



VCUG2004/VCPG6004

Creating Impact

Semester 1, 2017


Course Guide

Version 2017.S1.5

Creating Impact will introduce students to key methods and tools that underpin innovation across disciplines. Students will learn to use Systems Thinking; Design Thinking; and Lean Startup techniques to identify and validate opportunities, and to rapidly deliver results.

By applying these methods and tools to simple real-world problems, students working in small teams will develop the confidence and skills they need to begin tackling more complex problems and to have a real impact on the world around them.

Contacts

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Location



Computer Science & Information Technology Building #108
Building
Address:
108 North Road
Acton ACT 2601



Learning Outcomes

Each of the learning outcomes for Creating Impact have been formed to ensure that our students develop the competence, and most importantly, the courage to take on complex challenges and opportunities to change the world.

Upon completion of this course, students will be able to demonstrate:

- **An ability to use modern innovation methods and tools to**
 - identify and validate real-world problems
 - identify and validate potential solutions to real world problems
 - implement, evaluate and improve a solution to a real-world problem

In recent years a range of exciting and effective methods and tools for dealing with complex real-world problems have emerged. Students will be introduced to a range of such techniques in a series of workshops delivered by ANU, industry and government experts. Students will practice these methods and tools in small teams working on real-world challenges.

- **An ability to work in small multi-disciplinary teams**

Problems worth solving are frequently complex and involve a network of conflicting needs, options and other influences. These problems are often resistant to simple uni-dimensional solutions. They can rarely be addressed by individuals or teams of people from a single discipline. In this course, students will learn to work in multi-disciplinary teams. They will develop respect for other disciplines and an appreciation for how theories and methods from various disciplines might work together to create real-world impact in complex problem domains.

- **An ability to present information and interact in a professional manner with a diverse audience**

Problems worth solving usually involve a diverse range of stakeholders including those affected by the problem, those attempting to improve things, policy makers, colleagues and many more. Teams aiming to address such problems will need to communicate with these stakeholders in a range of ways including meetings, presentations and written reports. Students will develop some of these skills in a real-world setting. They will meet with industry and government representatives and will present their work in public forums.

- **An ability to provide constructive feedback to peers**

A important aspect of effective teamwork is an ability for team members to give each other constructive feedback. During this course, students will have an opportunity to develop their ability to provide constructive feedback to peers.

- **An ability to learn from reflective practice**

Reflective Practice is a productive way for students to learn from their experience. It is particularly useful when used within a team project environment such as Creating Impact. During the course, students will have an opportunity to “make sense” of what they have learned within the broader context of their university study and other experiences.

Course Schedule

Week	Workshops	Assessment Summary
1	<p>Course introduction</p> <p>“The Challenges”</p> <p>“Ways of thinking”</p> <p>1500-1800 Tue 21Feb <u>N101, CSIT Building</u></p>	
2	<p>“The Value Model Canvas”</p> <p>1500-1800 Tue 28Feb <u>Canberra Innovation Network</u> Level 5, 1 Moore Street</p> <p><i>We will meet in the Level 5 Lift Foyer</i></p>	
	<p>Networking with local innovators</p> <p><i>The <u>CBRIN First Wednesday Connect</u> networking sessions are HUGE. They are a great opportunity to see how vibrant the local innovation sector really is. You will hear about great projects and companies, and will get a chance to meet many of the most interesting people in Canberra !</i></p> <p>1700-1830, Wed 1 Mar <u>Canberra Innovation Network</u> Level 5, 1 Moore Street</p>	
3	<p>“Design Thinking”</p> <p><u>See the d.school</u></p> <p>1500-1800 Tue 7Mar <u>ThinkPlace</u> Level 4, 50 Blackall Street Barton ACT 2600</p> <p><i>If you need transport, we will take an ANU minibus at 1440 from the front of the CSIT building</i></p>	
4	<p>“Communication”</p> <p><u>See CPAS news</u></p> <p>1500-1800 Tue 14Mar <u>N101, CSIT Building</u></p>	Individual Reflection - Stage 1 [10%]
5	<p>Team Presentations</p> <p>“What is our challenge and approach?”</p> <p>1500-1800 Tue 21Mar <u>N101, CSIT Building</u></p>	Team Report [15%] Team Presentation [5%]
6	<p>“Cool Tools for Creating Impact”</p> <p>1500-1800 Tue 28Mar <u>N101, CSIT Building</u></p>	
<p>Mid-Semester Break</p> <p>Optional: Tour and Induction to the ANU Maker Space (arrangements TBA)</p>		

Course Schedule (cont.)

Week	Workshops		Assessment Summary
7	“Creating impact with Art and Design”	1600-1800 Wed 19 Apr (Special Time) Room 1.10, up stairs, Clock Tower, ANU School of Art	
8	No Workshop	Anzac Day	Team Report [15%]
9	Team Presentations <i>“What have we achieved so far?”</i> <i>We will select the two teams to pitch at the Public Showcase in Week 10</i>	1500-1800 Tue 2May <u>N101, CSIT Building</u>	Team Presentation [10%] Poster [5%]
10	Public Showcase <i>Students will present their work (along with students from other courses) to a public audience</i>	Evening event - Tuesday, Location TBA	
11	“What’s Next?” “Creating Impact” with guests who have have significant real-world impact <i>Opportunities for continuing the work you have started in Creating Impact</i>	1500-1800 Tue 16May <u>N101, CSIT Building</u>	Individual Reflection - Stage 2 [10%]
12	“Designing Creative Impact for 2018” <i>We will close the course by using what we have learned to design the 2018 version of Creating Impact (to increase it's impact)</i>	1500-1800 Tue 23May <u>N101, CSIT Building</u>	Final Team Report, Future Plans and Reflections [30%]

Assessment Tasks

Note: Refer to “*Our Approach to Assessment*” for explanation of the “*Stage 1 Assessors*” column.

Due Date and Time	Assessment Task	Requirements	Stage 1 Assessors	Marks
Week 4 1700, Friday 17Mar Submit using Wattle	Individual Reflection 1	Individual Reflection is an effective and systematic process for improving your learning and achieving the learning outcomes for the course. The <i>Individual Reflection</i> section of this guide provides details. Your reflections must be documented in a written report no longer than 4 pages.	Self Tutor Two Peers	10%
Week 5 1500-1800 Tue 21Mar During the normal workshop time	Team Presentation 1	Each team will have 20 minutes to present a summary of their first Team Report. 10 minutes will be allocated for questions and peer review after each presentation. Each team is required to invite their project sponsor and any other applicable stakeholders.	Own team Tutor All peers	5%
Week 5 1700, Friday 24Mar Submit using Wattle	Team Report 1	The first team report should focus on: a) Who your stakeholders are and how have you engaged with them b) What your challenge is and why it is important c) Your proposed approach to the challenge and how your approach will have ‘impact’ d) How have you applied what you have learned in each workshop. Limit your report to 4 pages. The challenge here is to present a lot of information in a concise way. Each team is required to submit a self reflection with their report using the <i>Team Report Tag Report</i> available on Wattle.	Own team Tutor Two peers	15%
Week 6 0900, Monday 27Mar Submit using Wattle	Peer Review of Individual Reflection 1	Each student is required to complete a peer review of two of their peers’ Individual Reflections. This is done by completing the <i>Individual Reflection Tag Rubric</i> available on Wattle. You will receive the reflections to be reviewed by email.	N/A	N/A
Week 7 0900, Monday 17Apr Submit using Wattle	Peer Review of Team Report 1	Each student is required to complete a peer review of Project Reports from two other teams. This is done by completing the <i>Team Report Tag Rubric</i> available on Wattle. You will receive the reports to be reviewed by email.	N/A	N/A

Assessment Tasks (cont.)

Due Date and Time	Assessment Task	Requirements	Stage 1 Assessors	Marks
<p>Week 8 1700, Friday 28Apr</p> <p>Submit using Wattle</p>	Team Report 2	<p>Your approach should be well developed by now. So, the second team report should focus on:</p> <ol style="list-style-type: none"> What you have achieved so far - have you already had an impact? How you have engaged with stakeholders in order to better deal with their (possibly conflicting) needs and constraints How have you applied what you have learned in each workshop. <p>Limit your report to 4 pages. The challenge here is to present a lot of information in a concise way.</p> <p>Each team is required to submit a self reflection with their report using the <i>Team Report Tag Report</i> available on Wattle.</p>	Own team Tutor Two peers	15%
<p>Week 9 1500-1800 Tue 1May</p> <p>During the normal workshop time</p>	<p>Team Presentation 2</p> <p>Team selection for Showcase</p>	<p>Each team will have 20 minutes to present a summary of their second Team Report.</p> <p>10 minutes will be allocated for questions and peer review after each presentation.</p> <p>Each team is required to invite their project sponsor and any other applicable stakeholders.</p> <p>Two teams will have an opportunity to give a 5 minute pitch at the Public Showcase (i.e in front of a very large audience). Like the poster, the pitch will have a clear objective - often around the next stage of your project.</p> <p>During our Week 10 workshop slot, each group will give a 5 minute pitch. The whole class will evaluate each presentation and choose two for delivery at the Public Showcase.</p> <p>The whole class will then work with the selected teams to improve their pitch for the Showcase.</p>	Own team Tutor All Peers	10%
<p>Week 9 1700, Friday 5May</p> <p>Submit using Wattle</p>	Team Poster	<p>You will show your poster at the public showcase to be held during Week 10. This will be an opportunity to share your work with a broad audience of people from across the university, industry, government and the broader community.</p> <p>The poster should have a clear objective - usually around the next stages of your project - e.g. attracting interest from key stakeholder groups, attracting financial and/or in-kind support, or promoting your product, service or policy.</p> <p>Design your poster so that it can be printed at A0 size.</p>	Own team Tutor All Peers	5%

Due Date and Time	Assessment Task	Requirements	Stage 1 Assessors	Marks
Week 10 0900, Monday 8May Submit using Wattle	Peer Review of Team Report 2	Each student is required to complete a peer review of Project Reports from two other teams. This is done by completing the <i>Team Report Tag Report</i> available on Wattle. You will receive the reports to be reviewed by email.	N/A	N/A
Week 11 1700, Friday 19May Submit using Wattle	Individual Reflection 2	Individual Reflection is an effective and systematic process for improving your learning and achieving the learning outcomes for the course. The <i>Individual Reflection</i> section of this guide provides details. Your reflections must be documented in a written report no longer than 4 pages.	Self Tutor	10%
Week 12 1700, Friday 26May Submit using Wattle	Team Report 3	The final team report should cover the entire project with a particular focus on: a) The final outcomes of your work - e.g. a prototype, draft policy, a creative work ... b) How your work has or will have impact c) How you have evaluated your work d) Future plans e) Reflections on your project - what went well and why, what did not go well and why, what will you take to your next team project? Limit your report to 8 pages. Include the first two reports as appendices (not included in page count) Each team is required to submit a self reflection with their report using the <i>Team Report Tag Report</i> available on Wattle.	Self Tutor	30%

Assessment Tasks (cont.)

Academic honesty and plagiarism

All students must read and understand the [ANU guidelines on Academic honesty & plagiarism](#).

Any sign of academic misconduct in any assessment task will be fully investigated in accordance with the [ANU Academic Misconduct Rule 2015](#).

Late submission policy

Late submission of work will not be accepted. That is, late submissions will incur a 100% penalty.

There will be no exceptions to this rule unless there are special circumstances such as illness.

Key ANU policies

All students should familiarise themselves with the following policies:

- a) [Assessment & exams](#)
- b) [Student assessment \(coursework\)](#)
- c) [Student Surveys and evaluations](#)

The Common Assessment Process

We use a common process for assessing all student work as depicted Figure 1 and described below. The marking process on the left is applied to every task. The process on the right is added when the assessment task is undertaken by a team.

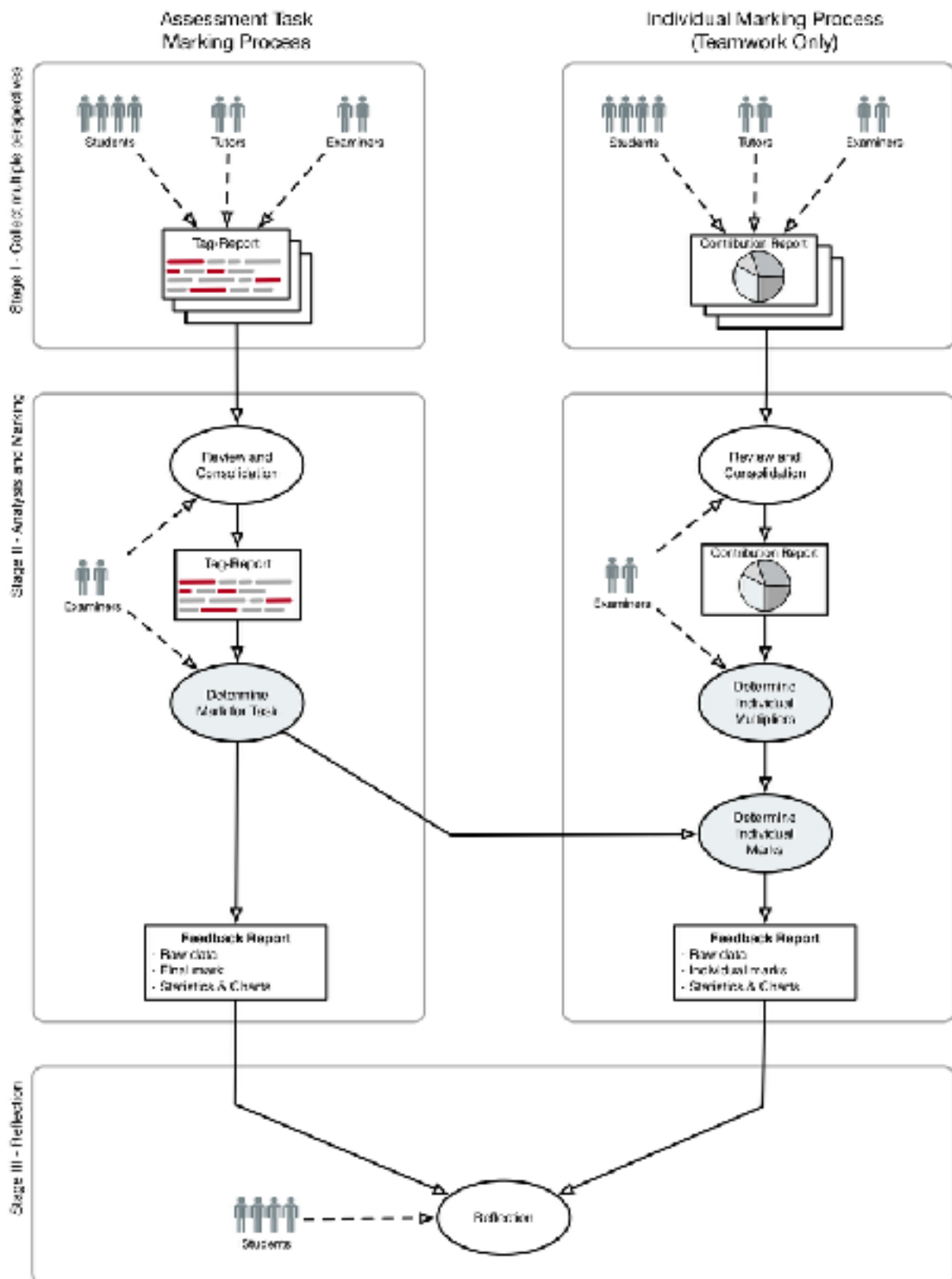


Figure 1. The Creating Impact Assessment Process.

Assessment task marking process

The assessment of each task follows a three-phase process designed to make use of multiple perspectives and to ensure consistency of marks across all students. Refer to the lefthand side of the above diagram.

Stage One - Collect Multiple Perspectives. In stage one, we collect a qualitative assessment of each piece of work from multiple sources depending on the nature of the task. For example, we might collect input from all attendees at a presentation. For a report, we might collect input from your tutor and several of your peers. This qualitative assessment is produced using a *Tag Report*.

A *Tag Report* is a form that lists a set of words or phrases that can be used to characterise the quality of the work being assessed. These words and phrases can be grouped in various ways. For example, the following may be used to evaluate a reflective report.

Understanding of Ideas covered in the course:

- | | |
|--|---|
| <input type="checkbox"/> brief summary of ideas | <input type="checkbox"/> no significant misconceptions |
| <input type="checkbox"/> frequent misconceptions | <input type="checkbox"/> no mention of learning outcomes |
| <input type="checkbox"/> goes beyond the obvious | <input type="checkbox"/> no misconceptions |
| <input type="checkbox"/> little or no attempt to summarise ideas | <input type="checkbox"/> discussion in terms of learning outcomes |
| <input type="checkbox"/> uses examples to explain ideas | <input type="checkbox"/> fails to cover all ideas |
| <input type="checkbox"/> strong understanding of ideas | <input type="checkbox"/> deep understanding of the ideas |

Rationale for above responses and additional tags:

Analysis of course ideas

- | | |
|---|---|
| <input type="checkbox"/> no significant misconceptions | <input type="checkbox"/> little or no analysis of ideas |
| <input type="checkbox"/> identifies alternative views | <input type="checkbox"/> competently explores alternative views |
| <input type="checkbox"/> no misconceptions | <input type="checkbox"/> repeats examples without analysis |
| <input type="checkbox"/> explores alternate views | <input type="checkbox"/> take a systems approach |
| <input type="checkbox"/> does not explore alternative views | <input type="checkbox"/> analysis in terms of 'creating impact' |
| <input type="checkbox"/> analyses strengths and weaknesses | <input type="checkbox"/> some misconceptions |

Rationale for above responses and additional tags:

Those assessing a task will create a *Tag Report* by selecting those words and phrases that characterise the quality of the work being assessed. They may also provide a brief rationale for each selection.

At this stage there is no consideration of numeric marks. We have simply collected a qualitative assessment from a range of people including examiners, tutors and students (your peers).

Stage Two - Examiners' Meeting (marking). In this stage, examiners meet to review and consolidate the *Tag Reports* generated in Stage One. The result of this process is a single *Tag Report* for each piece of work being assessed.

The examiners use this information to determine a final mark for each submission. Because it is only the examiners who determine the final marks (based on the qualitative input from several sources), there are high levels of consistency across all students.

The output of Stage Two is a detailed report showing (anonymised) raw data, a summary of results across the whole class, and your final mark for the assessment task.

Stage Three - Reflection. During this stage, students reflect on their results and how they compare with other students. The aim here is to identify areas of improvement and the actions that can be taken to make those improvements.

Individual marking process (teamwork only)

When assessing work completed by a team, we start with the process described above. This results in a *Team Mark* for the submitted work. We then use the following process to derive an *Individual Mark* for each team member. Refer to the righthand side of the above figure.

Stage One - Collect multiple perspectives on the value of individual contributions. In stage one, we collect multiple perspectives on the value of each team member's contribution to the work submitted for assessment. These perspectives are provided in the form of *Contribution Reports*. Each of these reports comprise a list of percentages indicating the value of the contribution made by each team member to the subject assessment task. For example, if every student contributed equally in a five person team, they would each get 20%. If, on the other hand, one student contributed significantly more than the others, they might get 40%, and the other four students would each get 15%.

Stage Two - Examiners' meeting. In this stage, examiners meet to review and consolidate the *Contribution Reports* generated in Stage One. The result of this process is a single *Contribution Report* for each team.

The examiners use this information to determine a *multiplier* which will be used to calculate an individual mark based on the team mark received for the assessment task.

$$\text{IndividualMark} = \text{TeamMark} * \text{Multiplier}$$

If every team member contributed equally, then this multiplier would be 1.0 for each student. That is, every member of the team would receive the same mark. Student who contribute less than others, will have a multiplier less than 1.0. Those who contribute more, will have a multiplier greater than 1.0.

The output of Stage Two is a detailed report showing (anonymised) raw data, a summary of results across the team, and your final individual mark for the assessment task.

Stage Three - Reflection. During this stage, students reflect on their results and how they compare with other teams and students. In some cases, this reflection may be done as a team with the help of a tutor. The aim here is to identify areas of improvement and the actions that can be taken to make those improvements.

Individual Reflection

Individual Reflection is an effective and systematic process for improving your learning and achieving the learning outcomes for the course.

In *Creating Impact*, reflection is an integral part of the iterative learning process depicted in Figure 2.

- The iterative loop begins with Learning Outcomes for the course. These outcomes are described earlier in this guide.
- The Learning Outcomes inform the design of workshops that introduce students to key concepts and tools.
- Students then develop their understanding of these concepts and tools by applying them to a real-world project.
- At the end of each iteration, students think about the work they have done. They consider how well they have achieved the learning outcomes and will identify actions they can take to improve their achievement of the outcomes in subsequent iterations.

It is important to note that all of the above happens within a broader context including personal experiences, learning outcomes from other courses and project stakeholders (those involved in, or impacted by course activities and the project). By connecting what they have done in the course to this broader context, students will gain more from the course and will have a rich source of information to complete the *Individual Reflection* reports due in weeks 4 and 11.

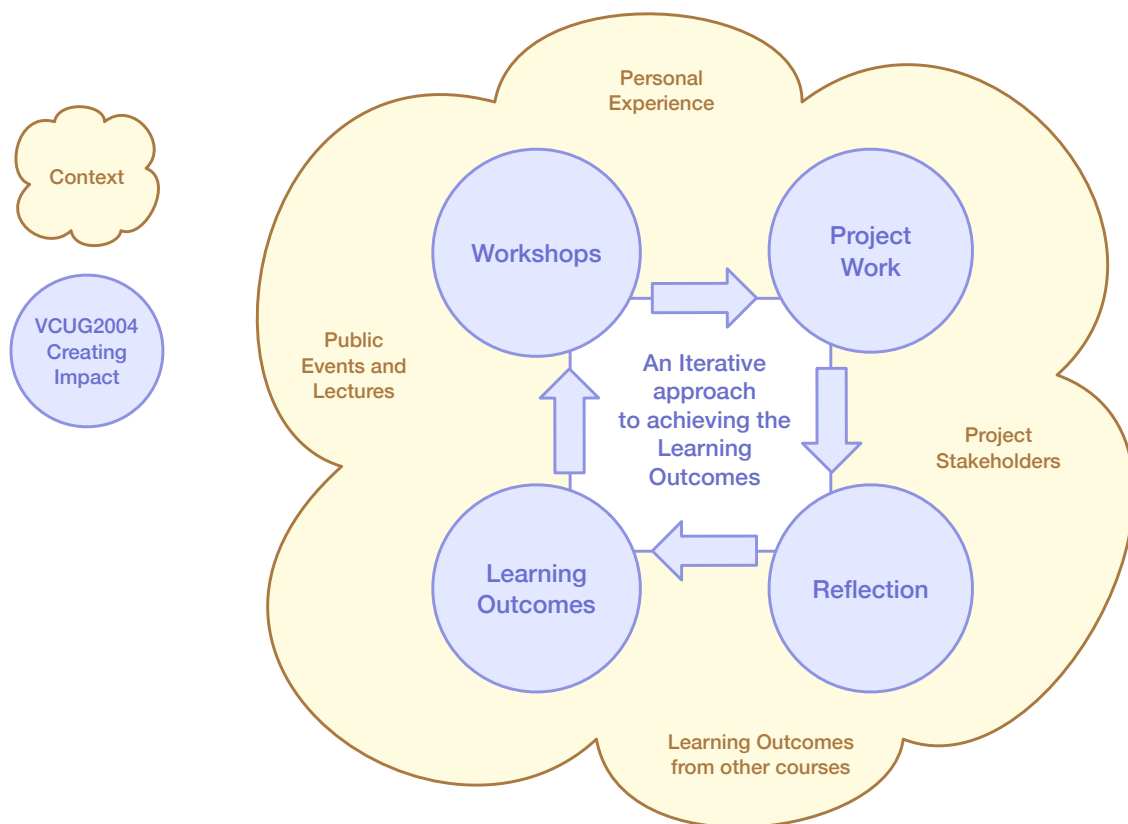


Figure 2. The Creating Impact Iterative Learning Process