Course Analysis

1. Course Analysis related to Unit Learning Outcomes

Graduate Attributes

At Curtin, each unit has up to about six learning outcomes that state what successful students know or can do. In the CCMap, each is coded to at least one, and up to three of Curtin’s nine Graduate Attributes to which they predominantly relate. (All learning outcomes must be assessed at least once in the unit). The charts demonstrated here show the relative emphasis of the Graduate Attributes as they relate to all unit learning outcomes. This analysis is intended to be a broadbrush overview of the distribution of the Graduate Attributes. Using this overview, the course teaching team can decide whether the spread is appropriate for the course. If adjustments need to be made, teaching staff can access and change the individual unit worksheets, then re-generate the chart. For more information, see http://otl.curtin.edu.au/publications/tlbookchap2.pdf.

The emphasis of the Graduate Attributes in each semester of the course is also demonstrated in a chart: in this example, the course is four years full-time and comprised of twenty-eight units.
Level of Thinking

In the CCMap, each unit learning outcomes is given a ‘star rating’ from one to six to indicate the highest ‘level of thinking’ (or cognitive demand) required to achieve that learning outcome. The six star levels are based on Krathwohl’s Revised Teaching Taxonomy. For more information, see http://otl.curtin.edu.au/publications/tlbookchap4.pdf. Unit coordinators indicate whether the achievement of the learning outcomes requires the student to Recall, Explain, Apply, Analyse, Evaluate or Create. Again, this analysis is intended to be a broadbrush overview which the teaching team can use to decide whether the spread is appropriate. If adjustments need to be made, teaching staff can access and change the individual unit worksheets, then re-generate the chart.
The emphasis of the Levels of Thinking in each semester of the course is also demonstrated in a chart: as for the previous example, the course is four years full-time and comprised of twenty eight units.
2. Course Analysis related to Assessment

At Curtin, each unit has usually up to four assessments constructively aligned with the unit learning outcomes. In the CCMap, each assessment is accompanied by information on percentage weighting, week due, and so on. Version 2 also attempts to categorise assessment tasks by type, mode, level of work-integrated learning, and so on, as shown in the charts which follow. Every aspect demonstrated here includes ‘other’ so that categories as yet not included can be captured as the CCMap is finessed. Assessments are complex and multifaceted tasks, and many defy categorisation: the intent in the CCMap is to have the unit co-ordinator indicate the predominant feature in any given category—not all will be appropriate to every task. Using the charts demonstrated below, the course teaching team can decide whether the spread is appropriate for the course. If adjustments need to be made, teaching staff can access and change the individual unit worksheets, then re-generate the chart. For more information, see http://otl.curtin.edu.au/publications/tlbookchap5.pdf.

**Type:** Tasks may fit several of these; the unit coordinator is asked to select the ‘best fit’. The chart also shows 0% categories, so that teaching teams can see what is not in the course, as well as what is in it.
Medium: This categorisation attempts to enable the identification of the predominance of any one medium. For example, a performing arts course with a predominance of written tasks may require attention; a literature or history course with few written tasks may require investigation.

Format of written tasks: This categorisation attempts to enable the identification of the predominance of any one format such as multiple-choice testing, short answer, or a combination of some of these.
**Student role:** This categorisation attempts to enable the identification of the predominant role of the student. For example, student feedback sometimes includes complaints about ‘too much group work.’ This chart identifies the amount of group work across a course.

![Proportion of Assessment Tasks by student role](chart1.png)

**Level of authenticity:** This categorisation attempts to enable the identification of levels of authentic assessment, or work-integrated learning (WIL), or the proximity of the task to ‘real world’ professional practice. Because there are many types of WIL, this chart draws on four broad categories—Nil (to show where there is absence of WIL), Low, Medium and High. Examples provide some guidance, but the categories are very broad: these may require further finessing as Version 2.0 develops.

![Proportion of Assessment Tasks by level of authenticity](chart2.png)
**Level of supervision:** It may be helpful to have an overview of what proportion of assessment tasks are high stakes examinations, or ‘closed book’.

![Proportion of Assessment Tasks by level of supervision](image)

**Mode:** It may be helpful to have an overview of what proportion of assessment tasks are conducted face to face and in blended learning: this is likely to vary according to enrolment and campus.

![Proportion of Assessment Tasks by mode](image)
**Principal assessor:** It may be helpful to track self, peer, teaching staff and industry assessors, and combinations of these. This chart demonstrates these categories; it is likely to need further refinement as Version 2.0 develops.

**Purpose:** Until now, Curtin has only mapped assessment of learning, and the oft promoted *assessment for learning* goes unrecorded. This category may provide a way of tracking, and even promoting more formative assessment.
**Week due**: The chart below shows the spread of assessment tasks by Week Due across the first semester in year one of the course. Similar charts are available for other semesters and may be used to determine the spread of assessment tasks and hence student and staff workload across the semester.
3. Course Analysis related to Learning Experiences

This section attempts to analyse face to face learning experiences and may be of limited use where there is extensive blended learning, multiple modes and several campuses. Alternatively, the teaching team may choose to use this section for ‘on campus’ teaching only. Version 2 also attempts to capture an overview of the experiences the student is likely to encounter across the whole course. For example, is the usual pattern lectures during which the student predominantly listens and takes notes? In a course with very practical outcomes, for example, medical imaging, this might need reconsideration. The categories here attempt to investigate the level of engagement or active learning expected of the student. For each unit, the unit coordinator may choose up to seven experiences from the drop down menu.

**Type:** The categories include the most common types available in face to face teaching.

![Proportion of Learning Experiences by type](chart)

**Duration:** This section allows the overview of length of experience showing, for example, where students experiences predominantly very long or short experiences.
**Frequency:** This section allows the overview of frequency of experience showing, for example, where students experience predominantly very frequent or intermittent classes.

**Predominant student activity:** This section allows the overview of the predominant types of student engagement, and is likely to require further finessing.
Proportion of Learning Experiences by predominant student activity

- Listening/viewing/reading: 14%
- Writing: 7%
- Speaking: 9%
- Reflecting: 13%
- Hands on practice: 11%
- Listening/writing: 18%
- Listening/writing/speaking: 20%
- Problem-solving: 7%
- Other: 1%

Legend:
- Listening/viewing/reading
- Writing
- Speaking
- Reflecting
- Hands on practice
- Listening/writing
- Listening/writing/speaking
- Problem-solving
- Other
4. Course Analysis related to Learning Resources

This section attempts to analyse the type of resources student experience across a course, and a broad overview of the costs to students, or put another way, the proportion of learning resources such as BlackBoard sites and iLectures which are provided at no direct cost to the student. Curtin uses Blackboard, iLecture and a Curtin-built iPortfolio.

**Type:** The categories include the most common types of resources.

![Learning Resources by type](chart.png)

**Frequency of use:** This section allows an overview of frequency of use of learning resources from daily to infrequent use.
Cost to student: The categories show different cost brackets for the learning resources in use by a student e.g. in the course below, more than half of the items incur no direct cost to the student.
5. Course Analysis related to Curriculum Themes

This section attempts to analyse the level of engagement of the course with five Curriculum Themes. To plot a different theme, the User simply replaces any of the themes, on the “Unit 1” worksheet. These new names will be reflected in the charts produced. The calculation is based on a rating provided by the unit coordinator as to whether there is

Nil: no relationship to the theme;

**Level 1 Low**: In the unit, the student engages with information about the theme; for example, information about indigenous issues;

**Level 2 Medium**: In the unit, the student is required to achieve a skill related to the theme; for example, designing a culturally inclusive teaching plan for indigenous students.

**Level 3 High**: In the unit, the student has ‘hands on’ engagement related to the theme; for example, completing teaching practice in an Aboriginal community school.

---

![Emphasis of level of engagement with Curriculum Themes](chart.png)

- **Nil (absence of engagement)**: 61%
- **Level 1 (low / information)**: 29%
- **Level 2 (medium / upskilling)**: 8%
- **Level 3 (high / hands on)**: 2%

---

The second chart provides more detail on the level of incorporation of each of the identified Curriculum Themes. This provides a snapshot of the extent to which the themes are included in the curriculum.
6. Course Analysis related to Career Development Learning

This section analyses Career Development Learning in the curriculum, using the Australian Blueprint for Career Development (ABCD) as a guide. At the base of the Unit Profile Template, eleven key competencies are outlined in three broad areas, in keeping with the ABCD: Area 1: Personal Management, Area 2: Learning and Work Exploration and Area 3: Career Building. Four levels of engagement with a competency are nominated: Act, Personalise, Apply and Acquire. For more information, see http://www.blueprint.edu.au/.

This chart indicates the number of times an ABCD competency is addressed in the course, shown as a cumulative total across all levels of engagement. Where a course aims to assist students to be ‘career ready’, mapping the competencies demonstrates where the student has opportunities to develop the skills to manage their careers. Additionally it allows lecturers to identify gaps in career development learning and to enhance its delivery in their courses.

This chart shows each level of engagement with an identified competency. Mapping the level of engagement may indicate whether opportunities exist for students to apply and acquire Career Development Learning skills across the course.
Managing charts in the CCMap

Working with charts
Tabulated information on any course analysis worksheet summarises data from all unit worksheets across a course and is visually summarised on charts.

For this reason, a few hints on working with charts follow, to enable the User to manipulate any chart to include data labels (names of categories shown on the charts), legends (key to category names), chart titles and size, to suit the needs of the User.

Selecting the chart
Highlight the chart you wish to work with or print, by clicking on the border of the chart. A feint, extra grey outline appears.

Once any chart is highlighted in this manner, the Chart Tools appear on the ribbon at the top of the page.

Changing a chart
Choose the **Design, Layout or Format option** of the **Chart Tools** to make changes to any of those aspects of the chart. Drop-down choices appear when an item is selected. For further assistance, **press F1 at the top left of your keyboard for Excel Help**.

**Design Tool**: includes chart type and appearance, data used and colours used on charts

![Design Tool](image)

**Layout Tool**: includes addition of inserts; labels for data, legend, title, axes and background

![Layout Tool](image)

**Format Tool**: includes shape and word styles and size selections

![Format Tool](image)

Another way of changing the appearance of charts is to highlight the applicable chart and click the label or feature you which to alter. A frame will become visible around the feature, as shown in the examples below. Click inside the chosen frame and re-type the new name.

![Chart Examples](image)

**Cautionary note**
Note that incomplete charts appear to be unformatted when first seen on the blank Curriculum Map, as shown by the two examples below.

Once data have been entered into Unit worksheets, charts display in the normal manner, as shown in the chart below. This is because the data are automatically transferred to Course Analysis worksheets and used to complete tables and populate charts.

Similarly, tables in course worksheets contain cells with error messages (e.g. $$$$ or #DIV/0!) which self-correct when unit worksheets are completed.
Producing a chart from any tabulated information

Some charts in the Curriculum Map are formatted to accept information over six years of study, as shown below. Years five and six are blank as the course shown is normally completed in four years.

If you wish to display a chart that incorporates only the years and semesters for which data is available, follow these instructions:

Find where the data contained in the chart is stored on the worksheet by clicking “Design” on Chart Tools and then “Select Data”. The plotted data will appear, as at left below. Click “Cancel” on the dialogue box that pops up and move your cursor to any empty cell on the worksheet to have the chart data visible but not activated / highlighted.

To produce a chart that only shows years one to four, highlight only the applicable cells. Start at the top left corner and highlight all cells to the Year 4 Semester 2 cell, as shown by the white cells in the right-hand table above. Now press F11 and a new chart, containing data from only the highlighted cells, will appear on a new tab (worksheet). A chart title or data labels etc may be added to the new chart by using the Chart Tools, as described above. The chart may also be printed.
Printing a chart

Method 1:
Highlight the required chart and choose “File” (or Office button), then “Print”; the following message displays:

Press “OK” command to print the highlighted/selected chart.

Method 2:
This method allows the chart to be inserted on a new, separate tab and then printed:

Step 1: Add a blank worksheet (Shift + F11), which appears to the left of the open tab.
Step 2: Highlight the chart to be printed by clicking on the border of the chart.
Step 3: Right-click the mouse cursor over the chart border and choose “Copy”.
Step 4: On the blank tab, right-click and choose “Paste” to add your copied chart.
Step 5: Use normal print procedure (Ctrl + P) or (Office button / File and Print) or (seek Excel Help on F1) to print the chart.