QUESTION AND PROJECT OBJECTIVES

Research question:

To identify obstacles that inhibit university researchers from initiating and/or maintaining profiles in online, voluntary research administration and/or bibliometric tools deployed by the university and to determine possible solutions to address or overcome these obstacles.

Objectives:

1. To survey any literature on universities’ experience with the (un)successful deployment of research administration and/or bibliometric (RA/B) tools.
2. To use literature and user feedback to identify frequently cited limitations with RA/B tools in general. For the purposes of this study, “users” are defined as the UBCO researchers (faculty) who are presently using research tools presently in use at UBCO, and in particular, UNIWeb, MORE, and PlumX.
3. To use the literature and user information to inform this study’s construction of and execution of a local (UBCO) survey on the RA/tools that have been trialled or are in process of being trialled at the UBCO campus.
4. To gather suggestions/identify solutions to any identified obstacles to increase use of RA/B tools by researchers.

1.3 PROJECT CLIENT

The client for the project is the University of British Columbia Okanagan (UBCO) as represented by Dr. Gordon Binsted, the Acting Vice Principal Research from 2013-2015 and presently the Dean of the Faculty of Health and Social Development. UBCO has trialled, and in some cases purchased, a number of RA/B tools in order to obtain valuable information about research productivity. UBCO will benefit from the information generated in this project in that it will assist the university to make decisions about the most suitable RA/B tools to deploy on campus on a permanent basis. It is hoped that identifying obstacles to researcher uptake will engender solutions to overcome them.

1.4 BACKGROUND

UBC Okanagan is a young campus (2005) of the University of British Columbia, established from what was once Okanagan University College in Kelowna, British Columbia. The campus has grown tremendously over the last several years, and while it enjoys the reputation and some of the research infrastructure of UBC, it is of a scale that allows it to experiment with processes that might be more difficult to deploy in a much larger setting – UBCO is approximately one-tenth of the size of the Vancouver campus. In attempting to increase and facilitate research activity and to assist researchers, some very new, with their research programs, the Vice Principal Research (VPR) is interested in adding to the campus some new and innovative tools that can provide valuable feedback on research activity (metrics) but also assist researchers with research application tasks and inspire research collaborations among them.

A geographer at the UBCO Campus, Dr. Jon Corbett, has developed an online mapping software called Geolive which has been used for a number of research driven mapping applications (see [www.geolive.ca](http://www.geolive.ca)). The VPR hopes to use a new custom Geolive application, Mapping Okanagan Research Engagement (MORE) to locate UBCO research interests both on campus and globally. In this tool, the information displayed on the map will be contributed to, or ‘crowdsourced’, by the researchers themselves in a participatory fashion in order to ensure that their research is represented exactly as they wish it to be. Map contributions may include various forms of media like photos and video or audio clips, as well as information like funding sources and alignment with the University’s strategic research plan.
Figure 1: Mapping Okanagan Research Engagement (‘MORE’)

UNIWeb is software developed by Canadian Company, Proximify, to help researchers manage their Canadian Common CV (CCV), a Curriculum Vitae (CV) that is required alongside grant applications to the Canadian Tri- Council Funding Agencies.
The CCV is a detailed document that researchers from all disciplines claim is very time consuming to populate and maintain. UNIWeb aims to assist researchers with this task, while at the same time using a researcher’s CCV information to populate other CV or reporting templates as required by individual institutions or agencies. UBCO has asked Proximify to create a template for UBC CV, the internal CV that is used for a number of internal and external purposes. This will further increase the utility of the system as researchers may then simply click an online ‘button’ to move information between the two CV templates. UNIWeb can also use key words in a researcher’s profile (as identified by the individual researcher) to compare with other researchers’ key words in the system to identify common interests and facilitate collaborations among researchers. UBCO trialled, then purchased the UNIWeb software, and like MORE, researchers must input their own information into the system.
The UBC Vancouver campus also trials and uses various research metrics tools, however one of these tools in particular, SciVal by Elsevier, presently in ongoing use at UBC, is designed to collect data on researcher productivity through very traditional means—journal article counts and citations (SciVal, 2015). While this might seem useful, and is to some extent, the SciVal rankings for an institution tend to favour Science, Engineering, and Health disciplines, and the well-established and senior researchers that publish from within them (WSU, nd). UBC Okanagan, as a much newer campus, with 10 years of operation to Vancouver’s 100, has fewer senior researchers, and thus relatively fewer researchers currently achieving publication success in the traditional top tier journals. Humanities and Social Sciences contributions are “modestly represented” (ibid).
PlumX™ from Plum Analytics is another online software tool that relies on researcher participation, but in this event, the results that are generated can be used as quantitative research metrics for use by the university to assess researcher productivity. PlumX, like Sci Val, gathers data on researcher publications and citations, but also gathers researcher output in other forms which can be more inclusive for Social Science and Humanities disciplines.

The categories of data gathered by PlumX include: usage (patterns of computer usage), captures (saving a particular state of a program, such as information on a display screen (Webopedia, 2016), social media (“websites and/or applications that enable users to create and share content or participate in social networking” (Google, 2016), and citations. The UBCO library, who contract with PlumX, is able to use this data to create reports on individuals, departments, faculties, or the university as a whole. Of the altmetrics tools currently available on the market, PlumX is able to generate the widest selection of altmetrics; over 25 different metrics are captured in their analysis (Jobmann et al, 2014).

The UBCO library began a campus-wide trial PlumX in early 2015.
### RESEARCH TOOLS

<table>
<thead>
<tr>
<th>RESEARCH TOOLS</th>
<th>FORMAT</th>
<th>PRIMARY USE</th>
<th>SECONDARY USE</th>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
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</thead>
<tbody>
<tr>
<td>UNIWeb</td>
<td>Web based software; researcher portal</td>
<td>CCV management tool</td>
<td>Collaboration, institutional metrics</td>
<td>Can add other form templates to add value;</td>
<td>Participatory tool; relies on user input for robust metrics</td>
</tr>
<tr>
<td>MORE</td>
<td>Interactive map based on Google API data</td>
<td>Displays research impact globally</td>
<td>Collaboration, marketing, metrics</td>
<td>Locally developed; sophisticated filters; has a number of ‘audiences’</td>
<td>Participatory tool; relies on user input for robust display</td>
</tr>
<tr>
<td>PlumX</td>
<td>Web based batch importing of research output</td>
<td>Altmetrics gathering tool</td>
<td>Institutional grant application strategizing; research funding database</td>
<td>Powerful; gathers widest selection of altmetrics of any similar product (Jobmann et al, 2014)</td>
<td>No ‘canonical’ set of altmetrics (Konkiel, 2013). Sources can change over time, but this actually shows the flexibility of the tool.</td>
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*Figure 5: Table: Comparing main features of featured research tools*

### 1.5 ORGANIZATION OF REPORT

This report is organized as follows: Section 2 provides an overview of the literature relevant to the project. Section 3 reviews the methods used in the generation of research data for its findings, which are covered in Section 4. Section 5 analyses these findings in a discussion format, and Section 6 provides some recommendations for consideration. Section 7 concludes.
2.0 LITERATURE REVIEW AND CONTEXTUAL FRAMEWORK

It seemed logical to start the literature review by searching for information on the prevalence of research metrics being used by universities as tools to assess researcher output, productivity and success, and any limitations to the data encountered by universities in doing so. There is limited literature that speaks to problems encountered by universities in implementing participatory metrics gathering tools as in the manner of this study, but there is a tremendous amount of literature that discusses the relative value of research metrics to the university as a whole, including a large amount around the United Kingdom’s Higher Education Funding Council for England (HEFCE) independent review of metrics to assess research impact, which includes opinion pieces by academics, committee findings, workshop results and an overall review of the entire initiative, *The Metric Tide* (Wilsdon et al, 2015). Much of the literature around research metrics discovered to date debates the value of research metrics as an assessment tool for researcher and/or university quality (Eyre-Walker & Stoletzki, Butler & Mcallister, Wilsdon, Henning & Gunn) in general, however for the purposes of this project, and because UBCO is already actively using a number of research metrics and metrics tools to demonstrate quality and researcher productivity, the study will not be including the metrics debate issue as part of the project.

For the purposes of this project, metrics as quality indicator is part of the UBC reality. As stated on the UBC Website under ‘Research Excellence’ A goal under the category of: Enhance infrastructure to support leading edge research is to: “advance UBC impact metrics project; bibliometrics; CV systems; and tools to improve monitoring and reporting of research performance, impact and knowledge mobilization” (UBC, 2015). The purpose of this project is to identify and suggest solutions for the limitations of certain metrics solutions tools about to be or presently deployed at the UBCO campus that require researcher participation to tell a complete story.

UBCO Office of Research Services staff, aware of other global mapping projects carried out by Geolive developer and UBCO Professor of Geography, Dr. Jon Corbett, approached him and his team with the idea of creating a map that showed UBC Okanagan research with a global perspective. The map was created in 2012 and has undergone many upgrades to functionality since then. The map has always been a participatory technology, and despite great support from UBCO Deans and Heads, and the functionality upgrades, it has not achieved the type of widespread support from faculty that would make it successful as the kind of marketing and collaboration tool that was first envisioned. Dr. Corbett’s previous Geolive projects have typically been deployed outside of a university community, and while often participatory, have traditionally been more successful in gathering data, in particular his projects with First Nations, and NGOs (Corbett, 2015).

Though it could be used very effectively as a tool for generating collaborations through the search functions which allows one to find fellow researchers working in various disciplines, fields and geographical locations, the greatest challenge has been that it is essentially a participatory technology, one in which individuals are asked to contribute the myriad data that make the map truly robust. The map has a very strong search tool, and a number of filters to allow one to search in a very refined manner—to seek only student projects, or ones funded by
certain agencies, or ones that meet the strategic goals of the university, etc. An additional feature recently added allows the user to set a timeline over the research, to capture a ‘slice’ of research activity over a period of time, which would allow one to see incremental changes in that activity, or trends in location, among other options.

Understanding that another participatory tool might be difficult to implement, UBCO was nevertheless interested in UNIWeb. The tools were both participatory, but UNIWeb had the key feature of making the Canada Common CV tool much easier to complete, and therefore should be that much easier to ‘sell to researchers’.

UNIWeb was originally conceived and developed as a collaboration tool for a single faculty at the University of Ottawa, but shifted to adapt into a platform for facilitating the completion of a complicated government document. The nature of UNIWeb means that all of its potential to engender collaborations is still intact, if not enhanced, by the implementation of a highly detailed profile which can be transformed into a CV (or other) academic document template while the key words that make up sections of the profiles are used by the software to develop elaborate webs of researchers with similar research interests. This web, a type of connections matrix, can be viewed by a researcher at any point while in UNIWeb and is enhanced when the number of researcher users increase. The collaboration webs can also be viewed by research staff with administrative access who can use this information to facilitate research collaborations, or offer funding opportunities to faculty. The key limitation, however, is that as a participatory technology, even with tremendous utility to make a researcher’s work easier, it is difficult to convince the researcher who already feels they have too much to do, and too many forms to complete, to add this new task to their list.

These factors informed a further search for literature on barriers to successfully deploying participatory software tools in the university community, including any that may have been anecdotally collected by the software companies themselves. In the survey of the literature around participatory technologies and online communities, I reviewed articles reporting the use of social psychology to address the phenomena of ‘social loafing’ and motivate contributors (Williams and Karau, 1991, Beenen et al, 2004. Ludford et al, 2004). Solutions in this vein include sending strategic messaging to contributors about the uniqueness and value of their contributions (Beenan et al, 2001), and motivation based on being part of a group that needed to come together to solve a problem, or achieve a goal (ibid).

Given that the reality of UBC’ strategic research plan includes metrics as an assessment tool, it was also important to review literature around non-traditional metrics gathering tools like the one that UBCO has recently acquired, PlumX™: This tool was developed by a software engineer and an academic librarian in 2012 to perform altmetric analyses.

Altmetrics are defined as “the study and use of non-traditional scholarly impact measures that are based on activity in web-based environments” (PLOS.org, 2016).

PlumX gathers academic output data from a wide variety of digital sources and aggregates it into five categories of altmetrics. It is provided to universities as a subscription service in order to provide metrics data for administrators, but the tool may also be used by individual researchers.
to build a personal profile within their university’s subscription platform in order to generate their own metrics reports. While this feature would be considered participatory, the UBCO faculty experience with PlumX has differed greatly from UNIWeb or MORE in that they have not been asked to provide any contribution to the PlumX trial; UBCO library staff entered profile information for every tenure stream faculty member on the campus (around 300) and were able to generate metrics data from this. The categories of data gathered by PlumX include: usage, captures, social media, and citations, and the library is able to create reports on individuals, departments, faculties, or the university as a whole. Of the altmetrics tools currently available on the market, PlumX is able to generate the widest selection of altmetrics; over 25 different metrics are captured in their analysis (Jobmann et al, 2014).

![Figure 6: PlumX for UBCO Altmetrics Detail](image)

Despite that it too, can be thought of as a participatory tool, the UBCO experience with PlumX has been largely successful, in that the job it is meant to do has not been hindered by a lack of participation by faculty and so the literature sought around altmetrics for this study is more broadly focussed on the use of altmetrics as a useful way to determine research impact. Theoretically, it should provide benefit—because of the diversity of metrics, including journal citations it is able to provide, PlumX can paint a much broader picture of an individual faculty member and seems to have very good utility across disciplines, especially when compared to other altmetrics tools (ibid). Much of the literature on altmetrics has been accessed from the Public Library of Science (PLOS.org) which contains a number of different sources ranging from journal articles to blogs on the subject (Neylon, Horsley, Denker). Information was also gathered from journal reviews of the product itself (Champieux, 2015, Jobmann 2014).
This literature review was instrumental in informing the primarily quantitative survey with a sample of UBCO professors who trialled the above software applications in order to determine whether such a participatory tool will fulfill the needs of faculty as described in 1.4, above, and identify any obstacles that would prevent widespread uptake by the campus community as a whole.
3.0 METHODOLOGY

3.1 METHODOLOGY

The literature review informed a primarily quantitative survey (Appendix Three) with a sample of UBCO professors who trialled or used, or continue to use, the UNIWeb and or MORE map tools in order to determine whether such a participatory tool would fulfill the needs of faculty as described above, and identify any obstacles that prevent widespread uptake by the campus community as a whole. A second, more qualitative survey (interview) (Appendix two) asked the representatives (referred to alternately as developers/vendors in this study) of the software companies behind these tools (UNIWeb, PlumX, and MORE) about any limitations they have encountered when working with campuses to adopt these technologies.

A third group of individuals, administrators who have attempted to adopt these or other similar tools in their own institutions were asked similar questions (Appendix One) about tool implementation and finally, in my inventory of obstacles I have included the anecdotal observations of my own university colleagues who are also involved in the deployment of these tools for the university, including the Library, and IT services. Altogether, in addition to the literature, this study has been informed by four other sources: 1. Researcher users from UBCO, 2. Interviews with research tool developers, 3. Interviews with university administrators from institutions also trialling the UNIWeb tool and 4. the personal recollections and thoughts of UBCO staff colleagues from other units on campus.

3.2 METHODS AND TASKS

DATA COLLECTION

Research participants:

Prior to official contact with any human participants, I obtained harmonized human ethics approval from both the UVIC and UBCO Behavioural Research Ethics Boards (BREB). The University of Victoria is the board of record for the study, however as I am an employee of the University of British Columbia Okanagan, and was surveying researchers and colleagues I work with and have access to on a daily basis in a non- research-project related capacity at UBC Okanagan, it was essential to obtain approval from both Behavioural Research Boards. I was able to take part in a harmonised review process trial underway at both campuses, and used the UBC RISe ethics platform to complete the application and received simultaneous review and approval from both boards (www.rise.ubc.ca)  I surveyed a variety of stakeholders key to the deployment of participatory research tools in universities including the researcher-users, the developers of the tools, and other university research administrators and relevant staff colleagues. These data, narratives and information have been presented in an anecdotal manner, in the following ‘Findings’ section, with little to identify the individual participants.
Researcher-users:

Researcher-users were surveyed using an anonymized survey tool (Appendix Three) that was delivered to them via email along with a letter of introduction and consent form. Surveys were sent to the 40 researchers who had had initially established UNIWeb accounts, and of these 40, at the time of the survey (March 2015), 14 users had what were considered active accounts. That is, they had created a whole or partial profile, uploaded their CCV, or completed some other task in UNIWeb. Of the 14, I received seven surveys, or exactly half of the active pool. At time of the survey, UBC Okanagan had 300 tenure stream faculty, and it is acknowledged that while the sample size is small, and thus perhaps statistically not significant, the responses received, do in fact represent what is known about what researchers ‘really think’ about the idea of using such tools. The investigator had received feedback from researchers during workshops, demonstrations, and information conversations about the tools during the course of the implementation period that was not covered under the research study, per the conditions outlined in the human approval application and certificate, but which echoed completely the responses received in the survey. The investigator is satisfied that while small, the survey group’s thoughts would not differ greatly had that group been larger. The survey findings also parallel the findings recounted by other university administrators and the tool developers when discussing their own thoughts on implementation challenges.

The consent forms and surveys were separated and collated after being returned to the investigator Korberg and once the two documents were separated, there was no information to identify which researcher had completed which survey. The participants chosen were the pool of UBCO researchers who were first selected to trial the new UNIWeb tool. The selection of the researcher pool was not part of this project; it had already occurred, and was based on factors such as an even distribution of discipline representation, as well as those researchers who tended to be more research-active and would be typically in need of a tool to assist them with the Canada Common CV (CCV).

Researchers were asked both about their knowledge and use of the UNIWeb and MORE map tools. In gathering data from this group, the investigator was looking to obtain the reasons that commonly prevent the widespread uptake and use of these participatory tools by researchers, especially given the context that researchers had historically expressed dissatisfaction, to ORS, to the VPR, and to the Library, with the CCV and wanted assistance to complete it as well as indicating anecdotally that they wished they had a better idea of what research their colleagues were engaged in. These tools would provide real assistance in both of these areas and thus it would seem logical for researchers to adopt their use. The investigator was also interested in any suggestions researchers had for university administrators with respect to the practical use of such tools and to gather any other solutions to facilitate widespread tool use among researchers and also wished to learn how many of them had taken advantage of the trial and had used the UNIWeb tool. The university promoted the trial among Deans, Associate Deans of Research and other administrators, as well as with direct contact to the researchers from both the administration and tool developers.
TOOL DEVELOPERS, RESEARCH ADMINISTRATORS, UBCO STAFF

From other participants, I hoped to learn of reasons why a university might trial a tool and then fail to purchase it for long term use, and whether one of those reasons was lack of researcher participation, and also, from University administrators in particular, what, if anything they have learned from attempts (successful or not) to deploy participatory metrics tools in their institutions. Interviews took place with these individuals by phone, and in one event, the participant chose to answer my interview questions in word form and returned them to me via email. Staff discussions have taken place over several months, as the tools were trialled, tested, and implemented on a day to day basis but were not formalised in an ‘interview’ type setting. Findings from developers, administrators, and staff are recounted in an anecdotal fashion, and individual participants are not identified in this report.
## 4.0 FINDINGS

### RESEARCHER-USERS:

Researcher participants\(^1\) were asked 15 questions about the extent of their past and current use of both the UNIWeb and MORE tools, and their corresponding experiences and satisfaction levels with them.

**Survey results**

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<tr>
<th>Question</th>
<th>(A)</th>
<th>(B)</th>
<th>(C)</th>
<th>(D)</th>
<th>(E)</th>
<th>(F)</th>
<th>(G)</th>
</tr>
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<tbody>
<tr>
<td>1. User UNIWeb history-how much use so far?</td>
<td>Have not used the log in/what is UNIWeb?</td>
<td>Have used the log in provided, established a user ID, uploaded my CCV and checked out some of the other features</td>
<td>Have used the log in, established a user ID but just looked around a bit</td>
<td>Have used the log in provided, established a user ID, uploaded my CCV and checked out some of the other features</td>
<td>Have used the log in provided, established a user ID, uploaded my CCV and checked out some of the other features</td>
<td>Have used the log in provided, established a user ID, uploaded my CCV and checked out some of the other features</td>
<td>Have used the log in provided, established a user ID, uploaded my CCV and checked out some of the other features</td>
</tr>
<tr>
<td>2. Overall experience with UNIWeb</td>
<td>User has not logged in</td>
<td>good</td>
<td>User declined to rate</td>
<td>excellent</td>
<td>Very good</td>
<td>Very good</td>
<td>good</td>
</tr>
<tr>
<td>3. Not logged in, why?</td>
<td>Someone told me it wasn’t very useful</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>4. Add new feature to UNIWeb-use more or less?</td>
<td>Not sure</td>
<td>Yes</td>
<td>Yes</td>
<td>Not sure</td>
<td>Yes</td>
<td>Not sure</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Given current levels, what other features would increase your use? (choose all)</td>
<td>1-1 training; grad students maintain; pay someone to maintain/more</td>
<td>Pay someone to maintain/more features</td>
<td>Other</td>
<td>Am happy but would welcome other features</td>
<td>1-1 training; other features</td>
<td>1-1 training; other features</td>
<td>1-1 training; other features</td>
</tr>
</tbody>
</table>

\(^1\) While the survey was distributed to researchers in a variety of disciplines, we did not ask for the survey respondents to identify to which discipline they belonged. That noted, I do have consent forms from Mathematicians, Anthropologists, Geographers, Nurses, and Engineers.
<table>
<thead>
<tr>
<th></th>
<th>6. Awareness of UNIWeb as collaboration tool</th>
<th>features</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>7. Awareness of MORE</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>8. How did you hear about MORE?</td>
<td>Was not aware of MORE</td>
</tr>
<tr>
<td></td>
<td>9. Know how to access MORE?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>10. Placed marker on MORE?</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>11. If yes to #10, how was use?</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>12. Will you add additional markers?</td>
<td>yes</td>
</tr>
<tr>
<td></td>
<td>13. If no to #10, do you intend to place marker at some point?</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>14. If not going to use MORE, why not? Choose all that apply)</td>
<td>n/a</td>
</tr>
<tr>
<td></td>
<td>15. Given experience with MORE and UNIWeb, would you use other tools?</td>
<td>Somewhat likely; not very likely</td>
</tr>
<tr>
<td></td>
<td>16. Answer the same as #14 if tool</td>
<td>Yes</td>
</tr>
</tbody>
</table>
Of the respondents, only one had not actually used either tool but chose to complete the survey. Of the 6 participants who had used it, two rated it good, two, very good, and two, excellent. One user failed to answer the rating question at all, but completed the rest of the survey. The individual who had not used the UNIWeb tool at all, indicated as their choice (per the survey tool) for “If you have not logged in to UNIWeb at all, please tell us why as “b. Someone told me it wasn’t very useful”. Other choices included (in short): not interested, too complicated, don’t need, don’t know anything about the tool, no time, too many other forms to complete, other). The survey then asked respondents about the conditions under which they would use UNIWeb more than they did currently, and 5 of them indicated they would be more inclined to use the tool if we added an additional feature, where the information in UNIWeb could also be used to populate the UBC CV template, which essentially means that users could transform the academic and research information in their UNIWeb profile into either a CCV or UBC CV with ‘one click’, saving time and effort. The remaining respondents were not sure if they would use UNIWeb more with this added feature, including the individual who had not yet used UNIWeb at all. The next question asked users under what conditions—for example, if the tool had more features——they would be inclined to use UNIWeb more than their current levels. Most respondents indicated that the addition of extra features, including the UBC CV or the annual activity report faculty are required to complete for their Deans would be useful templates. Most respondents also showed interest in having access to one-on-one training sessions for the tool, and others were interested in the idea that one could have someone else complete the profile for them, either a student, or someone else they could pay.

The survey then moved into questions about MORE, the research map, and respondents’ experiences with that tool. Three participants were not aware of MORE, three were aware, and one was not sure they had heard about it. Only one participant with map awareness had placed a ‘map marker’ which, in short, is the way in which one identifies a research project on the MORE map, and one indicated they planned to do so. No other participant intended to place a marker, most likely given that they were not aware of the map. These individuals provided (per the survey tool) various answers as to why they would not, and these included (in short, to paraphrase) too many other things to fill in, doesn’t interest me, not useful for my research, research is locally based and wouldn’t benefit from being ‘mapped’. The final questions asked for some indications of whether users, given their experience with UNIWeb and MORE, would use other research tools offered by the university as well as asking, in a free-form manner, what would be a tool they would like to see, and any comments they had on the survey or tools in general. Six respondents indicated likeliness to use other tools ranging from somewhat likely to
definitely likely, with one indicating that it was not very likely, and one indicating it was both
somewhat likely and not very likely they would use additional tools. The table in Figure 6
indicates whether respondents made comments in questions 16/17 as yes, or no. Some of these
comments are quoted below.

“These tools need to be easily accessed and updated...that is why I use a word file for my CV. I
know exactly where it is, how to update in a flash”

“The #1 drawback to UNIWeb is the huge start-up time required”

“The problem with these things is time. I don’t have the time to be filling out forms, and keeping
everything up to date. As it is, I am already doing 5 CVs, and more is just work.”

“I just haven't had time, nor the necessity of using this yet. I spent a lot of time on the old UBC
CV system back in the day, so I’m a little gun shy of spending too much time on something
now....but when I have time, I may well use it.”

Another, more extensive comment asked for a comprehensive training program for the tools,
both in one on one and group sessions, with supplementary sessions on the added value features.

RESEARCH ADMINISTRATORS:

Research administrators are defined for the purposes of this report as any staff or faculty member
with an administrative role who has been involved with the implementation of one or more
research tools at their institution, including UBCO. The investigator spoke with administrators
from two other institutions (University of Ottawa; McGill) that had or were implementing
UNIWeb and as the investigator herself a research administrator she can also report on the
reasons for doing so at her institution. For UBCO, this project was conceived out of the desire to
deploy research tools like UNIWeb effectively and efficiently, and most importantly, provide
great benefit to researchers who were looking for assistance both with managing the information
in their CCVs and also to discover research colleagues with whom they could collaborate.
Adding a research component to an otherwise relatively mundane activity like implementing a
new software tool has allowed the university to focus on identifying the barriers to successful
uptake and on finding the solutions to those barriers.

The reasons for adoption of UNIWeb at other institutions were similar to those of UBCO.
UNIWeb was originally developed as a collaboration tool to unite the disparate units of the
Faculty of Medicine at the University of Ottawa (Macrini, 2015), but didn’t achieve much traction until 2012, when the CCV was introduced to Canadian researchers wishing to apply for
Tri-Council funding and UNIWeb was adapted into a tool that would assist researchers to
complete the unfamiliar and complicated new CV (Ibid). Another major Canadian institution
adopted UNIWeb as a sort of emergency measure to assist their STEM field (Science,
Technology Engineering and Medicine) faculty to complete the CCV, when it became required
that funding applications to both the Canadian Institutes of Health Research (CIHR) and the
Natural Sciences of Engineering Council of Canada (NSERC) include the CCV.
Administrators at the other institutions reveal that uptake has not been as successful as hoped and that despite the benefits of preparing a CCV in UNIWeb—which include an simpler user interface, and a platform that ‘crashes’ less frequently than the CCV site-- faculty do not wish to spend the time completing an additional profile even though it’s a one-time obligation. Library and ORS staff at UBCO, the primary trainers for the UNIWeb tool, confirm that in early training sessions, users were very impressed with the ease of using the UNIWeb platform as opposed to the CCV site and enjoyed being able to import and export their profile information into the CCV with ‘one click’ and yet these users were not necessarily using the tool outside the workshops, nor convincing colleagues they should also adopt the tool.

The surveyed institutions, like UBCO, use both a ‘top down’ and ‘bottom up’ approach to ‘selling’ the tool in that Deans and Heads (top down), who in the UBCO experience see the value of UNIWeb, are asked to promote the tool among their faculty, as well as having their research office staff or faculty administrators (bottom up) provide information or workshops and other assistance to faculty members. At the time of their interview, the administrators were not considering any other research tool that they could name, nor considering working with the tool developers to add any other utility or function to the tools they were trying.

TOOL DEVELOPERS:

In speaking with the developers about the research tools featured in this study, I was interested in learning about the reasons the tool was created in the first place, for what audience, and to solve what perceived problem. I was also keen to understand the experiences of the developers in selling and/or promoting the tools among universities; what recommendations they had for tool promotion among researchers, and the feedback the schools had provided about their experiences in implementing them in the environment. Appendix 3 contains the list of questions that were put to the developers. One of these individuals was interviewed in person, one by phone, and one developer travelling overseas provided written answers to the questions via email.

MORE was first conceived in 2012, from the software Geolive, developed by UBCO researcher Jon Corbett. Unlike UNIWeb and PlumX, MORE was a locally (UBCO campus) product commissioned by the Office of Research Services under the guidance of the Vice Principal Research. With MORE, UBCO was looking to address a need to show research impact, as well as create a means to encourage collaborations among researchers. From the researcher survey, as well as from attempts by ORS to promote the tool and encourage use of the map we know that the participatory nature of the tool makes it harder to sell, and so in adding features and looking at ways to have other systems feed the map data without researcher input, we are addressing the chief barriers to increased uptake. Ultimately, as mentioned elsewhere in this text, MORE will be marketed as an ‘application’, or bonus add-on to clients of UNIWeb packages, which will give us an opportunity to experience external feedback for the map. In informal settings to date, reception of MORE by external audiences has been very positive, however uptake is not high. There are presently 42 unique users, or researchers who have placed one or more markers that indicate a research project, in MORE. The existing map has been viewed more than 87,000

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2 One administrator mentioned that while they had trialled and liked UNIweb, the school’s tendering process required that they put the contract for providing these services to bid and could therefore not be sure of UNIweb’s continued use there.
times, which seems to indicate that it would indeed benefit researchers to place their research projects in MORE as the audience clearly exists.

Unlike the locally developed MORE, PlumX and UNIWeb were developed by individuals who, though external to UBC, were very familiar with the challenges faced by universities in areas of research administration, metrics collection, research collaboration facilitation and impact measures. UNIWeb was developed in 2011 by a Post-Doctoral Fellow, Diego Macrini, at the University of Ottawa initially as a means of facilitating collaborations among disparate elements of the medical school. A lukewarm response to this platform, and a new requirement by the Canadian Federal Tri-Agencies that applicants to their programs create a very comprehensive and complicated document called the Canadian Common CV (CCV) caused Macrini to re-invent UNIWeb as a tool to create the CCV, and facilitate research collaborations on the side.

PlumX is a United States-based tool developed by scholarly research librarian Mike Buschman and software developer and entrepreneur Andrea Michalek in 2012 to address what they felt was the insufficiency of Universities in promoting the research of their faculty members, and the lack of tools to gather the measures that would help with this promotion.

UBCO’s external tools both have had active clients since they were first marketed and have had encountered similar experiences in researcher uptake. PlumX’s market is larger than UNIWeb’s, whose chief product addresses more specifically the needs of Canadian researchers (the CCV), but both report that the biggest hurdle is researcher participation. In the UBCO instance, this has not yet been an issue for PlumX as the institution decided to take responsibility for researcher data entry, but PlumX also reports that they face challenges in convincing older, more established researchers of the value of a product like PlumX, which captures the altmetrics that these researchers are not necessarily familiar with. However, for a place like UBCO, which has a disproportionately large number of early career researchers, PlumX’s mining of social media and other web-based resources makes perfect sense as those researchers tend to be more familiar and comfortable with the concept of altmetrics, as well as the use of the types of social media platforms that inform the altmetrics. To parallel this, PlumX developers also see that older, established institutions may feel that as leaders of established systems, there is no need for new measurement systems. Again, as an ‘up and comers’ UBCO is very amenable to working with these newer measures.

Plum and UNIWeb both agree that researchers who are already busy regard anything new that doesn’t directly add value to their research—in either process and/or projects – to be burdensome, as we have seen in our survey, and so to that end, both Plum and UNIWeb, like MORE are working to include easy to use and high value features in their products. In UNIWeb’s case, its added templates and ‘apps’ (“a self-contained program or piece of software designed to fulfill a particular purpose” (Google, 2016), and for Plum, its embeddable widgets (“an element of a graphical user interface that displays information or provides a specific way for a user to interact with the operating system or an application” (whatis.com, 2016)) and support for integration with other products. Examples of how UBCO is taking advantage of these tools’ added features are detailed later in this paper.
5.0 DISCUSSION AND ANALYSIS

It is clear from the researcher data, discussions with administrators, and UBCO’s experience in attempting to implement research tools in the university that there are significant challenges in obtaining researcher participation. While the researcher may admit the tool is interesting, novel, easy to use, useful, and can even see clearly the benefits of using such tools, they are reluctant to engage.

Prior to UBCO trialling the UNIWeb software, the Vice Principal Research and staff had organized a number of ‘town hall’ type meetings for faculty in which they were asked, among other things, what they needed from administration. The most common answers were: they wanted to know what their campus colleagues were doing, research-wise, and they wanted support for their grant applications. This support included assistance for the new Canada Common CV, which was rolled out over a few years, grant competition by grant competition, and it was soon to affect every researcher who needed to prepare a Tri-Council application—which, if a researcher is tenure-stream, is a reality (Seidman, 2014).

After attending a demonstration of UNIWeb, ORS and the VPR were convinced we had found a ‘magic bullet’- not only would it make the creation of the CCV much less complicated, it would automatically generate information on researcher commonalities and connections, and could engender all manner of collaborations. As such, UBCO began the trial, with 40 research-active faculty representing as many disciplines as possible. Staff demonstrated and promoted the tool among the Deans, who agreed it would be most useful and promised to promote its use among their faculty, and offered workshops and information sessions to faculty, staff and administrators, and yet the reception to the tool was disappointing. This despite the fact, it was what they had ‘wanted’.

Findings from the survey and interviews have been covered in the last section, but to recap, the primary reasons that faculty do not wish to engage with participatory tools is that they have too much to do as it is, too many forms to fill out, and too little time to do so. They need to maintain a variety of CVs and reports, and prepare grant applications and tenure packages. While eager to learn what their colleagues are working on, and happy to form new collaborations, it seems they would rather this just become evident, or delivered to them via the ORS research facilitators (which does happen now).

Because of the demands on their time, faculty are also not eager to participate in ‘trials’. I learned that the word ‘trial’ has a slightly ephemeral nature, and busy faculty are not enthusiastic about devoting time and effort to a system that ‘may just go away’.

It seemed at one point that if the administration was committed to UNIWeb, and the Deans were enthusiastic, that perhaps having a UNIWeb profile should be ‘mandatory’. This is likely not the best approach either. One faculty commenter, in his survey comments warned:

“You should ask around about the “myCV” experiment of 2006-2008. Non-compliance killed it’.”
Indeed, one of the administrators at another institution trying to implement UNIWeb also commented when asked about the permanent adoption of the tool:

“A pilot was necessary to get the feedback from users. To impose a solution on academics would not have been well-received”.

This administrator is also a faculty member at that institution.

These tools will solve problems, however. They are easy to use, and have tremendous potential, beyond their utilitarian uses, to facilitate collaborations, recruit students and provide valuable metrics for university administrators. A tool like MORE, is visually stunning, and can be an incredibly striking marketing tool as well. It can tell a story to a variety of audiences, including the public and funding agencies, about the kind of research impact that the institution is making all over the world.

![MORE map with ‘marker’ content](image)

Figure 8: MORE map with ‘marker’ content

How do we overcome these barriers to research tool implementation in order to enjoy their benefits?
6.0 OPTIONS TO CONSIDER AND RECOMMENDATIONS

In the review of the literature around participatory technologies and online communities, I discovered a few articles concerning the use of social psychology to address the phenomena of ‘social loafing’ and motivate contributors (Williams and Karau, 1991, Beenen et al, 2004). Solutions in this vein include sending strategic messaging to contributors about the uniqueness and value of their contributions (Beenen et al, 2001), and motivation based on being part of a group that needed to come together to solve a problem, or achieve a goal (ibid).

However, rather than resort to sophisticated, and potentially manipulative and time consuming psychological techniques, we have chosen to focus on practical and technologically appealing approaches to increasing tool use.

Here, I propose four solutions, or approaches, which can be implemented simultaneously to address the reluctance of researchers to adopt, or engage with research tools, particularly those that are participatory.

**Reinforce value and utility of the tools with training and programming.** At UBCO we have partnered with the Library, who, along with a Library-driven unit, the Centre for Scholarly Communication (CSC), provides research resources alongside ORS. Library, CSC and ORS staff regularly collaborate to provide one on one and group training opportunities for faculty, students and staff that are often targeted to a particular unit or group. It is not enough to invite someone to participate in a new initiative, no matter how well it may be suited to their needs if they are left alone to use figure out how it works. Training needs to be strategic, and linked to something of high value, that the researcher already knows and understands. At UBCO, the ORS research facilitators, in delivering annual, intensive, multi-part seminars that support the researcher throughout the Tri-Council grant writing process include a session on preparing the CCV—which is now conducted through UNIWeb. Researchers are given accounts on the spot, and shepherded through the process. By the end of the workshop they have learned how easy it is to use and that there are other benefits to the tool besides one CV template. This is because we also:

**Add utility to the basic tools.** The majority of survey respondents indicated that they were more likely to use UNIWeb if it had other uses. We have asked UNIWeb developers to add other templates to the basic UNIWeb offerings. We started with the UBC CV, which is used as a basic academic CV for a variety of purposes, including internal funding, tenure and promotion review, and professional identification. The profile information contained in UNIWeb can now be moved into either the CCV or the UBC CV, which eliminates the need to maintain two systems. We have just started to work on a new template, an annual report specific to each faculty, and presently in word form that is required to be completed each spring by each faculty member for their tenure and promotion file. It is true that this is an academic use, rather than a research one but the point is obviously to eliminate yet another form and task for the researcher. Each faculty presently has a different report template, which complicates things somewhat, but one faculty at UBCO has pledged that they will require that their researchers will need to prepare their tenure report in UNIWeb in the spring of 2016. The template is presently being constructed by UNIWeb, and again, will allow the researcher to simply move the information in his profile to any of these templates and generate the file with ‘one-click’. Adding utility to the tool also means that we:
Reduce points of entry. As discussed, by adding templates to the tool, we reduce the number of independent files that a researcher needs to maintain, and the sites and spaces a researcher will need to access. In further reducing the sites and spaces to maintain we are now working with UNIWeb to add to their software offerings, our research map, MORE. As it happens, UNIWeb includes, in its metrics and analytics offerings (automatically generated by the data in researcher profiles) a map showing the research places of its users. This map, like MORE, also uses a Google API to locate its geographical data, however the UNIWeb is markedly less sophisticated and robust than MORE. By replacing the standard UNIWeb map with MORE, the research project information which is presently needed, in participatory fashion, to show UBCO research impact globally would be automatically populated in MORE both in the UNIWeb site as well as its present location on the UBCO website. The data in UNIWeb would continually feed MORE, which can then be used with all of its highly refined search and filtering features, to show the type of research output or impact the user wished. This integration of systems would also have the benefit of allowing Dr. Corbett to commercialize part of his Geolive software, as it would become a UNIWeb application that is available to any other institution using the UNIWeb software. Presently, Geolive and UNIWeb developers are working within each other’s platforms to make this feature a reality.

Also in discussions about integration with UNIWeb are the PlumX developers. PlumX has a widget feature which allows integration with other data repositories and websites to facilitate altmetric analyses of those platforms. We anticipate having information in UNIWeb feed PlumX, which will then use the information to develop even more robust altmetric analysis in the UBCO instance that we are presently using.

It’s incredibly useful to reduce points of entry while enjoying maximum utility in a research tool, and also to have the tool become ‘normalized’ in the sense that it becomes the go-to platform to complete a number of research and academic tasks, but we still endeavour to show the value of each tool individually, and highlight why and when a researcher might need to use a given tool which is why we have also created a system to:

Make them easier to find and use. UBC has a lot of research tools that have different uses, and a lot of resources for researchers. Aside from the tools mentioned in this report, which are specific to UBCO, UBC has a grants administration and compliance platform (RISe), an institutional repository (cIRCLe), a data management and open access plan builder and a bibliometrics tool called SciVAL.

UBC has also recently acquired an asset inventory tool called QReserve. QReserve is also a participatory tool, into which researchers enter their equipment, lab (other research-related) assets into a searchable database that is also meant to encourage collaboration. We have seen pretty good uptake of this tool, primarily because the database was originally populated by QReserve staff, and is now populated and maintained by Lab Managers and Technicians. The site generates reports, such as the one below, that shows site usage as well as site assets, of which there are presently over 2300.
The number of tools and resources UBCO was promoting, though useful, was getting somewhat unwieldy, and potentially confusing, and so the ORS and Library partnered to build a research portal that would facilitate access to all of these tools and other research resources for faculty, in a way that would make sense. The portal, launched in November 2015, is based on the idea that while you make things easier to use, you make things easier to find, and should also help users understand why and when one should use the tools available to the researcher. Research and Infrastructure Management Enterprise Services (rimes), is an independent UBCO webpage, accessible through its own URL and from any other UBCO page through a big, bright button and it has been constructed to offer use of research tools and resources in the context of the research life cycle. In other words, depending on what stage you are in, you can easily find the tool you need, and also learn why you might need it. The rimes portal has five sections on its homepage, each following another, and each section (planning, implementation, publishing, discovery and impact, and preservation) displays the relevant tools and resources and contains links to a secondary page which explains what each stage is about and why you would need or use each of the tools and resources. There is a dropdown tool chest on the homepage, for when you wish to directly access a particular tool, as well as a continually updating list of events, deadlines and workshops for researchers offered by ORS, the Library, and the Centre for Scholarly Communication (CSC). Other resources, such as links to funding opportunities, grant facilitators, research ethics, copyright and journal hosting, all within the appropriate stage of research engagement are also featured in the stages alongside the tools and plan building.
The challenge at this point is to raise awareness of the rimes portal, but this doesn’t detract from the work we have done to increase the value and the utility of the tools we use. rimes is meant to facilitate access to the tools, in a way that makes sense to a researcher. The Library, CSC and ORS will partner to offer targeted workshops to staff, faculty and students, all of whom can benefit from the resources contained within rimes.

With these strategies, UBCO hopes to normalize and increase research tool use, for the benefit of the entire campus population.
The research life cycle discovery & impact stage covers:
- Research Metrics
- Research Map

Research Metrics

SciVal
Elsevier’s SciVal provides access to the research performance of 4,600 research institutions and 220 countries worldwide, allowing researchers to benchmark performance against other institutions or groups of researchers. This can help to highlight the impact of research for assessment and funding purposes, assess the performance of researchers and groups relative to peers, and track collaboration patterns and seek out new partners for research projects.
SciVal access is available on-campus at both UBC Okanagan and UBC Vancouver.

PlumX
PlumX is an impact dashboard that provides evidence of how research output in all its forms is being utilized, interacted with, and talked about around the world. Harvesting metrics from a multitude of online sources that measure the impact of a researcher’s output, PlumX combines both traditional and alternative metrics to provide a different kind of measurement. PlumX also accounts for a wide-range of research outputs beyond traditional articles, books, and book chapters and includes presentations, datasets, videos, blogs, and other digital artifacts. In addition to traditional citation counts, PlumX accounts for usage (clicks, downloads, views, library holdings, video plays), captures (bookmarks, code forks, favourites, readers, watchers), mentions (blog posts, comments, reviews, Wikipedia links) and social media activity (+1s, likes, shares, Tweets). Data about your research impact is gathered and displayed on a dashboard and is also available for export to be used on its own or in other research metrics tools.
Current PlumX display was developed in Summer 2015 based on available self-reported researcher outputs, and includes only UBC Okanagan researchers. Access is available on-campus at both UBC Okanagan and UBC Vancouver.

Figure 11: rimes Secondary Page Detail: “Discovery and Impact”
7.0 CONCLUSION

UBCO has renewed its subscriptions with the two external tool developers, Proximify, and Plum Analytics, which indicates continued confidence in and reliance upon, the services and information that each provides. It remains challenging to overcome the single biggest obstacle in implementing research tools that rely on researcher input, though as UBCO’s experience suggests, continual innovation by the university in adding value and features to the tools while reducing the points of entry that researchers need to observe is a solid way to move forward and gain users. Since the survey was completed in March 2015, the number of active user accounts in UNIWeb has increased from 14 to 59, or twenty percent of faculty. In that time, we have adopted and maintained a number of the recommendations as outlined in earlier sections of this document, such as adding features that reduce the number of individual documents a researcher needs to produce independently, and including UNIWeb training as part of the Federal Tri-Council grant preparation programming. UBCO is also actively working with tool developers on the integration of the various systems with the hope that they will feed each other data in real time, and thereby reduce the amount of time a researcher needs to spend inputting new data into their profile.

The research map, MORE, is one of the systems we are looking to integrate into UNIWeb, which has a number of added benefits including commercialization of the technology for the researcher. We also recognize the value of working with units across campus, such as the Library, to add value and innovation to the tools as well as the training and marketing methods we use to encourage use of the tools. The *rimes* portal is a great example of this type of collaboration and we hope that it proves to be an essential part of the researcher’s routine going forward.

Ultimately, in adopting research tools that will tell us stories of our researcher’s success and impact, we need to be cognizant of the demands on their time away from conducting the research that will generate that impact. The university can reduce administrative burden while gathering this essential research output data by working creatively and collaboratively with tool developers to adapt the tools to fit researcher needs and preferences, while actually adding value to their own product, making it more viable and valuable for the next institution they work with.

UBCO has been fortunate to have been working with tool developers at a relatively early stage of the life of the tool (as well as the business) for some of these companies (UNIWeb, QReserve, and MORE) which has enabled us to experiment with processes and suggest and adopt innovations ‘on the fly’, as well as allowing us to feel almost ‘partnered’ with them while doing so. This of course makes us feel invested in the success of the tools and even more determined that they become an essential and ongoing part of the research lifecycle at UBCO.
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Appendix 1 – Administrator Interview Questions

Kristen Korberg
University of Victoria MPA
University of British Columbia Okanagan ORS
April 2015

Research Tool Interview Questions (to be administered by phone)

[NB: these questions form the basic structure/line of questioning but if there is something in answer that warrants further investigation, the interviewer (K. Korberg) may ask additional questions though none of the content will vary significantly from the main line of inquiry below]

Prior to asking questions, I will introduce myself and briefly describe the study: eg:

I am a Masters of Public Administration student at the University of Victoria, as well as a University Research Administrator and I am conducting a project on the use of Research Administration and/or Research Metrics Tools at UBCO. I would like to survey UBCO Researchers on their experience using the research administration and/or bibliometric (statistical analysis of publications) tools currently deployed at the University of British Columbia Okanagan to determine user satisfaction levels and any real or perceived barriers to their ongoing or widespread use. I am also interviewing Research Tool Vendors and University Administrators at other institutions to get a sense of how many of how many Universities are using research tools, and to gather anecdotes of feedback from the institutions. Your confidentiality will be protected. No identifying characteristics will be used in the project report.

Thank you very much for consenting to participate in my project.

University Research Administrators:

1. Your name was given to me by X Research tool vendor. Other than X, are you using any other research administration and or bibliometrics tools? Overall, how have they been received?
2. [If applicable, has X or Y (or Z) been more successful? Why?]
3. What about your university and/or research environment caused you to adopt the X tool? Ie. Why did you perceive there was a need for a tool that would perform this/these functions?
4. How has reaction specifically to the X tool been? How have you marketed the tool?
5. Have you purchased the tool on a permanent basis, if not, do you intend to?
6. If not, can you share your reasons?
7. Have there been any concerns raised with respect to Researcher uptake of the tool? Can you share some examples of positive and negative feedback?
8. What are your thoughts about how universities should present the tool to their faculty for maximum uptake? What sorts of things have you done to encourage ongoing use of and interest, in, the tool?

9. Do you have interest in, but have not yet adopted, any other tool? Why? [back to Q3 if applicable]

Thank you for your time!!
Appendix 2 – Vendor Interview Questions

Kristen Korberg
University of Victoria MPA
University of British Columbia Okanagan ORS
April 2015

Research Tool Interview Questions (to be administered by phone)

[NB: these questions form the basic structure/line of questioning but if there is something in an answer that warrants further investigation, the interviewer (K. Korberg) may ask additional questions though none of the content will vary significantly from the main line of inquiry below]

Prior to asking questions, I will introduce myself and briefly describe the study: eg:

I am a Masters of Public Administration student at the University of Victoria and I am conducting a project on the use of Research Administration and/or Research Metrics Tools at UBCO. I would like to survey UBCO Researchers on their experience using the research administration and/or bibliometric (statistical analysis of publications) tools currently deployed at the University of British Columbia Okanagan to determine user satisfaction levels and any real or perceived barriers to their ongoing or widespread use. I am also interviewing Research Tool Vendors and University Administrators at other institutions to get a sense of how many of how many Universities are using research tools, and to gather anecdotes of feedback from the institutions. Your confidentiality will be protected. No identifying characteristics will be used in the project report.

Thank you very much for consenting to participate in my project.

Research Tool Vendors:

1. What about the university and/or research environment caused you to create this tool? Ie. Why did you perceive there was a need for a tool that would perform this/these functions?
2. How has reaction to the tool been? How have you marketed the tool?
3. How many institutions have trialled the tool? Has anyone not purchased the tool?
4. If not, what are the reasons given? Have you adapted the tool accordingly?
5. For those purchasing the tool for ongoing (permanent) use, have there been any concerns raised with respect to Researcher uptake of the tool? Can you share some examples of positive and negative feedback?
6. What are your thoughts about how universities should present the tool to their faculty for maximum uptake?

Thank you for your time!
Appendix 3 – UBCO Faculty Survey

UBCO Faculty Survey

Study being conducted by:

Principal Investigator: Dr. James MacGregor, Professor, School of Public Administration, University of Victoria. 250.721.6435

Co-Investigator: Kristen Korberg, Masters of Public Administration student, University of Victoria; Associate Director, Office of Research Services, University of British Columbia Okanagan. 250.807.8832.

You are being invited to take part in this study as a member of the UBCO faculty presently trialling the “UNIWeb by Proximify” CV software tool in order for us to gain insight into your experiences in using the tool, and/or any barriers to the active or ongoing use of the tool. We would like to gather information about any real or perceived barriers in order to ultimately propose solutions for them in order for UBCO to continue to successfully deploy the tool and others like it.

Please answer the questions to the best of your ability. If a field is too small to hold or does not capture your comments adequately, there is a “general comments” section at the end with plenty of room. Thank you very much for your participation.

1. To what extent have you used the UNIweb Canada Common CV (CCV) tool?
   a. Have used the log in provided, established a user ID, uploaded my CCV and checked out some of the other features
   b. Have used the log in provided, established a user ID, uploaded my CCV
   c. Have used the log in, established a user ID but just looked around a bit
   d. Have not used the log in
   e. What is UNIweb?
   f. Other (please describe):

2. If you have used the UNIweb tool, how would you characterize your overall experience with it?
   a. Excellent
   b. Very good
   c. Good
   d. Fair
   e. Poor

3. If you have not logged in to UNIweb at all, please tell us why
   a. Not interested/don’t need
   b. Someone told me it wasn’t very useful
c. Looked too complicated
d. Don’t know about UNIweb; haven’t received any information about it
e. No time
f. Too many forms and CVs to complete as it is
g. Other (please describe):

4. UNIweb will be adding a feature that will move data between the CCV and the UBC CV. When the feature is live, will you be more or less inclined to use it then you described in Q1?
   a. More
   b. Less
   c. Not sure

5. Given your current usage levels, would you be more inclined to use UNIweb if one or more of the following were available at UBCO (choose all that apply):
   a. Group workshops explaining how to use
   b. One on one sessions with a trainer
   c. My grad students could complete and maintain my profile
   d. If I could pay someone to complete and maintain my profile
   e. There were more features to UNIweb (eg. other templates like UBC CV or annual reports; collaboration opportunities)
   f. I’m happy with it as is, but would welcome other features
   g. If I knew what it was
   h. Other (suggestion?):

6. Were you aware that UNIweb can function as a tool for researcher collaboration by identifying key words and phrase in CVs and profiles and matching up common interests?
   a. Yes
   b. No

The MORE map is a tool that allows a UBCO researcher to place a marker that contains a variety of media about a research project on an online, interactive, real-time map on the UBCO website. This map is viewable by any visitor to the website and contains a number of features that allow it to be viewed through specific filters including, ultimately, an individual researcher’s projects.

7. Were you aware of the MORE (Mapping Okanagan Research Engagement) map?
   a. Yes
   b. No
   c. Not sure
8. If you know about MORE, how did you hear about it?
   a. UBCO Celebrate Research Week information/events
   b. Word of mouth
   c. ORS
   d. From Dr. Jon Corbett/Geolive
   e. Other (please indicate)

9. Do you know how to access MORE?
   a. Yes
   b. No

10. Have you placed a marker(s) on MORE?
    a. Yes
    b. No

11. If yes(Q10), what was your level of satisfaction with ease of use of MORE:
    a. Very satisfied; I found it really easy to use
    b. Satisfied; it was about average
    c. Neither satisfied or dissatisfied: it was about average
    d. Dissatisfied; it was complicated
    e. Very dissatisfied: it was impossible to navigate without assistance

11B. Do you intend to place additional markers as needed/desired?
    f. Yes
    g. No

12. If no (Q10), do you intend to place one or more map markers?
    a. Yes
    b. No

13. If you do not intend to use MORE, why not? Select all that apply.
    a. It doesn’t interest me
    b. I don’t think it will be useful to my research
    c. I don’t think it will be useful to the promotion of my research
    d. I don’t have time to deal with it
    e. It looks too difficult to use
    f. Too many other things (like reports or online profiles) to fill in
    g. Other (please describe)
14. Given your experience with UNIWeb and/or MORE, how likely would you be to use other/additional research tools offered by UBCO?
   a. Definitely
   b. Likely
   c. Somewhat likely
   d. Not very likely
   e. Definitely not

15. Would your answer (Q14) be the same if the tool was of benefit to your research but did not require you to complete any online forms or provide any information?
   a. Yes
   b. No

16. If you could create a research tool (online or otherwise) that would most benefit you, what would it do?

17. General comments: