Working collaboratively in a group assignment using a Mediawiki for an architecture and construction management undergraduate unit

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What is Mediawiki?

- Web-based application
- Similar concept to Wikipedia
- Allows multiple users to work collaboratively on the same documents

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About the unit

- Core unit in Construction Management, Architecture and associated combined degrees
- Understanding of construction technology of low-rise commercial and industrial buildings
- Develop the ability to communicate the results of the students' research in construction technology using appropriate digital media
- T1/2011 : 180 students – 18 groups with 10 team members
- Authentic learning assignment reflecting the "real world" of a construction company

Why Choose Mediawiki?

- Supported by Deakin
- Flexible
- History page shows each contribution made in Mediawiki

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Mediawiki Interface

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Main Page

Welcome to the SRT251-Construction and Structures 2 unit for 2011. I look forward to working with you this trimester to help you develop an understanding of commercial and industrial building construction and the relevance of applying a deep understanding of the topic to other areas within the course. You will have 2 assignments in this unit which you will submit in the form of ONE media-wiki.

Dr Linda Osman-Schlegel

The main aims of the unit are:

- To gain an extensive knowledge of industrial and commercial construction technology
- Development of the ability to research into construction technology through critical examination of texts, websites and actual buildings
- Development of the ability to communicate the results of your research in construction technology using appropriate digital and physical media
- Development of the ability to integrate understanding of construction technology into architectural design processes (for architecture students)
- Development of the ability to integrate understanding of construction technology into the building procurement process (for Construction Management students)

It is the responsibility of the students to attend all lectures, tutorials, site visits and workshops. You are reminded that all information regarding your enrolment and course of study is distributed via the Deakin Portal and check your Deakin email regularly.

Assignment page

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Assignments

You will have **2 assignments** in this unit which you will submit in the form of **ONE media-wiki**. Therefore, treat both the assignments as **one BIG project**. A media-wiki session will be available on week 2 during the lecture and will be presented by a representative from Institute of Teaching and Learning. The media-wiki project is to be done in a group of 10. Group members are assigned after week 1 lecture according to their score in the "team-working skill" exercise. The group members are limited to their tutorial sessions. You cannot change your group members unless you have a solid and valid excuse. Divide your group members into two so that you have 1 sub group for assignment 1 and another sub-group for assignment 2. Assign one leader for each sub-group. The sub-group leader is responsible to assign task(s) to his/her group members. Remember, you are marked (individually and group) according to your contribution to your assignment.

A media-wiki for each group will be published in ***Week 2***. For more details on how to get started on media wiki you are encouraged to refer to the media wiki help guide: Please refer to Media Wiki Help Guide or click "Help" on the navigation on the left.

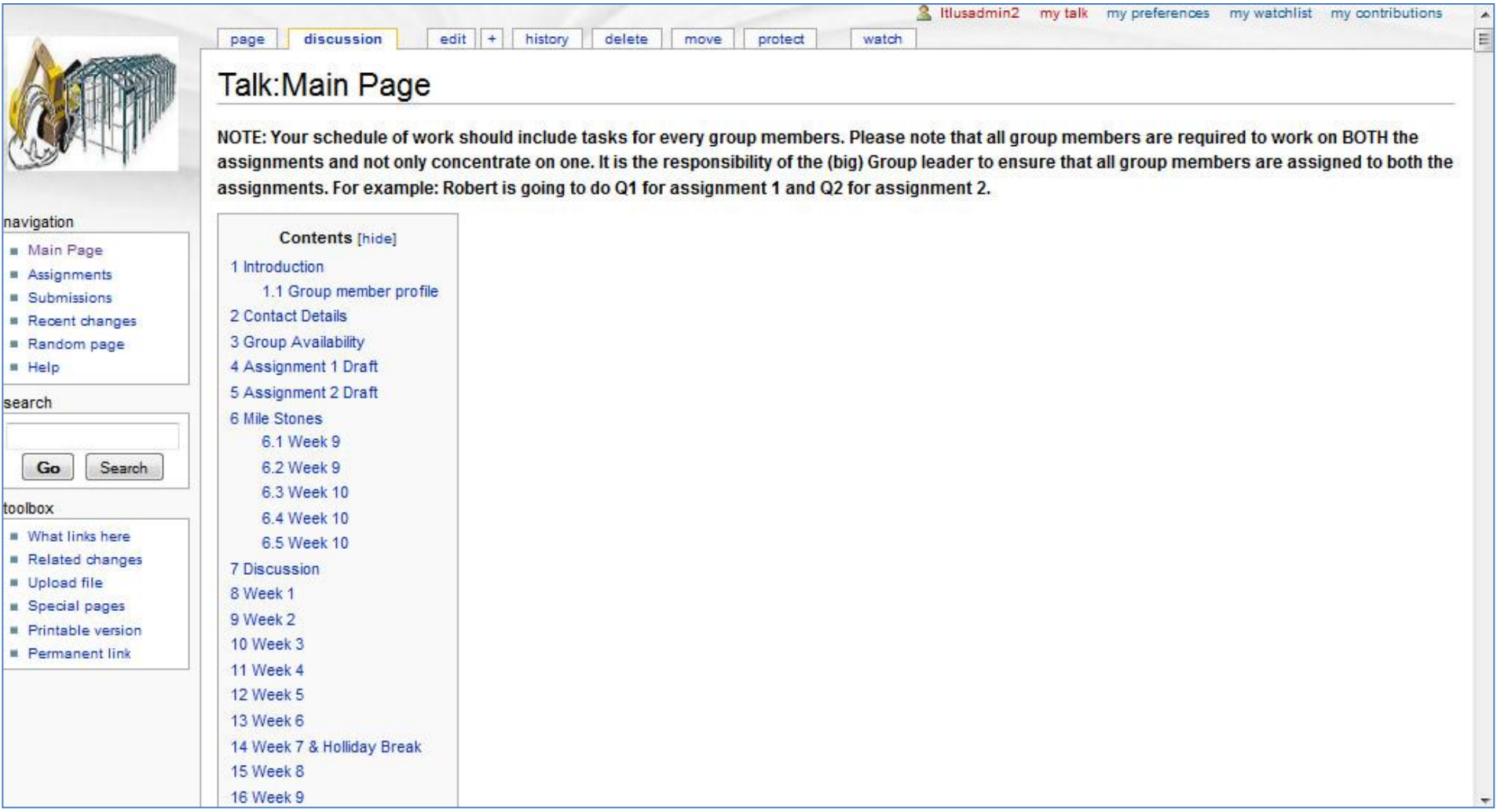
You have to specify in the media-wiki the leaders of each group, the name of your group by **18th march 2011-end of Week 2**. I expect everyone to know their group members by **end of Week 1**. I will post the groups in DSO once I have received your team work skill exercise which you are to complete and hand it in to me at the end of the lecture in Week 1. **For those who did not attend the lecture in Week 1, please see me in my office asap before Friday 11th March 2011**.

Please allow 1 week of your time to compile your media-wiki before submission (report writing, editing, checking and compiling the reports etc) – the group leader may need to assign few members to do this.

Discussion Page

- Allows communication between group members
  - A space for group members to discuss and contribute
  - Peer learning

Discussion Page



Discussion Page

Discussion [edit]

Week 1 [edit]

- Hey Guys, Is anyone available for a meeting tomorrow or after the history lecture on Wednesday? Not everyone knows everyone so i think it would be good to know the people in our group before we start and to also elect roles for the assignments and get started!! YAYNESS! Please email back!---[redacted] :)

- I can meet tomorrow between 10am-1pm/after the lecture, or on Wednesday, but I have the tute straight after lecture, so I'd have to meet after 12.30pm on Wednesday... Its gonna be hard to find a time that suits all of us consider all different tute times etc...---[redacted]

- Hi there, I am in the same boat as [redacted]. I have the tutorial straight after the lecture tomorrow as well(Wednesday). We could perhaps meet beforehand on thursday as well if others can not make it tomorrow. Whichever suits best. My mobile is [redacted] if anyone wants to contact me as i do not have internet yet at my home and may not check this as regularly as needed.---[redacted]

Week 2 [edit]

- Hi Guys, I am in the 1pm tute on Wednesday so could do 12:30 for half an hour considering both [redacted] and [redacted] would finish at 12:30, not sure about everyone else though. Otherwise later in the day or even Thursday before we present.

-- [redacted] 01:08, 15 March 2011 (UTC)

Submission Page

- A space for Final Submission of the assignment

Submission Page

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Submissions

Final mark & comments for Wiki

Contents [hide]

1 GROUP 1C Introduction
2 Assignment One
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- 2.2 Building A: MCR Building
  - 2.2.1 Brief Overview of Building
  - 2.2.2 Plant, Tools and Equipment
  - 2.2.3 Temporary Structure
  - 2.2.4 Working Methods
- 2.3 Building B: KAN
  - 2.3.1 Brief Overview of Building
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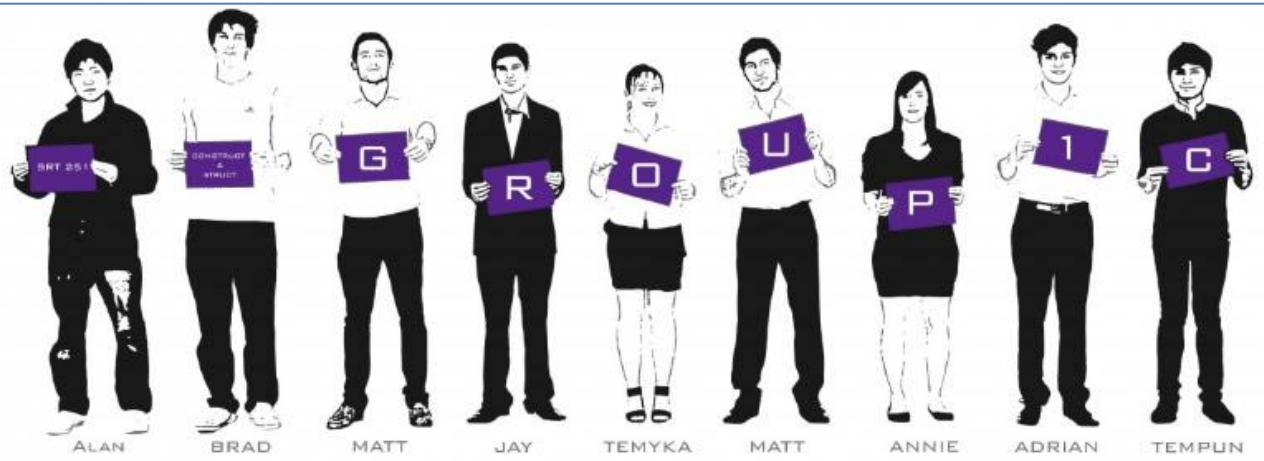
  - 2.3.3 Temporary Structure
  - 2.3.4 Plant, Tools and Equipment
  - 2.3.5 Comparison of Building A to Building B
- 2.4 Building C: HOSPITAL RE-DEVELOPMENT
  - 2.4.1 Brief Overview of Building
  - 2.4.2 Plant, Tools and Equipment
  - 2.4.3 Temporary Structure
  - 2.4.4 Working Methods



Group 1c is a team of 9 fun, bubbly, positive and dedicated hard working students who, through the following report, have aimed to present to you, our client, the best possible, thoroughly researched information regarding wall systems within various construction projects in a range of locations. These projects consist of a new design for Penleigh Essendon Grammer School located in the Melbourne suburbs, an Apartment complex located in walking distance to the Geelong CBD precinct and the Geelong hospital redevelopment.

We have endeavored to present this information in a way that excites you, encourages you to want to read more and encourages you to visit these sites through utilising the groups strengths of creativity, knowledge and dedication!

This dedicated team consists of:

- ***Team leader:*** *Matthew Secatore*
- ***Assignment 1 leader:*** *Temyka Belgrove*
- ***Assignment 2 leader:*** *Matthew Simpson*
- ***Scribe:*** *Annie Oldman*
- ***Team members:*** *Adrian Robledo, Jay Mammino, Bradley Patteison, Tempun Temtnpeth, Alan Weng Meng Ong*

[edit]

ASSIGNMENT 1.

OVERVIEW

Overall summary and comparison of Wall-Systems within the three selected sites.

[edit]

Table 1: Site Summary and Basic Comparison

	Site 1. MCR	Site 2. KAN	Site 3. HOSPITAL RE-DEVELOPMENT
Load/Non Load Bearing	Non load bearing brickwork	Load bearing	Non-Load bearing stud frame with steel clad frame connection to alucobond

History Page

- To avoid argument/excuses among the students; the history page is the best feature in Mediawiki
  - It tells you what has changed and who made the changes or addition/deletion
  - It tells you how long that person is using Mediawiki
  - You can see a summary of individual contribution and how long they have been on the site

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History Page

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Revision history of "Submissions"

View logs for this page

Browse history

From year (and earlier): From month (and earlier): all Go

(Latest | Earliest) View (newer 500) (older 500) (20 | 50 | 100 | 250 | 500)

Diff selection: mark the radio boxes of the versions to compare and hit enter or the button at the bottom.

Legend: **(cur)** = difference with current version, **(prev)** = difference with preceding version, **m** = minor edit.

Compare selected versions

- (cur) (prev) 04:07, 29 July 2011 ltlusadmin2 (Talk | contribs | block) **m** (140,728 bytes) *(Unprotected "Submissions")* (rollback | undo)
- (cur) (prev) 06:48, 15 June 2011 Osman (Talk | contribs | block) (140,728 bytes) (undo)
- (cur) (prev) 22:56, 1 June 2011 ltlusadmin2 (Talk | contribs | block) **m** (140,682 bytes) *(Protected "Submissions" ([edit=sysop] (indefinite) [move=sysop] (indefinite)))* (undo)
- (cur) (prev) 14:10, 1 June 2011 [redacted] (Talk | contribs | block) (140,682 bytes) *(→Matthew Simpson)* (undo)
- (cur) (prev) 14:09, 1 June 2011 [redacted] (Talk | contribs | block) (140,674 bytes) *(→Matthew Simpson)* (undo)
- (cur) (prev) 14:02, 1 June 2011 [redacted] (Talk | contribs | block) (140,638 bytes) *(→Matthew Secatore)* (undo)
- (cur) (prev) 14:01, 1 June 2011 [redacted] (Talk | contribs | block) (140,621 bytes) *(→Matthew Secatore)* (undo)
- (cur) (prev) 13:59, 1 June 2011 [redacted] (Talk | contribs | block) (140,594 bytes) *(→Bibliography)* (undo)
- (cur) (prev) 13:58, 1 June 2011 [redacted] (Talk | contribs | block) (140,582 bytes) *(→Temyka Belgrove)* (undo)

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History Page

The reinforcement bars are epoxied into position, giving it rigidity and strength allowing the panel to simply slide into place. This connection can be seen in figure 3.2.1.1 where the bar can be seen inserted into the cast-in tube located at the bottom of the pre-cast panel. This cast-in tube was then filled with epoxy through the grout hole which also be seen in figure 3.2.1.1 on the actual precast concrete panel.	
""Stage 4.""	""Stage 4.""
As the panels were lifted into position, fixing plates on each panel aligned to other plate as seen in fig... Workers on booms bolted these connections together using electric drills. After all the tilt up panels had been secured in place and were complete to the third level these connections were permanently welded together and all the bolts were removed leaving a clean strong connection as can be seen in figure 3.2.1.4.	As the panels were lifted into position, fixing plates on each panel aligned to other plate as seen in Fig. 2.3.10 Workers on booms bolted these connections together using electric drills. After all the tilt up panels had been secured in place and were complete to the third level these connections were permanently welded together and all the bolts were removed leaving a clean strong connection as can be seen in Fig. 2.3.10.
""Stage 5.""	[[File:Figure_1.1.5.jpg|thumb|left|300px|Fig. 2.3.11 10mm approx. gap between panels after final welding source: pictured on site 2/04/2011 at 1pm Corner Moorabool Street and Kiglour Street, Geelong]]
Once the connections were welded together although the panels were secure there were still gaps between each of the column panels (not the shaft) where they meet as seen in figure 3.2.1.5. At this particular join the gap was approximately 10mm which brought up issues relating to fire proofing as such gaps particularly in the stairwell structure would not allow the building to comply with fire regulations. This being the case such gaps are later filled with a fire proof sealant which closes all gaps and allows the columns to comply with all fire regulations.	
""Summing up.""	

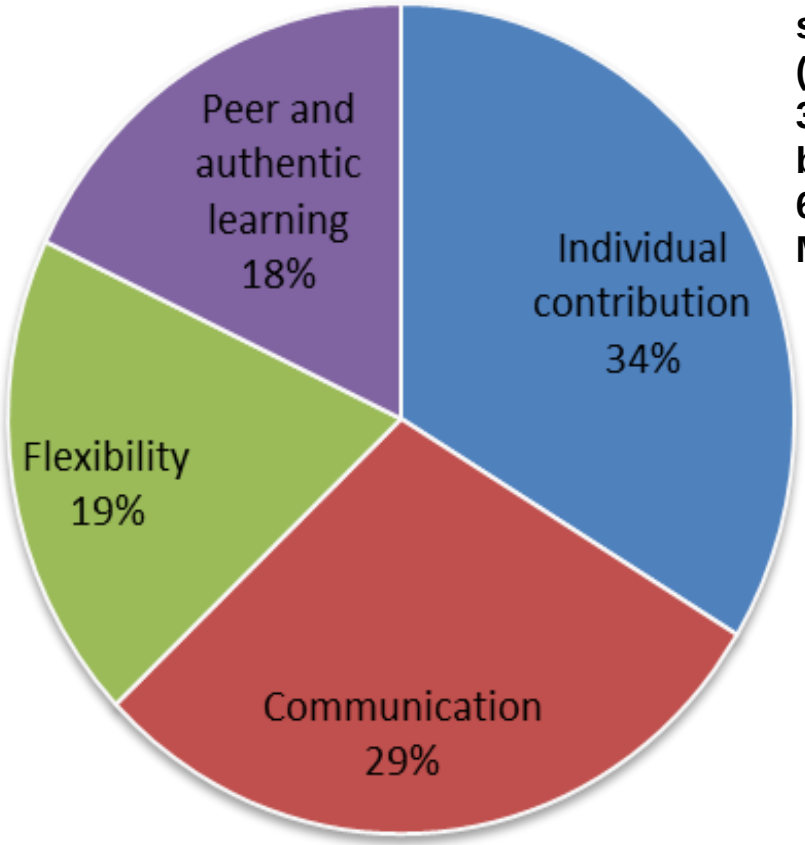
Teaching & learning support for staff

- One-to-one hands on professional development training session on using a Mediawiki in teaching and learning
- Progressive assistance from the initial to final stage of design and structure of the assignment
- Reflection of challenges and successes for future refinements to the assignment

Student Support

- Presentation overview of using the Mediawiki during a unit lecture
- Drop-in session towards the end of the assignment
- Help guides in the Mediawiki

What did the students think about Mediawiki?



34.4% of students enrolled in the unit completed the survey (62 students)
32% had used Mediawiki before
68% were first time users of Mediawiki

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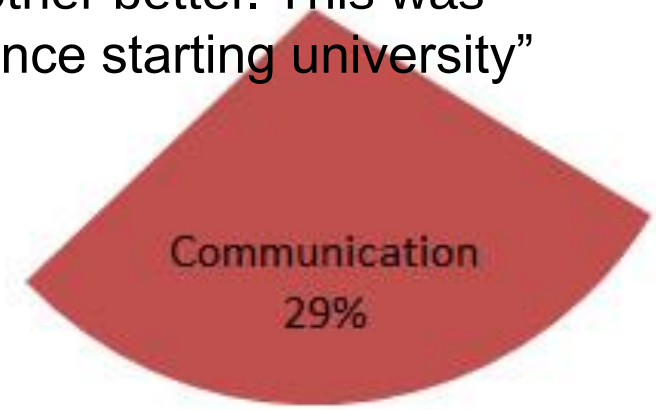
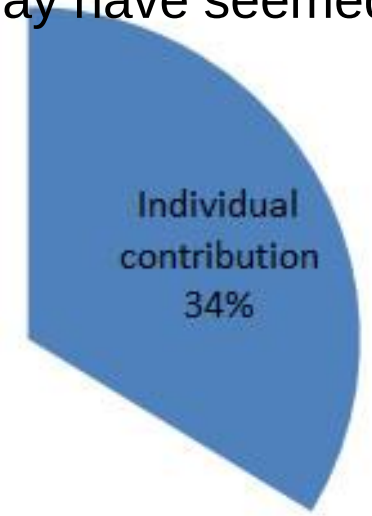
Communication

- “Mediawiki is a very handy way to work collaboratively in large groups, as the information can be edited by everyone simultaneously”
- “[Mediawiki] built important team skills and organisational skills”
- “members of the group can work independently and still be able to communicate with the rest of the group”;
- “Mediawiki did enable a large group of students to communicate and get to know one another better. This was the largest group I have worked with since starting university”



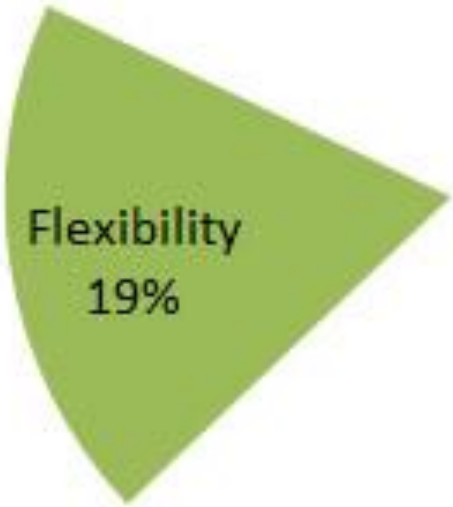
Individual contributions

- “all group members can [then] see each others’ contributions and measure their work in relation to that”
- “I think the wiki is a good tool for [a] group assignment as it allows people to put their stuff up and the others can see it instantly”.
- “an issue was that quite a few people struggled with operating wiki so the one group member who was experienced at it generally put work up for them, therefore it may have seemed like people did less than they actually did”;



Flexibility

- “Mediawiki could be used from home and made doing the assignment as a group a lot easier”
- “the wiki is easily accessible so it is useful for seeing the progress other group members have made. It is also useful for staying in contact with group members outside of emails and phones, as long as the wiki is regularly checked by everyone”
- “all parties/group members can work on the wiki and collate work easily rather than relying on face to face meetings and deadlines to see each others’ work”



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Peer and authentic learning

- “learning how to use the wiki means that we will be able to use it in the future, not only for assignments but as an actual life skill”
- “range of different students from other courses, got to associate with them like the real world”
- “I found that working as a group we were able to share resources which was very useful. The Mediawiki allowed us to easily share this information via the discussion page”.

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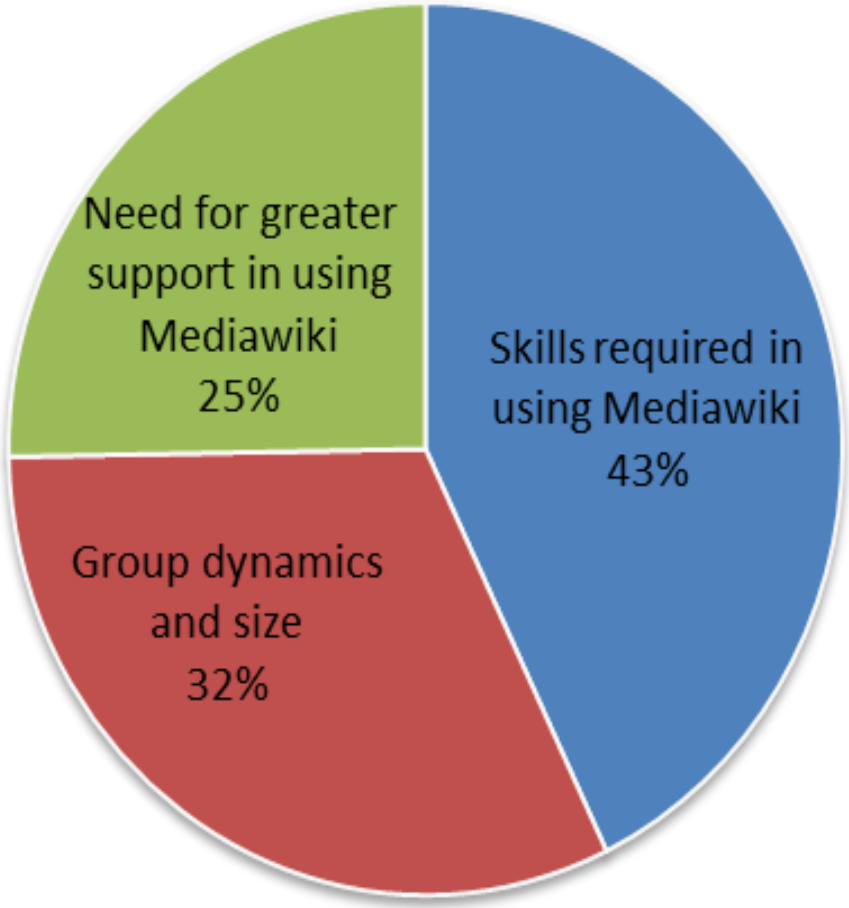
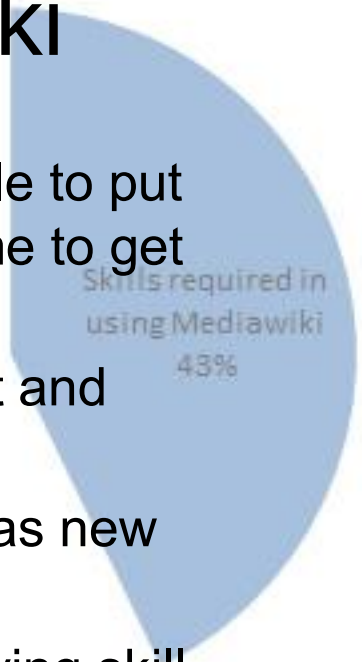
Challenges in using wikis in teaching and learning

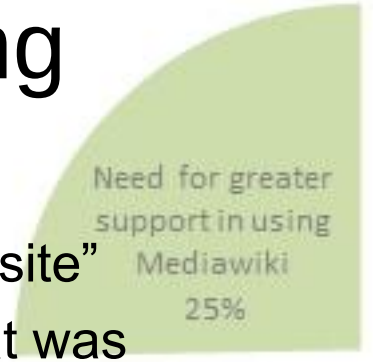


Skills required in using Mediawiki

- “It was hard to format our submission … not being able to put in tables … the format of Mediawiki will take some time to get used to”
- “we found the formatting of the Wiki extremely difficult and time consuming”
- “coding was problematic to begin with as everyone was new to the program”
- “the biggest issues are having group members of varying skill, and also general teething issues yourself, it’s very hard to suddenly pick up an internet coding format when you're not used to it. Some students wouldn't feel motivated to learn it either, when they consider that they will never need it in their careers”

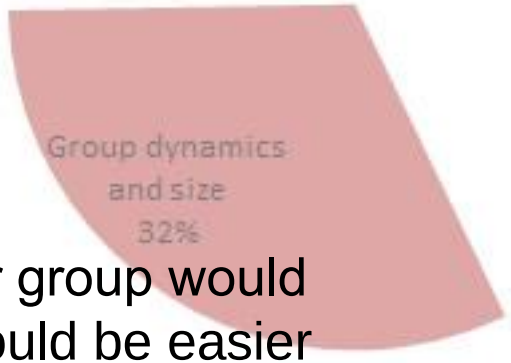


Need for greater support in using Mediawiki



- “should be more instruction initially in how to use the site”
- “having the tutorials focus more on the actual wiki that was being produced rather than on the group (Maybe, get the wiki projected on a screen so that the group can go through parts of it with the tutors)”
- “there should be more education and practice on media-wiki before commencing the actual project”
- “more on line video tutorials should be made available to ensure more things can be easily implemented e.g. formatting, how to insert a gallery for photos etc.... There is a lot the wiki can do but learning tools such as more video tutorials need to be provided so that we can learn to use the wiki facility to its fullest”

Group dynamics and size



- “less group members. I feel that 5 members per group would be more beneficial with this assignment as it would be easier to determine a direction for the group and easier to determine individual tasks for group members. It was very difficult to organise the group with 10 members, 1 leader and no specific tasks set for individual members in the assessment brief. If you had members in your group who hardly contributed, like the group I was in, then the group mark will be low and an individual who put in lots of work for their nominated section of the assignment will be punished due to the poor contributions of other members in their respective sections”
- “good experience, worked with a lot of different students. It is really dependent on the group you get, I heard some other groups were really struggling with group participation etc”

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Future directions

Suggested refinements to the assignment:

- Further developing students' skills in using Mediawiki
- Mediawiki assignments made viewable to all students after the due date of the assignment
- Mediawiki used as a co-requisite of the unit in a peer learning exercise among students in different year levels

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Questions?

Thank you!