



University of the  
Highlands and Islands  
Oilthigh na Gàidhealtachd  
agus nan Eilean

# Encouraging Student Engagement in Virtual Learning Environments (VLE)

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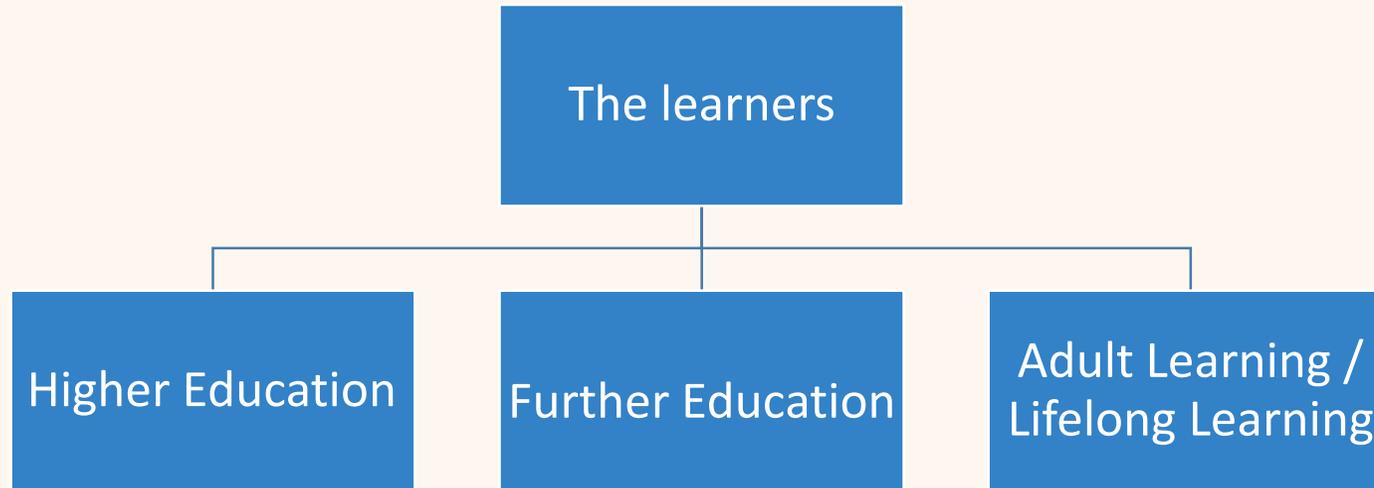
NAFC Marine Centre UHI

Shetland Islands

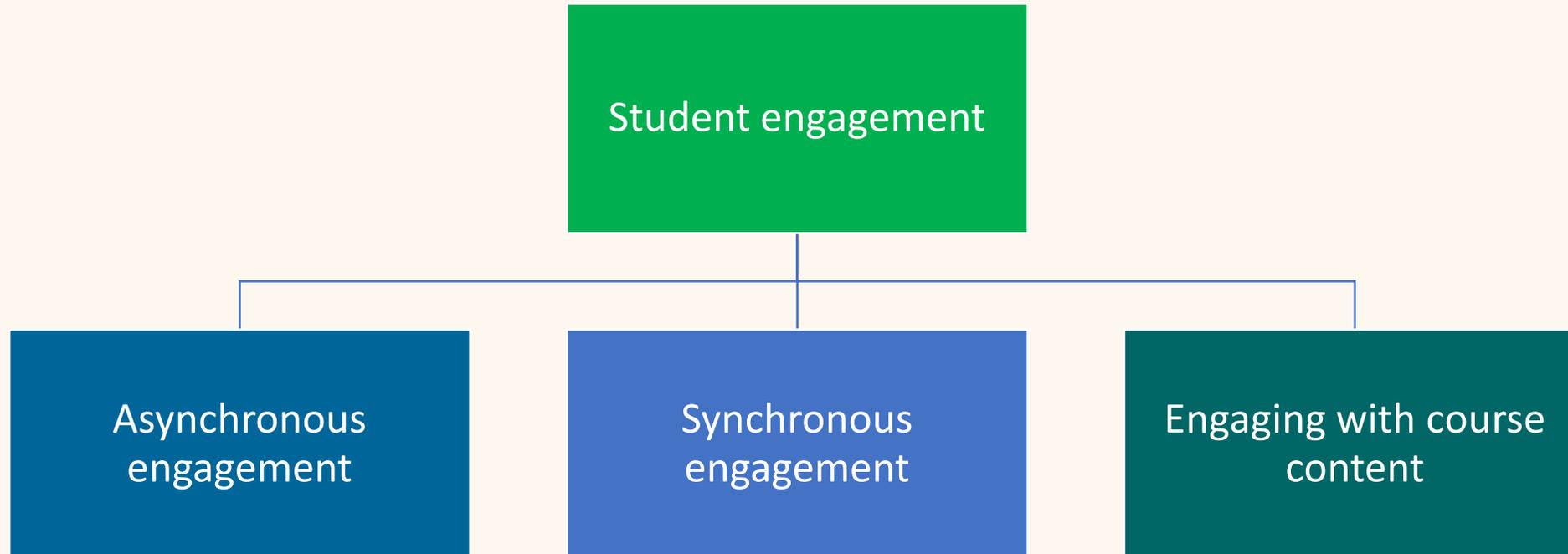
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# Teaching and learning



# Student Engagement



# Factors that affect student engagement in VLE

- Poor course design- too much clutter or too dull.
- Poor course content, induction /instructions given to students.
- Poor accessibility- colour, font, graphics and others.
- Too many graphics and too long video files/broadband speed.
- Activities not connected to achieve the intended learning.
- Learning materials are originally designed for face to face delivery.
- Poor availability of tutorial support.



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# Factors that affect student engagement in FE and CPD courses delivered online

- Duration of the course
- Who paid the fees?
- CPD or to meet compliance?
- Responsibility
- Accountability

## **Approach to learning**

- I really want to learn or I just want the certificate?
- Tell me what to do to complete the assessment?
- Social context
- Motivation



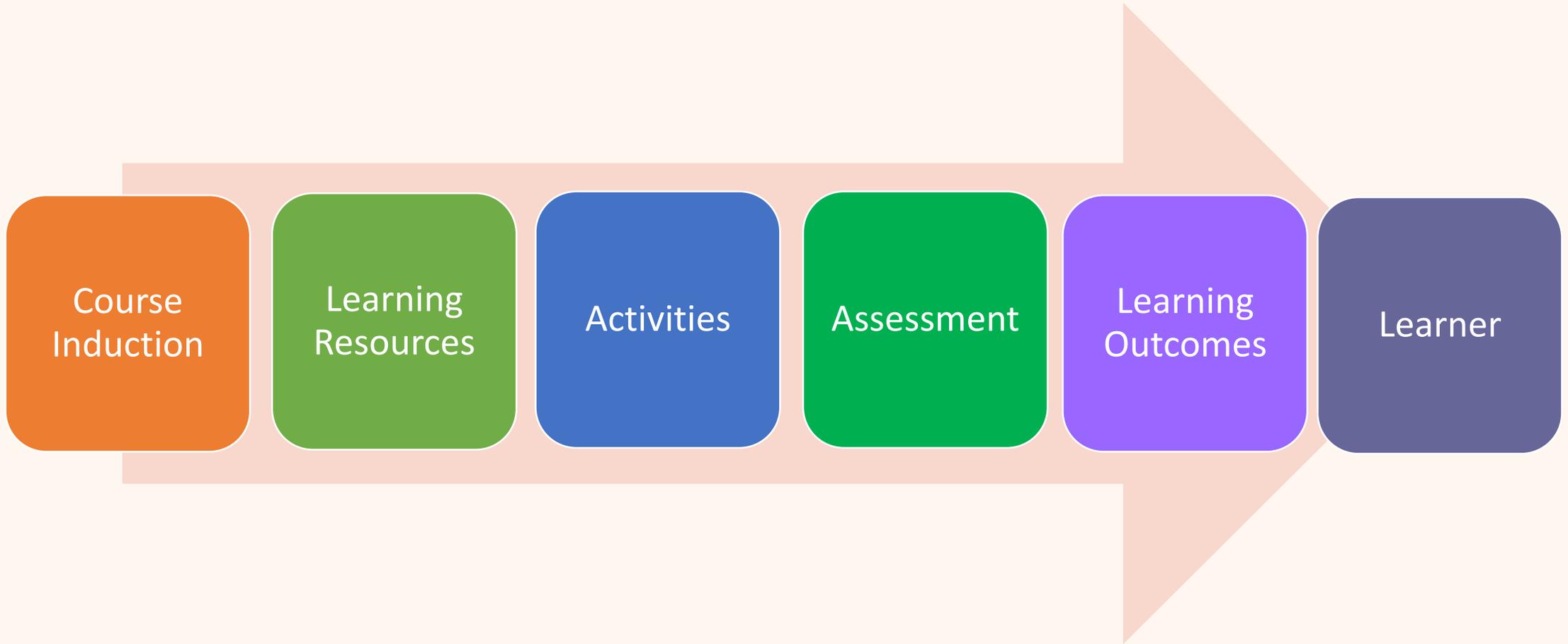
# The pedagogical design in VLE

- The pedagogical design should be based on learner's experience.
- Don't focus on the tools in VLE, focus on why, when and how learners will be learning and then choose the tools.
- Activities – is it for active participation or passive participation?
- Activities – is it mandatory or part of assessment?
- Tutors role in a fully delivered online course is more likely for facilitation and guidance.



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# Forward course design



# Backward course design

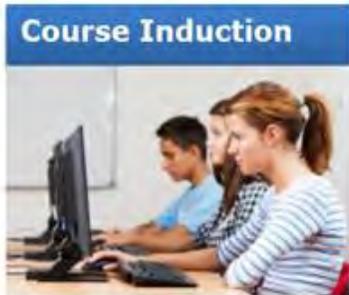


- E-Learning Fish Welfare training (NAAQ36A) 
- Course Home page
- Course Induction
- Learning resources
- Assessment
- Discussion board
- Student Support
- External links
- My Grades
- UHI eResources
- UHI Student services

## Course Home page



### Fish Welfare Course Home Page



### Announcements

[Announcements](#)

Introduction to Fish Farm Containment (NAAQ62A)

- Course Home Page
- Announcements
- Course Induction
- Learning Resources
- External links
- Assessment

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- Course Discussion Forum
- UHI eResources
- Communication Tools
- Student Support

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- My Grades



## Course Home Page



### Introduction

Welcome to the 'Introduction to Fish Farm Containment' course delivered online from NAFC Marine Centre

This course is designed to meet the requirements of the fish farming industry with regard to fish escapes. In particular the course covers practical viewpoint, action to be taken, legislative requirements including training and an understanding of basic moorings design for open water sites, closed aquaculture systems, fish transport and biosecurity. The target audience is all staff involved with aquaculture practice.

Please do the course induction first and read the instructions in the [course induction booklet](#).

[Course Discussion Forum](#)



### Course Home Page

**Course Induction**

**Learning Resources**

**External Resources**

**Assessment**

**UHI Resources**

**Student Support**

# Interaction / Active participation

## Tools choice for setting activities

- VLE tools- very limited, either not very interactive or display is very poor
- External software- SCORM compliant, Wimba, Articulate, iSpring and Adobe e-learning
- Activities / Self-assessment with instant feedback or delayed feedback.
- Activities part of assessment or practice towards an assessment
- Office and Acrobat reader – use the accessibility tools, templates.
- Check UHI guidelines on developing accessible materials.

# VLE analytics to monitor student engagement

Make the VLE platforms and tools to work for you.

## UHI Blackboard

- Notifications dashboard – setting alerts
- Performance dash board & Retention centre.
- Full grade center- last access, grades, feedback
- Sending e-mails & auto texts



# UHI Blackboard- Notifications

The screenshot shows the 'Notifications Dashboard' with three main sections: 'Needs Attention', 'Alerts', and 'What's New'. Each section has an 'Edit Notification Settings' button and an 'Actions' dropdown menu. The 'Alerts' section shows 'Past Due' with 'No Notifications' and 'Retention Center Alerts'. The 'What's New' section lists 'Announcements (1)', 'Content (9)', and 'Courses/Organizations (3)'.

**Current Notification Setting: E-Learning Biosecurity**  
*Current notification settings for this course are displayed below. Change settings by selecting the clearing boxes adjacent to each type of notification. Higher priority notifications should be sent with a method that will deliver that notification in the timeliest fashion. [More notification help.](#)*

**NOTIFICATION DESTINATIONS**

Email	NA01SS@uhi.ac.uk
Mobile	na01ss

**SETTINGS**

<input checked="" type="checkbox"/> On/Off	Notification	<input checked="" type="checkbox"/> Dashboard	<input checked="" type="checkbox"/> Email	<input checked="" type="checkbox"/> Mobile
<input checked="" type="checkbox"/>	Announcement Available	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Assignment Available	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Assignment Due	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Assignment Needs Grading	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Assignment Past Due	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Flag Needs Grading	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Content Item Available	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	Course/Organization Available	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

# UHI Blackboard- Full grade centre

The screenshot displays the 'Full Grade Center' interface in Blackboard. On the left is a navigation menu with sections for 'E-Learning Biosecurity' and 'COURSE MANAGEMENT'. The main content area is titled 'Grade Center : Full Grade Center' and includes a toolbar with options like 'Create Column', 'Create Calculated Column', 'Manage', 'Reports', 'Filter', and 'Work Offline'. Below the toolbar, there are sorting controls for 'Sort Columns By' (set to 'Layout Position') and 'Order' (set to 'Descending'). A 'Grade Information Bar' is visible, showing a table header with columns: 'Last Name', 'First Name', 'Username', 'Student ID', 'Last Access', 'Availability', 'Weighted Total', and 'Total'. The table currently shows 'Selected Rows: 0'. Additional controls include 'Move To Top', 'Email', 'Icon Legend', and 'Edit Rows Displayed'.

**Grade Center : Full Grade Center**

*The Full Grade Center displays all columns and rows in the Grade Center and is the default view of the Grade Center. [More Help](#)*

Create Column   Create Calculated Column   Manage   Reports   Filter   Work Offline

Move To Top   Email   Sort Columns By: Layout Position   Order: Descending

Grade Information Bar

Last Name	First Name	Username	Student ID	Last Access	Availability	Weighted Total	Total
Selected Rows: 0							

Move To Top   Email   Icon Legend   Edit Rows Displayed

# UHI Blackboard – Performance Dashboard

The screenshot displays the Blackboard Performance Dashboard for the course 'E-Learning Biosecurity'. The dashboard includes a navigation sidebar on the left and a main content area with a table of user activity.

**Performance Dashboard**  
*The Performance Dashboard shows all types of user activity in your course or organization. [More Help](#)*

Last Name	First Name	Username	Role	Last Course Access	Days Since Last Course Access	Review Status	Adaptive Release	Discussion Board	Customize Retention Center	View Grades
Saravanan	Saro	na01ss	Instructor	Jun 4, 2018 8:34:24 PM	0	0		0	-	

Displaying 1 to 1 of 1 items [Show All](#) [Edit Paging...](#)

**Navigation Sidebar:**

- E-Learning Biosecurity (Home)
- Announcements
- Staff Information
- Module information
- Module descriptor
- Learning resources
- Assignments
- Discussion board
- External links
- UHI eResources
- Student services
- COURSE MANAGEMENT
- Control Panel
  - Files
  - Course Tools
- Evaluation
  - Course Reports
  - Performance Dashboard
  - Retention Center
  - SCORM Reports

# UHI Blackboard – Course reports

## Course Reports

Run course reports to view information about course usage and activity. You can view summaries of course usage such as which course areas are used most frequently and course access patterns for specific students. [More Help](#)

Search

---

 **All User Activity inside Content Areas**

This report displays a summary of all user activity inside Content Areas for the course.  
› Last Run: Friday, March 28, 2014 1:34:36 PM GMT

---

 **Course Activity Overview**

Course Activity Overview displays overall activity within a single course, sorted by student and date. Data includes the total and average time spent per active student and the total amount and type of activity each student had in the course. Optionally, you can filter the report by one or more groups.  
› Last Run: Tuesday, May 29, 2018 11:46:23 AM BST

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 **Course Performance**

This report displays information showing how a single Blackboard Learn Course performs against a selected set of goals. Performance targets and a range of acceptable performance for the course can be determined when running the report. Data includes averages for the entire course as well as break downs for individual students and goals.  
› Last Run:

---

 **Overall Summary of User Activity**

The report displays user activity for all areas of the course, as well as activity dates, times and days of the week.  
› Last Run: Friday, March 28, 2014 3:19:06 PM GMT

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 **Single Course User Participation Report**

Displays detailed statistics on assessment and collaboration tool submissions for all users in this course during a specified timeframe.  
› Last Run: Thursday, May 31, 2018 8:47:04 AM BST

# Moodle



e-learning website



Training Education Research Consultancy



Home ► Courses ► Engineering section ► FSH1

Turn editing on

## Course Menu

- Course Induction
- Learning materials
- Assessment
- Useful Links
- Contacts and Help
- Frequently Asked Que...

Discussion forum

Grades

## Study Progress Bar



Outcome 4 Assessment Remit attempted ✓

Expected: Sun, 17 Jan 2016, 11:55

Overview of students

## Upcoming events

There are no upcoming events

Go to calendar...

New event...

## Electrical principle FSH1

This Unit has been designed to introduce candidates to Electrical Principles and provide opportunities to develop their knowledge and understanding of basic electrical concepts, magnetic and electromagnetic theory. Candidates will develop the skill to solve electrical quantities in direct current (dc) resistive networks and determine electromagnetic quantities. Candidates will be provided with the opportunity to describe the generation of an alternating voltage and determine the fundamental properties of a sinusoidal waveform.

This Unit is suitable for candidates wishing to progress a career in electrical and/or electronic engineering. It is also suitable for candidates studying other branches of engineering, science or technology, requiring knowledge of electrical principles or who may be employed or seeking employment as electrical, mechanical or marine craft persons or technicians.

### Course Induction



### Learning materials



### Assessment



### Useful Links



### Contacts and Help



### Frequently Asked Questions



# Moodle

## Study Progress Bar

Specialised tool- for students to monitor their own learning and for tutors to monitor the students learning and progress

Home ► Courses ► Engineering section ► FSH1 ► Overview of students

### Overview of students

Role

	First name / Surname	Last in course	Progress Bar	Progress
<input type="checkbox"/>	guest 1	Thursday, 18 February 2016, 10:48 AM	 Outcome 2 Assessment attempted <b>X</b> Expected: Sun, 17 Jan 2016, 11:5	55%
<input type="checkbox"/>	Arthur Student	Friday, 27 May 2016, 4:38 PM		36%

Select all Deselect all With selected users...  ?

#### Administration

- Course administration
- Turn editing on
- Edit settings
- Users
- Filters
- Reports
- Grades
- Badges
- Backup
- Restore
- Import
- Publish
- Reset

# References

- Bell, F. (2009) Connectivism: a network theory for teaching and learning in a connected world [online]. Available from < <http://usir.salford.ac.uk/2569/1/ConnectivismEdDev.pdf> > [3<sup>rd</sup> June 2018].
- Conole, et al (2004) Mapping pedagogy and tools for effective learning design [online]. Available from <<http://www.michaelhanley.ie/downloads/blog/Mapping-pedagogy.pdf>> [May 30<sup>th</sup> 2018].
- JISC (2017) Effective Practice in a Digital Age [online]. Available from <https://repository.jisc.ac.uk/6790/1/effectivepracticedigitalage.pdf> [3rd June 2018]
- UHI (2018) Accessibility checklist Blended learning standards [online]. Available from <<https://mahara.uhi.ac.uk/view/view.php?id=608> > [30<sup>th</sup> May 2018].
- Wiggins, G., & McTighe, J. (2005) Understanding by design (2nd ed.) [Online]. Available from <http://www.asbmb.org/uploadedFiles/Backward%20design.pdf> [21<sup>st</sup> May 2018]



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