“The best way to design instruction is to work backward from its expected outcomes” (Gagné, Briggs & Wager, 1992, p. 39).

A Learning Outcomes Primer
Learning outcomes are clear descriptions of what learners can do as a result of actively participating in your subject.

Doing has five parts (Gagné, Briggs & Wager).

1. Intellectual skill
   Your students are now aware of facts and ideas that they did not know prior to your subject.

2. Verbal information
   Your students are able to list, identify, and describe these facts and ideas. In other words, they can verbally demonstrate their learning (through speaking and/or writing).

8. Is the wording of your LOs professional?
   Tip – Instil a sense of pride in your discipline by wording the LOs in a professional manner. Turn to peer-reviewed journal articles or respected trade publications to see how they have worded the ideas you are trying to articulate.

9. Do your LOs represent both Australian and International content?
   Tip – Re-examine your LOs through the lens of Australian national students who want to work overseas upon graduation, and international students who are coming to Australia for the first time to partake in your subject. Do your LOs meet the needs of both of these student populations?

10. Do you have 5 or 6 LOs?
    Tip – If you have more than 5 or 6 LOs, you may need to combine some of the specific points into more inclusive points. Having a large list of LOs could also indicate that you may be trying to do too much in a single subject. Perhaps the desired LOs might be redistributed to some other subjects. If you have less than 5 or 6 LOs, you might not have considered all of the outcomes that come from this subject. Have you considered – intellectual skill, verbal information, motor skill, cognitive strategy, and attitude?

References
3. **Motor skill**
In addition to verbally demonstrating their learning, your students may have gained other hands-on skills necessary within your discipline.

4. **Cognitive strategy**
Your students can use the same processes and approaches to thinking, analysing, and problem solving as experts in your discipline.

5. **Attitude**
Your students have gained an appreciation for what matters in your discipline. They may have been infected with some of your passion.

In summary, as a result of actively participating in your subject, your students know something that they did not know before. They have some strategies to think about this information and have learned how to apply it within your discipline. They are able to express this knowledge. They may have some hands-on skills and abilities that they gained through direct experience within your tutorials. Finally, some of your passion for your discipline may have rubbed-off on your learners. Your students’ learning outcomes are knowing what, how, and why, and being able to demonstrate this learning verbally and physically.
How to get started on writing learning outcomes

Does your Subject Outline already include:

Goals
Objectives
Aims
or other such features?

If so, use these concepts and words as the basis for your learning outcomes.

You may wish to skip this next session and move directly to the 10 questions on the checklist below to help you refine and enhance your Learning Outcomes.

10 Question Checklist

Here are 10 questions to guide you in writing your learning outcomes.

LOs = Learning Outcomes

1. Are your LOs written in plain language so that prospective and current students and their employers can understand what you mean? Have you avoided jargon?

   Tip – Ask a colleague from another faculty to read your learning outcomes and ask them to describe the meaning in their own words.

2. Are your LOs measurable?

   Tip - One of the most common errors in writing LOs is using the word “understand.” We cannot establish whether our students understand what we are teaching them. We can only ask that they list, define, or do something similar that we can observe.

3. Is there a sequence in the LOs between subjects in your school?

   Tip – Once you have drafted the LOs for your individual subjects, look at the bigger picture of the Subject LOs. Is there overlap between the subjects? Are there gaps?
Learning Outcomes

Attitude

Sample Words to use:

Defend
Explain
Debate
Choose
Act

Sample Learning Outcomes

As a result of active participation in this subject, students will be able to:

3. Critique films including analysis of the film crew functioning.
4. Defend your choice of film crew.

4. Attitude

Students enrol in and complete a program of studies to learn facts, ideas, and processes, but also to become a member of the discipline, or in other words, to be inducted and develop their identity as part of a larger system. They develop an appreciation for what matters within your discipline. They observe and experience your passion, which may serve to ignite their own engagement.

What matters about your discipline? What do you want your students to have a sense of upon completion of your subject?

Learning Outcomes

Intellectual skills / Verbal information

Sample Words to use:

List
Identify
Describe
Define
State

If, on the other hand, you are staring fresh, here are some questions and words with which to begin.

1. Intellectual skills/ Verbal Information

Intellectual skills and verbal information go hand-in-hand. Facts and ideas are the stuff and substance of your subject. However, you cannot peer inside your students’ brains to determine whether they have learned these facts and ideas. Your students need to demonstrate their learning to you.

Make a list of the facts and ideas that are core content in your subject.

Ask yourself how your students are going to demonstrate that they have learned these facts and ideas. One of the key ways for students to express their learning is through spoken or written communication.
2. Motor skills

We started this discussion by defining learning outcomes as what your students are able to do as a result of participating in your subject. The traditional sense of doing is using motor skills. Some subjects have tactile, physical or hand-on skills that must be mastered.

Students often learn these skills through hands-on work in your tutorials, labs, and/or field experiences.

5.

3. Cognitive strategies

On the previous page, we talked about the WHAT of your subject. What your students will be learning about and what they will be able to do. This section talks about the HOW. In writing about “the business of education,” John Dewey (1909) defined teaching as ‘training of the mind.’ He wrote,

“While it is not the business of education to prove every statement made, any more than to teach every possible item of information, it is its business to cultivate deep-seated and effective habits of discriminating tested beliefs from mere assertions, guesses, and opinions; to develop a lively, sincere, and open-minded preference for conclusions that are properly grounded, and to ingrain into the individual’s working habits methods of inquiry and reasoning appropriate to the various problems that present themselves” (p. 28).

How do experts train their thinking within your discipline? What strategies should you teach your students?