

Transforming Assessment Webinar Series



9 December 2015: 07:00AM GMT

Providing meaningful learning analytics data to teachers: a tool to complete the loop

Professor Gregor Kennedy, Dr Linda Corrin and Ms Paula De Barba (University of Melbourne, Australia)



Your Webinar Hosts

Professor Geoff Crisp,
Dean Learning and Teaching, RMIT University
geoffrey.crisp[at]rmit.edu.au

Dr Mathew Hillier,
Office of the Vice-Provost Learning & Teaching,
Monash University
mathew.hillier[at]monash.edu

Just to let you know:

By participating in the webinar you acknowledge and agree that:

The session may be recorded, including voice and text chat communications (a recording indicator is shown inside the webinar room when this is the case).

We may release recordings freely to the public which become part of the public record.

We may use session recordings for quality improvement, or as part of further research and publications.



Providing meaningful learning analytics data to teachers: a tool to complete the loop

> Gregor Kennedy, Linda Corrin & Paula de Barba













Project Details

Project leader: Professor Gregor Kennedy, *University of Melbourne*

Project team: Dr Linda Corrin, Professor David Williams, Professor Raoul Mulder

University of Melbourne

Professor Lori Lockyer, Dr Susie Khamis

Macquarie University

Professor Shane Dawson, Mr Scott Copeland

University of South Australia

Project officer: Ms Paula de Barba, *University of Melbourne*

Programmer: Ms Aneesha Bakharia, *University of South Australia*

Reference group: Professor Barney Dalgarno, Charles Sturt University

Professor Sue Bennett, University of Wollongong

Dr David Jones, University of Southern Queensland

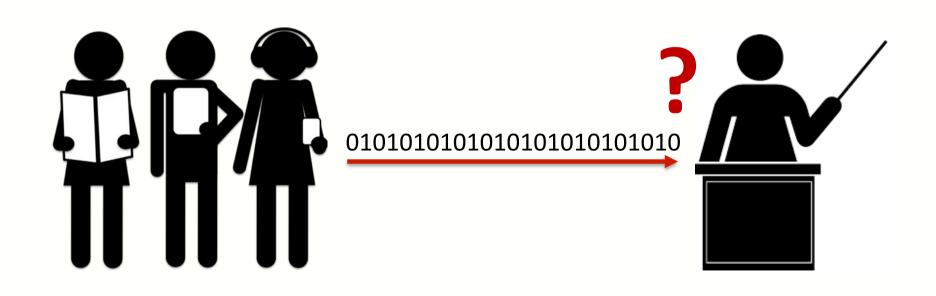
Professor Diana Laurillard, University of London

Professor Maarten de Laat, Open University Netherlands

Funding body: Office for Learning and Teaching

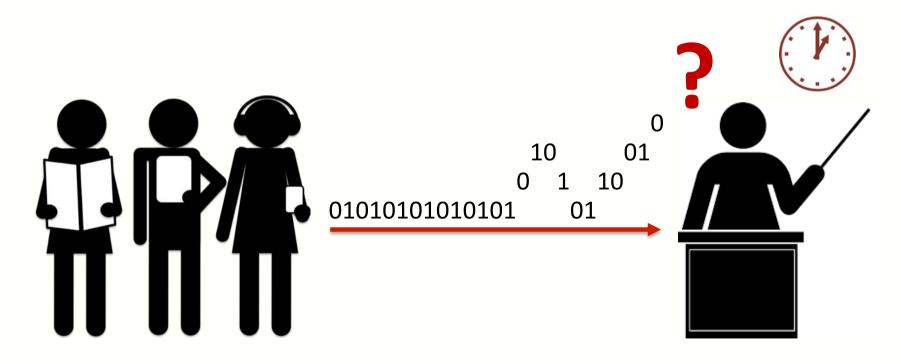
Background

The field of learning analytics offers the potential to enhance teaching and learning practices in higher education by providing an empirical basis for educational design and delivery



Background

The field of learning analytics offers the potential to enhance teaching and learning practices in higher education by providing an empirical basis for educational design and delivery



Aims of the project

This project will investigate ways to deliver useful learning analytics to academic teachers in higher education.

It aims to:

Better understand how analytics can be interpreted, applied and actioned by teaching academic staff "Complete the loop" by providing easily accessible data to teachers about their students' interactions in online learning environments

Phases of the Project

_

Explore teaching problems and analytics solutions

Interviews with 12 teaching academics (4 from each participating institution)

- Pedagogical intent
- Educational technologies
- Educational problems/situations
- Needs and wants

Explore teaching problems and analytics solutions Participants had fairly basic requests concerning their needs and ideas of how leaning analytics can be used and retrieved from their courses.

Explore teaching problems and analytics solutions

Such requests mainly focused on analytics around student engagement, specifically frequency of access to resources.

Explore teaching problems and analytics solutions

Due to the blended nature of their teaching, few participants made use of interactive online activities such as quizzes and discussions, limiting the availability of data.

Explore teaching problems and analytics solutions

Some participants wanted to relate data from the learning management system with data from other sources. For example, student evaluation surveys.

Explore teaching problems and analytics solutions

Participants expressed concern about their own ability to interpret the data, and identified a need for training in this area.

Explore teaching problems and analytics solutions

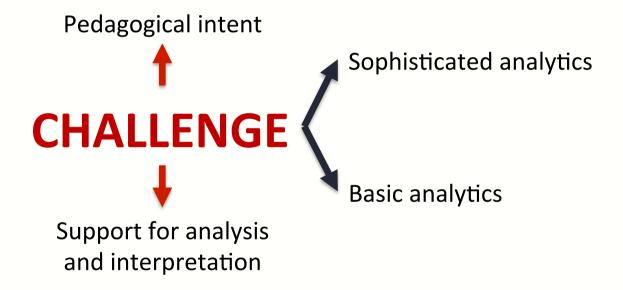
They were also concerned about the time it would take to collect, analyse and develop actions based on the learning analytics data.

Challenges for Phase 2

Explore teaching problems and analytics solutions

2

Development of a web-based analytics tool



Phases of the Project

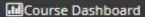
_

Explore teaching problems and analytics solutions

2

Development of a web-based analytics tool

Web-based tool
Extract data from Moodle/Blackboard
Pedagogical intent, technological tools & data

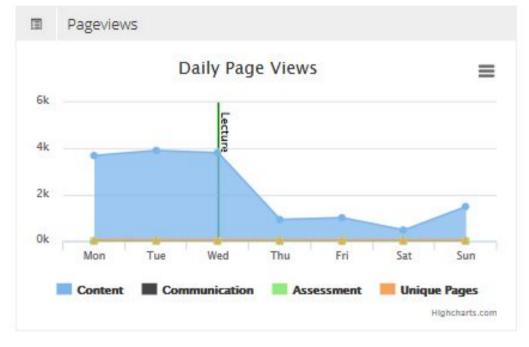


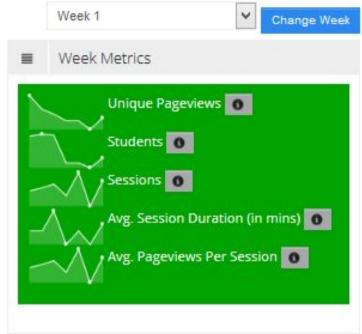
My Courses > Course: TEST - Dummy Course > Dashboard

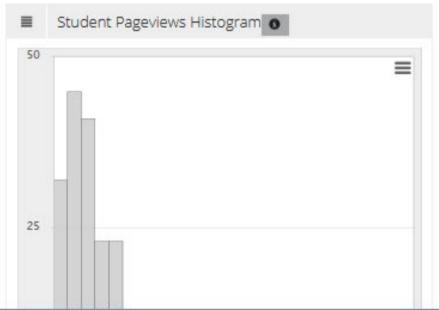
Course Access

Students









Page	Туре	Student Visits	Pageviews
ruge	Турс	VISICS	rageviews
Lecture 2	resource/x-	173	1182
	bb-document		
Introduction	resource/x-bb-file	172	1124
lecture			
TOP	resource/x-	171	1080
	bb-folder		
Lecture 4	resource/x-	170	1078
	bb-document		

Ton Accessed Content

To May 31, 2015

25. May

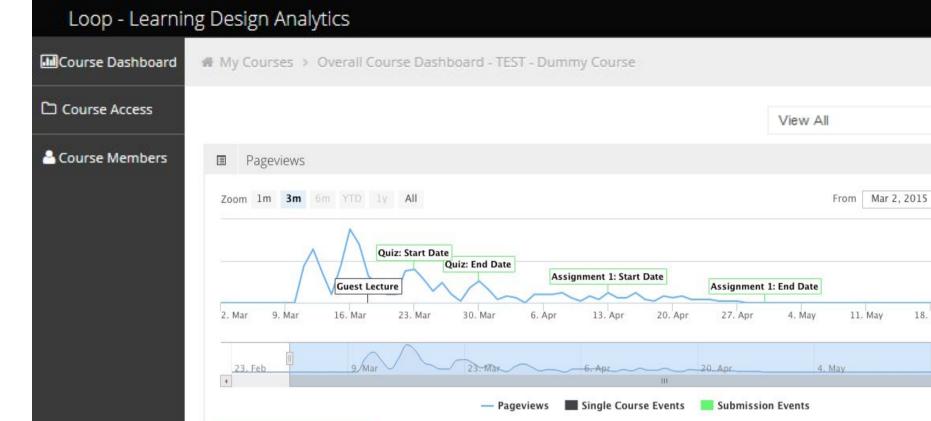
18. May

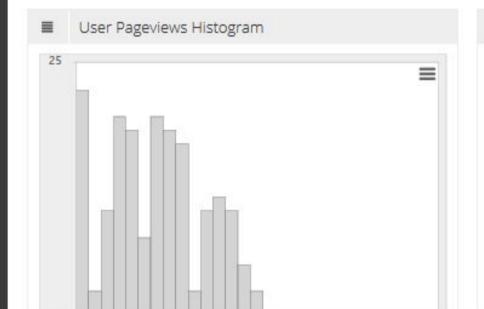
18. May

Change Week

 \equiv

Highcharts.com





Update Based On Date Selection

	sed Content		
Page	Туре	Student Visits	Pageviews
Lecture Capture	resource/x- osc-basiclti	186	10152
TOP	resource/x- bb-folder	225	9304
TOP	resource/x- bb-folder	235	9248
Lecture 14	resource/x-	230	9232

■ Top Site Visitors				
Firstname	Surname	Role	Pageviews	
Student	Student	STUDENT	2850	
Student	Student	STUDENT	2804	
Student	Student	STUDENT	2537	
Student	Student	STUDENT	2399	
Student	Student	STUDENT	2169	
Student	Student	STUDENT	2092	
Student	Student	STUDENT	2074	
Student	Student	STUDENT	1913	
Student	Student	STUDENT	1876	
Student	Student	STUDENT	1865	

		Unique		No
Title	Туре	Students	Pageviews	Posts
Drugs	resource/x-	25	130	6
news	bb-discussionboard			
Tutorial	resource/x-	11	46	2
discussions	bb-discussionboard			
Lecture	resource/x-	11	36	1
discussions	bb-discussionboard			
Peer	resource/x-	4	14	1
marking	hh-discussionhoard			

■ As	ssessr	ment Access			
Title		Туре	Unique Students	Attempts	Average Student Score
Drugs t Shape assignn		resource/x- turnitin- assignment	0	0	0
Peer assessr marks submis	8-92-95-92A) ********	resource/x- turnitin- assignment	0	0	0
Online	tort	accommont/v	207	410	0

■Course Dashboard

■ My Courses > Course: TEST - Dummy Course > Content

Course Access

Content

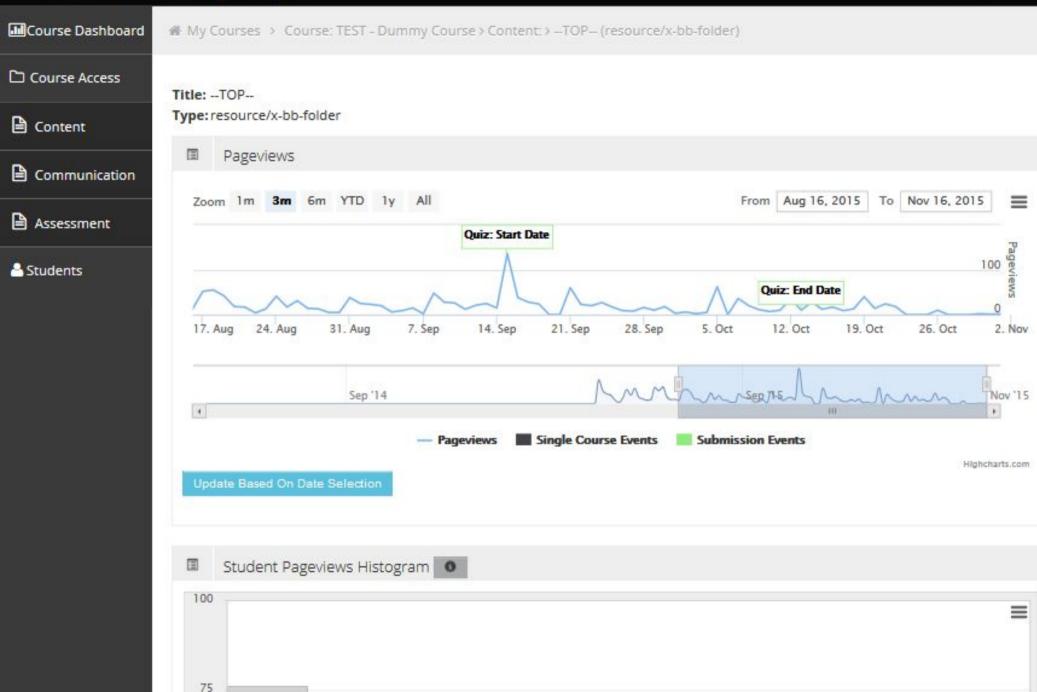
Communication

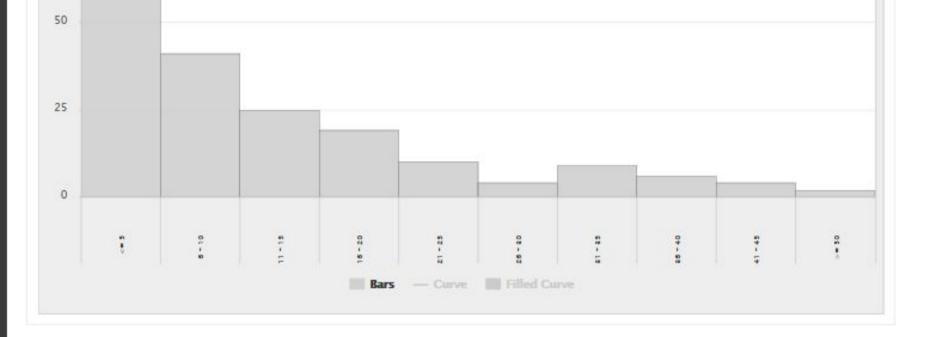
Assessment

Students

ш	Course Content	Events	Unique Students	Pageviews
		Formed all 1 Callings all		

							Expand all	Collapse a	II .				
Name	Туре	View	Week	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	1
Main Course Homepage	Course	YIEW	0	0	0	0	0	0	0	0	0	0	(
Announcements	resource/x- bb-announcement	View	11	2	13	12	8	0	1	8	3	3	9.0
View Gradebook	course/x- bb-gradebook	View	8	8	13	35	33	20	29	88	44	18	1
► □ How much do we drink survey	course/x- bb-coursetoc	View	0	0	0	0	0	0	0	0	0	0	(
► Staff Information	resource/x- bb-stafffolder	View	0	0	0	0	0	0	0	0	0	0	-(
▼ 📴 Lecture Capture	course/x- bb-coursetoc	View	0	0	0	0	0	0	0	0	0	0	
► <u>□</u> -TOP	resource/x- bb-folder	View	256	218	250	201	126	136	162	241	164	60	
▼ 📴 Timetable	course/x- bb-coursetoc	View	0	0	0	0	0	0	0	0	0	0	1
► <u>□</u> -TOP	resource/x- bb-folder	View	113	53	59	47	42	32	53	36	38	15	3
▼ [a] Assessment	course/x- bb-coursetoc	View	0	0	0	0	0	0	0	0	0	0	-
► <u>□</u> -TOP	resource/x- bb-folder	View	143	104	163	505	261	258	236	780	945	103	
▶ 🥃 Subject nformation	course/x- bb-coursetoc	View	0	0	0	0	0	0	0	0	0	0	1
► [a] Court visit	course/x-	View	0	0	0	0	0	0	0	0	0	0	





10	records per page	Search:	
Firstname	Surname	Email	Role
Student	Student	email@test.com	STUDENT
Student	Student	email@test.com	STUDENT
Student	Student	email@test.com	STUDENT
Student	Student	email@test.com	STUDENT
Student	Student	email@test.com	STUDENT
Student	Student	email@test.com	STUDENT
Stude <mark>n</mark> t	Student	email@test.com	STUDENT
Student	Student	email@test.com	STUDENT
Student	Student	email@test.com	STUDENT

■Course Dashboard

♠ My Courses > Course: ACCT1006 - Financial Accounting > Communication

Course Access

Content

Communication

Assessment

Students

Pageviews

Name	Туре	View	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	We
All Forums	Forum		0	0	0	0	0	0	0	0	0	0	0
Financial Accounting 1 - Course Content Forum	forum	View	0	0	0	99	261	201	423	983	43	29	68
Financial Accounting 1 - Off-Campus Student Forum	forum	View	0	0	0	63	144	45	89	395	16	54	59
Financial Accounting 1 - Administrative Queries Forum	forum	View	0	0	0	32	69	70	64	111	5	10	28
News forum	forum	View	0	0	0	0	2	0	0	0	1	0	0
Total			0	0	0	194	476	316	576	1489	65	93	155

Posts

■Course Dashboard

₱ My Courses > Course: ACCT1006 - Financial Accounting > Communication

Course Access

Course Communication Unique Students Events

Content

Assessment

Communication

Pageviews

cation	Name	Туре	View	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	We
nt	All Forums	Forum		0	0	0	0	0	0	0	0	0	0	0
	refers to views of the pa ks to each discussion for		View	0	0	0	99	261	201	423	983	43	29	68
	Course Content Forum													
	Financial Accounting 1 - Off-Campus Student Forum	forum	View	0	0	0	63	144	45	89	395	16	54	59
	Financial Accounting 1 - Administrative Queries Forum	forum	View	0	0	0	32	69	70	64	111	5	10	28
	News forum	forum	View	0	0	0	0	2	0	0	0	1	0	0
	Total			0	0	0	194	476	316	576	1489	65	93	155

■Course Dashboard

■ My Courses > Course: ACCT1006 - Financial Accounting > Communication

Repeating Course Events: Lecture (Tuesday)

Course Access

Content

Communication

Assessment

Students



Update

Note: Blue indicates the forum was viewed before the selected event, and Red after the event. The size of the circle is related to the number of p indicate higher number of posts.

Name	View	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Wee
News forum	forum	View	•		•	•	•				•	•	
General Course & Assessment	forum	View	•										
Student Lounge	forum	View	•	•	•							•	

■Course Dashboard

My Courses > Course: BIOM200002 - Human Structure and Function > Assessment

Course Access

Content

Communication

Assessment

Students

ш	Course Assessment	Events	Unique Students	Grades	Access	

Pageviews

Name	Туре	View	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Wee
Induction Declaration questions	assessment/x- bb-qti-test	View	1454	803	1185	1257	57	172	31	33	88	34	35
Concept Check 1: Membrane Potential	assessment/x- bb-qti-test	View	0	0	0	0	0	0	0	0	0	0	0
Concept Check 1: Membrane Potential(1)	assessment/x- bb-qti-test	View	0	0	0	0	0	0	0	0	0	0	0
Concept Check 2: Nerve/Muscle Integration	assessment/x- bb-qti-test	View	0	0	0	0	0	0	0	0	0	0	0
Concept Check 1: Membrane Potential(1)	assessment/x- bb-qti-test	View	0	0	0	0	0	0	0	0	0	0	0
Concept Check1: Membrane Potential	assessment/x- bb-qti-test	View	0	0	0	0	0	0	0	0	0	0	0

-

William Committee and Committe

MANAGE I

agentieves																		
Name	Type	View	West 1	Week 2	Week	Week 6	Week 3	Weeks	Week 7	West X	Wests	Mesh 18	Meek 11	Work 12	Week III	Week 14	Total	+(8
tellustran Declaration quantum.	accomposed by the	Money	1,010	300	1009	1287	kt	132	-81	10	***	16	38	AL.	4%	a	9273	5.00
Colorings Charle 1-Manufaction Publishmen	accommunent's lide op's test	- Week		0	a		à	10	0	4	0			0			0	1.00
Colorings Check 1-Merculaume Polinetial(1)	provincements (steroph seed)	-	0	B	0		0	a .	4		4			0	0		D	100
Celongii Chesili 2: Norvedibuuste Indograften	processive-error ball-opt tour	0	0	0.5	0	0.3	0	0.7		9	1	*		9	0		D	1.00
Colorope Check 1: Merobosen Polential(1)	accompanies to options	View										8			4			1.00
Concept Check L Mendouse Princettal	accontracement's lide-gift level	Vice	n	n	n	a.	n	4	4	4	4			0	0		10	0.00
olongi Cheli 7 Marili ani Make Cartel 1933	accommons to optimal	Vi-		0		0.		0.		4			1	0	2	1		5.00
0011- Piachol gambion	accontinuentally this up then	· American	is		- 1	0		a		4		1	1		0		2	100
Service Check & Digestion	anconcommental data spiritural	Verm				0		0.			10	1	1	8	0			1.00
owings Check & Reposition has	accomplishment for lade up to be set	View	0	0	a		a	0	a	4	4			0			0	100
nation MCQs.	accessments bit gitted	-		п				0		*				0			0	1.00
BITO Principa MEQN	processive-entitle bits light target	No.				4.		4.		4		*	10	0.0	0		b.	1.00
Sorrings obsets 7: Respondings	ancontamental foliages total	View		и:		0					167 -	.419	2981	201	162	362	2994	2.00
counge Check it AMS and Fraliantine Againsts.	anconcomment in this right hand	Vene	n	n.			a		4	4	4		1	0	0		10	9.90
Colonyal Check & Digeration	accommence beings and	Yes		0		0.				4				0				200
areage Cresh % Reproductor	accontinuentily bis-spiritural	- Committee		0	-	0				4		1	1					100
orangi Check 1: Montecano Potrettal	accomments by all test	-		1818	1608	729	No.	1941	76	1318	Feet	877	1947	287	NO	218	11208	1/6
owings Cheris 'S Nerwollikasale Indografian	accomments bis of tent	- Marie				2004	62%	1994	76	121	119	367	100	214	les.	219	TOM	162
current Checks To AMIL and Englishmen Systems.	assessments bis gitted					9			4		4			0				1.00
morpi Chryll S. Esperakurturi	providentify the spiritual	- Contract		0:		4.		6.3		4			1	80	425	926	78	200
normal Check & Digention	accompanies by girting	View			1				1946		788	817	3887	774	NEX	362	1000	5.0%
omingé Check to Kidney	accontravement's list-spir tend	Vene	n	n				*	4		•		*	0				0.000
He til Qui	accontinuent's bit-get tend	Year		0		8		0.				*		0.	0			5000
tive to que	accontinuentally bits upor torus	/Anne	a		- 10	0	-	0		4		1.	0	800			2	0.080
net til Que	acconsistent's lide spit total	View				0		0.		9		1:	1	8	0		D	1.000
mé de que	ancomoraments's liste op'n tent	- Marie	0	0	9		0		a	4	9			9		2	0	1.00
mis 19 Guile	provincements bit git sed	-		0		9	9	9		*		*		0			D.	1.000
tick 67 Quar	processus-sectific fide-spit tangl	0	0	0	9	0.3	9	9.3		9	1	*)	0	9	0	*	b	1.000
Seek 17 Quits	accomments to option	View.							1						4			100
ive de qui	anconcomment in Indexp1 hand	View.	n	n	n	4	n	4	4	4	4			0	0		10	0.00
ove de guar	accomments to operand	-		0		0.		0.					1	0.	0	1		5.00
tion of their	accompanient bit up tool	(American)	a	a.	4	0	-	0		4		1	0.		0			100
teek 11 Guile	anconscionentia del spiritoria	View		8	9	0	0	0.			ii .	1			0			100
ment que	accommonweally lade up to be all	Man		0	à		à		a	4	à			0	4			100
owings Check 2: Aption Polentials, and Massel language	accessments bit gitted	-		D	2765	With	401	1814	10	300	179	94	1000	201	1001	201	1908	110
AL 2. Astron Puteritats and New of Indeportuni Browne	processivements's bits optional	View		0		4.0	0	6.3		4			10	0.0				1.00
January Check N. Cardinassoular System	accomments to grand	West								548	.na	303	2875	209	1000	284	6216	240
W. B. Carolina consider Rystern Review	accontrapement in this right hand	View.	n	n		4	n		4	4	4			0	0		10	2000
Curings Cherk & Halley	accomments by spirited			0				0.		4			1	281	age	345	1973	50%

■Course Dashboard

₱ My Courses > Course: TEST - Dummy Course > Students

Course Access

Content

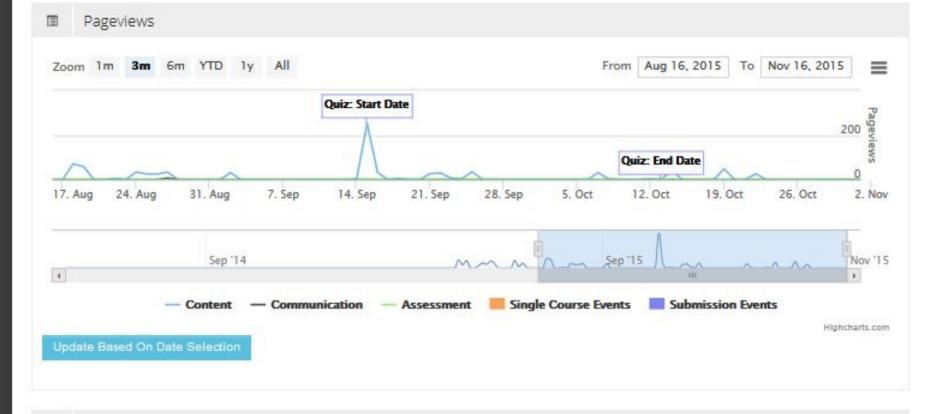
Communication

Assessment

Students

III	Students	Events	Pageviews
***	Deducties	Livering .	

Firstname	Lastname	Account Type	View	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Student	Student	STUDENT	View	195	113	104	136	126	32	0	294	109	0
Student	Student	STUDENT	View	43	0	112	83	8	61	11	143	124	0
Student	Student	STUDENT	View	37	5	2	26	60	24	3	35	135	0
Student	Student	STUDENT	View	160	41	159	195	169	143	543	147	215	133
Student	Student	STUDENT	View	28	25	65	67	44	65	116	79	101	0
Student	Student	STUDENT	View	82	164	85	129	89	114	105	23	20	56
Student	Student	STUDENT	View	0	18	0	0	3	0	37	0	112	66
Student	Student	STUDENT	View	122	42	48	61	41	30	94	60	105	0
Student	Student	STUDENT	View	0	0	7	7	0	0	5	43	136	0
Student	Student	STUDENT	View	27	48	95	72	75	45	24	49	87	0
Student	Student	STUDENT	View	147	46	96	100	91	94	12	11	98	14
Student	Student	STUDENT	View	214	90	156	458	277	172	65	619	127	24
Student	Student	STUDENT	View	24	48	87	146	126	34	0	1	30	0
Student	Student	STUDENT	View	1	25	42	66	51	25	38	71	40	0



■ Course Communication

Title	Туре	Pageviews	Posts
Lecture discussions	resource/x-bb-discussionboard	4	0
Tutorial discussions	resource/x-bb-discussionboard	4	0
Drugs news	resource/x-bb-discussionboard	12	0

Course Assessment

Title	Туре	Pageviews	Attempts	Average Student Score
Online test 1 2015	assessment/x-bb-qti-test	2	1	90.00
Online test 2	assessment/x-bb-qti-test	2	1	120.00

What's next?

_

Explore teaching problems and analytics solutions

2

Development of a web-based analytics tool

Pedagogical Helper

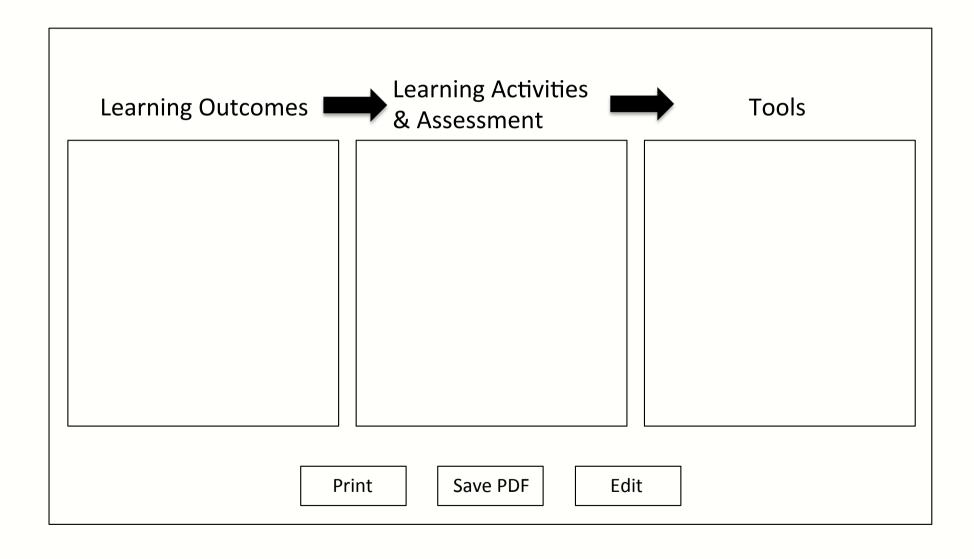
Input of learning outcomes

Connection with activities/assessments

Connection with technologies used

Available for consultation within the Loop tool/print

Pedagogical Helper Tool



What's next?

_

Explore teaching problems and analytics solutions

2

Development of a web-based analytics tool

3

Tool trial and dissemination

Analysis of tool pilot data
Further development of pedagogical support tool
Review of tool
Dissemination

Outcomes of the Project

Explore teaching problems and analytics solutions

2

Development of a web-based analytics tool

3

Tool trial and dissemination

Web-based analytics tool

Technical framework

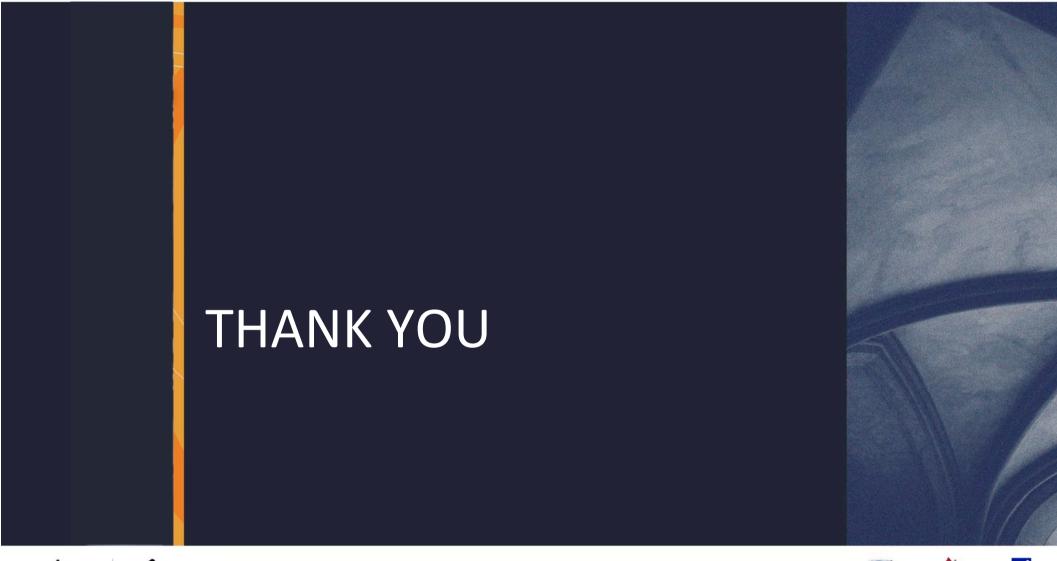
Workshop series

Handbook

Academic papers

Final report

Website















Transforming Assessment Webinar Series



This was a recall



ascilite 2015
webinar session

Session feedback:

With thanks from your hosts

Professor Geoff Crisp,
Dean Learning and Teaching, RMIT University
geoffrey.crisp[at]rmit.edu.au

Dr Mathew Hillier, Institute Teaching and Learning Innovation, University of Queensland mathew.hillier[at]uq.edu.au

Recording available http://transformingassessment.com

