Millikin University

Student Learning in Library Research Instruction for University Seminar and Critical Writing, Reading, and Research I & II

'oals

"urin# the 20 $%20 ! acade&ic year, the librarians tau#ht $$ sessions 0in 4! sections1 (or C , RR classes, 2$ sessions 0in 2$ sections1 (or Se&inar classes, 4 sessions 0in 2 sections1 (or the 8o((%se/uence9 C , RR classes 0i)e), C , RR II o((ered in the (all rather than the sprin# se&ester and C , RR I o((ered in the sprin#1, and 2 sessions 0in 2 sections1 (or the 7-C@ C , RR classes)

Matthew Olsen coordinates the research instruction pro#ra& and shares in the instruction with library (aculty Rachel *icicchi, Cindy Auller 0'ibrary "irector1, and -&anda 7ippitt) -ll library (aculty, includin# the Instructional Services Coordinator, report to the "irector)

(he Learning Story

Aor &ost Millikin University students, C , RR and University Se&inar are their introduction to colle#e%level writin# and research) , hile &any (irst%year students are co&(ortable usin# consu&er technolo#y and (indin# in(or&ation on the internet, those abilities do not necessarily translate into well%developed in(or&ation seekin# and evaluation skills) ;he library (aculty are the ca&pus leaders in increasin# students+ in(or&ation literacy skills, not only to pro&ote acade&ic success, but also to develop the skills necessary (or li(e%lon# learnin#) ;o this end, the librarians work closely with University Se&inar and C , RR (aculty to tailor their instruction so that it &atches the course content and provides an authentic learnin# e2perience (or students) 'ibrarians teach students to use both

;o (acilitate reportin# o(the ran#e o(answers to the short answer /uestions, responses to /uestion and E were coded into thirteen cate#ories, all o(which are listed in -ppendi2 -) @ach response was assi#ned up to three codes) ;he Instruction Coordinator and library (aculty &e&ber Rachel *icicchi per(or&ed the codin#) - nor&in# session was held be(ore they independently coded all o(the responses) -(ter review, (or any responses the two librarians coded di((erently, the responses were discussed and the librarians a#reed on co&&on codes) Cuestions < and 3 were also #raded by the Instruction Coordinator and Rachel *icicchi and the #rades were avera#ed to assi#n a (inal #rade to each response) ;he #radin# scale (or /uestions < and 3 can also be (ound in -ppendi2 -)

-ther .orms of /valuation

In addition to the library instruction sessions (or the (irst%year core curriculu& courses, new students have traditionally participated in a sel(%#uided tour o(the library durin# the (irst &onth o(the (all se&ester) ;he #oal o(the library tour is to introduce students to the library 8as place9 and to (a&iliari=e the& with so&e o(the resources and services that are available in the library buildin#) ;he tour has three learnin# #oals8

) Students will (eel co&(ortable while researchin#, locatin# resources, studyin#, and rela2in# in the library)
2) Students will know how to locate &any o(the resources available in the library)
<) Students will know who to ask i(they have /uestions)

Aall 20 $ presented a challen#e to our usual (or&at (or the tour because the library had &oved to its te&porary location in Hew Ball < durin# the University Co&&ons construction) Hew Ball < is not conducive to #roups o(students &ovin# throu#h the buildin#, and the librarians wanted to share in(or&ation about the o((%site stora#e (acility, which is not accessible to students) ;hus, we created a virtual tour o(the library usin# the 'ib Iuides plat(or&) ;he tour consisted o((ive Jpa#es+ o(photos and te2t, each correspondin# to di((erent areas o(the library) ;he tour also had two videos e2plainin# how to access the library+s website and how to re/uest &aterials (ro& the o((%site stora#e (acility) -(ter (inishin# the tour, students co&pleted a ten /uestion worksheet that tested their co&prehension o(the &aterial) Students also had the option to respond to a (ive /uestion survey) Upon co&pletion the worksheets were turned in at the library, #raded by the librarians, and then returned to the Se&inar instructors) ;he worksheet scores are reported in ;able below and the results o(the survey are reported in ;able 2)

-cade&ic year 20 $%20 ! also continued the Aaculty -ssess&ent o('ibrary Instruction survey) ;his nine /uestion electronic survey is sent to every (aculty &e&ber within whose class library instruction was conducted includin# those outside o(the Se&inar .C , RR se/uence) ;he (aculty can then #ive anony&ous or si#ned (eedback, which the librarians use to i&prove library instruction) ;o view the survey /uestions please contact the Instruction Coordinator)

Assessment 0ata

.all , re%(est!

7art 6 - vera#e score K <) 03 point scale1
7art 26 Multiple choice6 - vera#e percenta#e o(students answerin# the /uestion correctly K $< L
Short answer6 - vera#e score K 2)04 0< point scale1

Spring , ost%(est1

7art 6 - vera#e score K <)<! 03 point scale1
7art 26 Multiple choice6 - vera#e percenta#e o(students answerin# the /uestions correctly K !0 L
Short answer6 - vera#e score K 2) M 0< point scale1

(able !) , re% and post%test results by library CWRR learning goal

Staley Library CWRR Learning 'oals 2L'3			
#) Information Sources ,art # 4uestions && 5 7re%;est -v#) K 2)E 7ost%;est -v#) K <) I&prove&ent K ! L ,art ! 4uestions 6 & 7 7re%;est -v#) K $3 L 7ost%;est -v#) K M0 L I&prove&ent K 22 L (otal for L' # I&prove&ent K 3L	!) Search Strategies ,art # 4uestions #, !, 1, 6 & 7 7re%;est -v#) K <) 7ost%;est -v#) K <) I&prove&ent K ! L ,art ! 4uestion ! & $ 7re%;est -v#) K $$L 7ost%;est -v#) K $E L I&prove&ent K 4 L (otal for L' ! I&prove&ent K $L	1) /valuation of Information ,art # 4uestions $, 8 & #" 7re%;est -v#) K <)0 7ost%;est -v#) K <)4 I&prove&ent K L ,art ! 4uestions 1 & & 7re%;est -v#) K 3! L 7ost%;est -v#) K $2 L I&prove&ent K 0L (otal for L' 1 I&prove&ent K L	6) /thical Aspects of Information ,art # 4uestions #1, #6 & #7 7re%;est -v#) K <)2 7ost%;est -v#) K <)3 I&prove&ent K L ,art ! 4uestion 5 7re%;est -v#)K ! ! L 7ost%;est -v#)K !4 L I&prove&ent K %4 L (otal for L' 6 I&prove&ent K 4 L

7art o(the assess&ent is desi#ned to &easure students+ con(idence level % TL rT*[(25%721(e) - .74033(s) - .398818(h) -

(able **1)** Comparison of student ratings pre% and post%test by **9**uestion for **,** art **#**

4uestion Scale **#** % **7** **#** **:** very difficult **7** **:** very easy	**,** re%**(**est Average **,**oints **0**n**K** **$** **1**	**,** ost%**(**est Average **,**oints **0**n**K** **43**1	**,**oint Change	**,**ercent Change
) **"**e**(**inin**#** a topic **(**or the assi**#**n**&**ent	**<)**0**!**	**<)**22	0) **3**	**3L**
2) **H**arrowin**#** **&**y topic	2)**EM**	**<)**0**$**	0)0**E**	**<L**
<) Selectin**#** search ter**&**s	**<)**	**<)<3**	0)2**4**	**ML**
4) **A**indin**#** articles in the research databases on the **'** ibrary****s website **0@*** SCO, JS **;** OR, **7**ro**C**uest, etc)**1**	2)**!**0	**<)<3**	0)**$$**	2**4L**
3) **A**indin**#** sources to use **0**out on the web**0** **0**e**2**a**&**ple % **I**oo**#**le, **,** ikipedia, websites**1**	**<)!**	**<)$$**	%0)0**3**	% **L**
$) **"**eter**&**inin**#** whether a website is credible or not	**<)**2**<**	**<)4<**	0)20	**$L**
!) **A**i**#**urin**#** out where to **(**ind sources in di**((**erent parts o**(** the library	2)**M<**	**<)**0**<**	0)20	**!L**
M) **A**indin**#** up%to%date **&**aterials	**<)**0**<**	**<)**2**$**	0)22	**!L**
E) **B**avin**#** to sort throu**#**h all the irrelevant results I **#**et to **(**ind what I need	2)**M**0	**<) 4**	0)**<4**	2**L**

;able 3 0below1 and I raph 2 0-ppendi2 *1 show the percenta#e o(students who answered each /uestion correctly on the pre% and post%test (or the (ive &ultiple choice /uestions in 7art 2)

(able 7) , re% and post%test comparison of percentage of students ans<ering multiple choice 9uestions correctly

+ultiple Choice 4uestion	, re% (est 0nK 4E1	, ost% (est 0nK <31	, ercent Change
2) 5eywords	$3L	$$L	2L
4) "atabase	!4L	E0L	22L
$) Harrowin#	$! L	!2L	! L
!) Sources	<3L	30L	42L
M) Citation	! ! L	!4L	%4L
Average	$1 ;	&" ;	## ;

;ables $, !, and 0 0below1 list the nu&ber o(student responses that &atched a #iven cate#ory (or /uestions and E and a representative response (or each cate#ory) Student responses were coded into up to three di((erent cate#ories)

(able $) Coded student responses to pre%test 9uestion #

, re% (est 4uestion # = >What do you hope to learn from the library sessions this year?>	@umber of Student Responses 0nK 4M1
-ther >0I hope to learn as &uch as I can due to the (act that not &uch was done involvin# this topic in &y hi#h school)0	3$
.inding resources >0I hope to learn how to (ind accurate and up%to%date in(or&ation /uickly and easily)0	33
Library >0I hope to learn where speci(ic sources are within the library)0	33
Citation >0I also want to be able to source the ri#ht thin#s and be correct while doin# the&)0	2<
.inding booAs >0I will like to learn how to #et &ore (i&ilar with checkin# out books0	2<
/valuation of sources >0Bow to evaluate print sources)0	22
.inding articles >0Aro& the library session I hope to learn how to use data bases to (ind scholarly :ournals0	4
(opics >0I hope to learn how to narrow &y topics as well as (ind so&e (ocus in &y writin#)0	<
Web >0Bow to better use internet sources)0	<
Interlibrary loan >0I hope to learn P what kind o(access I have to interlibrary loans (ro& other universities and institutes)0	2
@othing >0Hothin# in particular0	2
Bey<ords >0 , hat are the best ways to phrase the search ter&s when lookin# (or in(or&ation online)0	
0on*t Ano< >0I\& not sure what else I could learn honestly)0	

(able **&)** Coded student responses to post%test **9**uestion **#**

,ost%**(**est **4**uestion **#)#=C**What **<**as the most useful thing that you learned from the library sessions**?D**	@umber of Student Responses **0nK <**21

/valuation of sources >0; hey can also help us deter&ine i(a site is credible or not)0	<0	-ther >0I think the activities that they provided us, #ot the :ob done0	2$
-ther >0Study tactics0	23	(opics >0advice students to build a better topic0	M

03 0 L 1) , ith the e2ception o(/ uestion $ 0narrowin#1, all o(the &ultiple choice post%test scores were lower than acade&ic year 20 $%20 ! and the overall percenta#e chan#e (ro& the pre% to the post%test was lower as well 0 L increase this year versus 3 L last year1) -s in past years, the students showed the #reatest increase in their scores on /uestions related to &aterial that the librarians particularly e&phasi=e in their instruction sessions, e)#), scholarly databases and peer%reviewed :ournal articles 0/uestions 4, 3, and !1) On the whole this year+s assess&ent shows that students+ in(or&ation literacy con(idence and abilities are increasin# durin# their (irst year at Millikin University)

Analysis of Assessment Results by Library Instruction 'oal

Many o(the /uestions in 7arts and 2 can be &apped to particular Staley 'ibrary C , RR learnin# #oals) Students+ con(idence and correct answers increased across all o(the learnin# #oals 0see ;able 2 above1, with a particularly stron# increase in #oals and < 0in(or&ation sources and evaluation o(in(or&ation1, as has been the case in past years)

Analysis of Assessment Results for ,art

Students+ sel(%assessed con(idence increased on a &a:ority o(the /uestions in 7art and on the whole increased by)2 ! points 0E L 1) ;he #reatest increase in con(idence was in (indin# articles in the library databases 0/uestion 41, evaluatin# sources 0W 01, knowin# how to cite sources in the correct (or&at 0W 41, knowin# what constitutes pla#iaris& 0W 31, and sortin# throu#h sources to (ind what the student needs 0WE1) Usin# the library databases is covered e2tensively in library instruction sessions and these results re(lect positively on that instruction) ;he increased con(idence in evaluatin# sources is also encoura#in#, althou#h deter&inin# credibility o(a website, which is discussed e2tensively in the (all se&ester, only showed a $ L 0)20 point1 increase) Sortin# throu#h irrelevant results is another topic that is covered in library sessions, particularly in C , RR II) Citin# sources and pla#iaris& are covered in varyin# de#rees both in library instruction and by Se&inar. C , RR (aculty)

Students con(idence is (indin# sources 8out on the web9 decreased sli#htly (ro& the pre% to the post%test, althou#h their con(idence on the pre%test 0<) ! 1 wa

4uestion **6** on the types o**(** resources available in library databases showed a si**#**ni**(**icant i**&**prove**&**ent 022 **L1** between the two tests? **E**0 **L** o**(** students correctly identi**(**ied library databases as a source **(**or **:**ournal articles by the post%test) **5**nowin**#** what library databases are and what can be **(**ound in the**&** is an essential skill **(**or scholarly researchers) Students+ success ac**/**uirin**#** this skill **0**which they see**&** to appreciate **#**iven that al**&**ost hal**(** o**(** the**&** **&**entioned in **/**uestion o**(** the post%test that learnin**#** to use the databases was the

4uestion **8**, which asks about research activities that a librarian can help with, is intended in part to **#**ive a better sense o**(** students' perceptions o**(** the librarians both be**(**ore and a**(**ter the instruction sessions) On the pre%test students identi**(**ied traditional activities with librarians, e)**#**), **(**indin**#** books and other resources, but by the ti**&**e o**(** the post%test the responses were **&**ore varied and included **(**indin**#** credible resources, **(**indin**#** books and articles, helpin**#** with citations, and other activities such as **8[**I\librarians can provide research strate**#**ies to **&**ake the instructions attainable to the students)**9** ;he variety o**(** activities that students identi**(**ied, especially in the post%test, is noteworthy and de**&**onstrates that students reco**#**ni=e the di**((**erent ways that librarians can help the**&** with the research process)

Analysis of Results for the **G**irtual Library **(**our

;his **(**all 2**E$** students co**&**pleted the 0 **/**uestions worksheet associated with the virtual tour o**(** the library in its te**&**porary location) ;he avera**#**e score was **E)<** with a **&**ean o**(** **E)3 0**see ;able above**1**) ***a**sed on a class o**(** **4$3** students, that **&**eans that **$3L** o**(** the enrolled students co**&**pleted the tour) **,** hile the scores on the worksheet continued to be hi**#**h, the participation rate dropped si**#**ni**(**icantly **(**ro**&** the previous year, when appro**2**i**&**ately **M0L** o**(** students co**&**pleted the sel**(%#**uided tour) **,** hile the librarians wanted to continue to o**((**er a **(**or**&** o**(** orientation to the physical library while in **H**ew **B**all **<**, we knew that the virtual tour would be a co**&**pro**&**ise) **,** e intend to return to physical tours o**(** the library in the University

$

Appendi**l** A

, re% and **,** ost%**(** est **4**uestions

, art **#**

, hen you think about the @**H;** IR@ research process **] (**r

4) I(you are searchin# in the database 0-cade&ic Search 7re&ier0 as seen in the i&a#e below, what type o(research resources should you e2pect to (ind in your resultsD

"ournal Arti!les

*ooks

3) "escribe three ways that scholarly :ournal articles di((er (ro& &a#a=ine articles or newspaper articles)

$) Rou have been assi#ned to write a research paper on a current events issue and you have decided to write about privacy on the Internet) Rour pro(essor tells you that your topic is too #eneral) O(the (ollowin#, which is the best way to narro< your Internet privacy topicD

Aocus on the relationship o(Aacebook use and sel(%estee&)

Aocus on &ethods that schools are usin# to prevent online bullyin#)

&o!us on so!ial media !ompanies and how the# use personal data to ma'e mone#)

Aocus on whether e%books a((ect student learnin#)

!) Rou are doin# research (or a speech on the potential health bene(its and drawbacks o)aat -2.0%854(c)-5.50%35(-0.409

' raph !

Appendi**l** C

,AC**/** CWRR Results**&**

,art **#**

(able C**)#)** Student ratings by **9**uestion for **,**art **#**

4uestion Scale **#%7** **#:** very difficult **7:** very easy	**,**ost**%(**est Average **,**oints **0**n**K**2**1**
) **"**e**(**inin**#** a topic **(**or the assi**#**n**&**ent	**<)3**0
2) **H**arrowin**#** **&**y topic	**4)**00
<) Selectin**#** search ter**&**s	**<)3**0
4) Aindin**#** articles in the research databases on the **'** ibraryll**s** website **0@*** SCO, JS**;** OR, **7**ro**C**uest, etc**)1**	**4)**00

.art **!**

(able C)&) Coded student responses to post%test 9uestion 8

,ost%(est 4uestion 8 =>What are some research activities that librarians can help students <ith?>	@umber of Student Responses 0nK21
/valuation of sources >0 , hat authors are &ost credible)0	
(opics %0narrow down topics to research0	

Appendi I 0

- ff%Se9uence CWRR Results5

,art #

(able 0)#) Student ratings by 9uestion for ,art #

4uestion
Scale #%7 ,ost%(est Average ,oints
#: very difficult
7: very easy

(able **0)!) ,**ercentage of responses at each level of difficulty for all **9**uestions in **,**art **#**

Rating	,ost%(est 0nK 01
> ;his is very di**((**icult	0**L**
2**> ;**his is di**((**icult	0**L**
< > ;his is neutral	2**$L**
4 > ;his is easy	**4$L**
3 > ;his is very easy	**ML**

,art **!**

(able **0)1) ,**ercentage of students ans**<**ering each multiple choice **9**uestion correctly

+ultiple Choice **4**uestion	,ost%(est 0nK 01
2) **5**eywords	**3**0**L**
4) "atabase	**M**0**L**
3) Harrowin**#**	**3**0**L**
!) Sources	**!**0**L**
M) Citation	**!**0**L**
Average	**$6 ;**

- ther > 0; he di((erences between