## Project title
Development of improved content and delivery for IT trainees and cadets.

## Project leader
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## Team members
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## Funds approved
$36123

## Funds acquitted (attach financial statement)
$37902

## Introduction
The project aimed to improve the online content for the Certificate IV in IT students, both Cadets and Trainees. The previous content was outdated and did not provide a satisfactory e-learning experience for students. The project achieved its objectives of developing a new framework and implementing new content and delivery models.

## Detailed project description and outline of what was done
The online content was developed throughout the project with the focus on creating a more holistic view of the program and the assessment, while creating a simplified model of assessment and activities.

The stages of the project included:
- Developing a learning model that enables roll over enrolments
- Building sites (online interface, instructional design, )
- Developing content (clustering of competencies, integration of content)
- Building learning activities (case studies, interactive and integrated activities)
- Building communication (blogs, wikis, discussion forums)
- Building Multimedia (to enhance learning activities)
- Building Assessment – (integrated projects)

The learning model included clustering of competencies into meaningful knowledge areas to reduce the workload on students. The model used integration and holistic learning approaches to achieve these results. By clustering competencies, the content became more contextualised and meaningful and by integrating assessments learners are able to produce better examples of work relating to their competencies.

The project took much longer than anticipated due to conflicting demands on the various resources and the limited access to the educational developers assigned to the project. Although the learning content and delivery model has been implemented, the evaluation process is still underway and the project team will continue to modify and further develop interactivity of resources as the need develops.

## Attach the full and detailed report and evaluation of your project outcomes including evidence of the impact the project has had. Also make reference to how the outcomes

### Notes:
Include changes to the project scope, methodology, and outcomes/products of the project as it progressed, and the rationale for this.

The project scope involved three phases including planning, implementation and evaluation. Due to the project taking much longer than expected, the evaluation is still ongoing.

The aim of the project was to create an online learning environment that would improve student learning experiences. The evaluation is ongoing and will be evidenced in the future through surveys and direct feedback from students. Initial informal responses from the students have been very positive but have yet to be measured. The project team have developed their thinking and innovation through being part of developing the new framework of clustering knowledge areas for delivery and assessment. Strategic alignment has occurred through the development of more flexible delivery strategies for online content and these...
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<tr>
<th>Address the five key objectives:</th>
<th>concepts can be applied across the university for various programs.</th>
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<tr>
<td>• Improved student learning experiences, outcomes and employment opportunities</td>
<td>The teaching and learning model aimed to improve student performance and improve student engagement by ensuring completeness of content, ensuring consistency of language, ensuring quality of content, improving student usability, ensuring balance of assessments, ensuring integration of assessments and incorporating the needs of diverse learning styles of students (multimedia, podcasting, video streaming, lectopia, discussion boards, wikis and blogs etc)</td>
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<td>• Innovation</td>
<td>The model has enabled a streamlined online delivery of the Certificate IV for trainees and cadets. The further aims of the model were: to enable learners to develop transferable skills to the workplace; to encourage the evidence of workplace skills that are transferable to learning; enable a more efficient way of addressing student needs, to provide an opportunity to fast track student learning through RPL and workplace assessments; enable a smooth transition for trainees to move into the cadetship program and increase the opportunity to engage with industry</td>
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<td>• Strategic alignment</td>
<td>Some of these aims have already been evidenced with both the Cadets and trainees currently sharing the online resources and the development of evidence based portfolios as alternative and/or supporting methods of assessment. As the product is adopted and utilised throughout semester 1 and 2 2010, further evidence will be obtained on the effectiveness of the model and further improvements will be undertaken based on the feedback provided. These improvements will be the responsibility of the Business TAFE school and the project team.</td>
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<td>• University wide application</td>
<td>Dissemination of project outcomes both completed and planned. This should include both within RMIT and externally.</td>
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<td>• Value for money</td>
<td>The project outcomes have been shared within the Business TAFE school and with current employers of new trainees. It is anticipated that the framework would be beneficial to other areas within RMIT and therefore the outcomes could be shared with other faculties and schools. The project experience has enhanced the role of teachers and created opportunities for teachers to conceptualise teaching in a different framework.</td>
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The project aimed to improve the online content for the Certificate IV in IT students, both Cadets and Trainees. The previous content was outdated and did not provide a satisfactory e-learning experience for students. The project achieved its objectives of developing a new framework and implementing new content and delivery models.

The stages of the project included developing the learning model, building the sites, developing content (clustering of competencies, integration of content), building learning activities, building communication, building multimedia and building assessment.

The learning model involved the clustering of courses into meaningful integrated knowledge areas to reduce the workload on students and create more contextualised content and assessment. The model utilised integration and holistic learning approaches to achieve these results.

The screen shots below show the knowledge areas categorised as ‘Project and Business Skills’, ‘Programming’ and ‘Networking’. Each knowledge area was then set up as a learning unit using Blackboard’s learning unit feature. The learning units contain sections that create a pathway and flow for students to follow the grouped content in a meaningful order. Overlaps in the training packages were minimised using this method.

There were several challenges during the project. The availability of resources was a major challenge especially when future tasks were dependant on the timely completion of the predecessor tasks. Teachers were released from teaching to work on the project, but were often ‘borrowed’ to assist in regular activities such as covering classes for absent teachers, attending meetings etc. The educational developers on the team were working on many different projects and often these other projects were given higher priority, leaving the development project in limbo during several stages. The multimedia aspects that were developed were not as extensive as was first planned due to the restrictions of blackboard and resource scarcity.

The limitations of Blackboard made it difficult to create the level of multimedia interactivity that were initially planned for the project. These limitations affected the scope of the project. The constant restrictions on resources caused the time line of the project to blow out with the content finally implemented in December 2009. As a result, the evaluation stage is still ongoing with the new 2010 students utilising the model.

Regardless of the challenges, the project has achieved many of the outcomes that were planned and the project team have developed their own skills in teaching innovation through the experience. The project outcomes have been shared with colleagues of the Business TAFE school and with employers of the new 2010 trainees. After further evaluation, the project manager intends to disseminate the outcomes further both within RMIT and with the wider community including the industry advisory committee and employers.
The learning unit has five stages and covers 9 courses.
1. Workshop 1 - Welcome to the Wonderful World of Java

Outline
- In this session you will create your first Java program. You will learn how to compile and run Java program using an editor called Textpad. There will be an introduction to basic output, code structure, variables and data types.
- You will learn how to use the assignment operator (=) and the arithmetic operators (+, -, etc.). You will also learn the naming conventions you will be expected to conform to throughout this course and in the future. You will learn the correct use of white space and comments to enhance the readability of your code.
- You will learn what an algorithm is and how to construct one. You will also get your first look at flowcharts and then learn how to create the code modelled by simple flowcharts using the selection tools (if statement) of the Java language. You will learn an alternative to the if statement - the switch statement.

Workshop 1 notes and exercises
Notes and Exercises
Read the materials provided in this link. Complete all the exercises to get a detailed understanding before trying to attempt assignment 1.