

Curriculum Design Pattern

Global Learning by Design

Name of Pattern

Inspiring Student Learning using Employability

Date

December 2014

Abstract

Anyone who has instructed both mature age students and recent high school graduates can attest to the significant difference in their learning styles, McKenzie and Gow, (2004), (Martin, Wilson, Liem and Ginns (2013). Mature age students are often more motivated, more organized and focused, and achieve better learning outcomes. Recent high school graduates often see university as an extension of high school where the aim is to pass exams (often only just pass) and to obtain a piece of paper (a degree). This poor motivation leads to surface learning and poor skills which makes students unappealing to employers. Employability can be used to provide students with specific goals and a motivation to learn which benefits both the student and the university.

Learning Context

The learning activities can be fitted into any first year course, even a highly technical one. The requirement is about 15 minutes in the first four lectures of semester and one assignment where students make a four minute job application video.

Students are motivated to learn by focusing on employability which is also a key university metric.

The activities in this resource can be adapted for use in any discipline.

Rationale/Aim

If students are inspired to learn, they will become far more skilled and more competent which brings a whole range of benefits to the student and the university. Many first year students are not motivated and so it is vital to improve their motivation. Employability as a motivator can inspire learning.

Learning Design

The learning design uses employability, specifically the risk of not being employable, as a key motivator. Students were introduced to what employers really wanted in a graduate and so now have something specific to aim for.

The material used is suitable for a first year course and has a small impact on the lecturer and student time.

- Dedicate 15 minutes of each of the first four lectures of semester to talk about the issues and show one or two 8 minute videos.

At the first lecture, ask students, “Why are you here?” Ask them to reflect on their responses. Responses to be talked about in the second lecture.

The second lecture discusses the previous point, and discusses the competitive nature of the job market. Students are asked to think about their current and possible attributes.

The third lecture discusses previous week’s question and poses a new one, “What do employers want?”

The fourth lecture discusses this issue and shows the employment video.

The fifth lecture asks students what they are doing to gain evidence of the attributes seen in last week’s video.

- Students need to complete a job application video assignment where they produce a four minute video job application. This might be one assignment of five in a typical 12 credit point course.

It is important that the lecturer be seen as understanding the job market and as having a good idea about what employers want. It is also possible to bring in an external person for the four 15 minute talks.

The aim is to convince students that:

- Not all students get a job although they may be qualified for the position, due to lack of skills and attributes that employers want.

- What employers want is not a mystery and we can show you what they want.
- University must be a time when the student works out what employers want, acquires these attributes, and collects evidence they have these attributes.
- Not all the required attributes are gained at university but these things must also be vigorously pursued.

Students now have something to aim for and a reason to work hard; getting a top job is very competitive.

Conditions

The most critical factor is the believability of the staff member who introduces the material outlined above. Not all academics have the required contact and vision of what employers want. It would be quite appropriate to bring in a staff member, or external person, who can talk authoritatively on this topic.

Resources/Technology

Education resources

- [A Google Sites template](#)
- [Resumes and Interviews](#) YouTube video
- [Soft Skills: The importance of soft skills in the work place - both now and in the future](#) YouTube video

Technology resources

- [Google Sites](#)
- [Google Forms](#)
- [YouTube](#)
- [Kahoot!](#)

Other resources

- McKenzie, K., & Gow, K. (2004). [Exploring the first year academic achievement of school leavers and mature-age students through structural equation modelling](#). Learning and Individual Differences, 14(2), 107-123.
- Martin, A. J., Wilson, R., Liem, G. A. D., & Ginns, P. (2013). [Academic momentum at university/college: Exploring the roles of prior learning, life experience, and ongoing performance in academic achievement across time](#). The Journal of Higher Education, 84(5), 640-674.
- [Creating a Kahoot for easy and fun formative feedback](#)

Case Studies

This material has been very successfully used in the course Engineering Design 1 (EEET-2251) in 2015. The course is very technical yet the material was easy to graft in and was very well accepted by students.

Outcomes

Overview

The success of the employment activity in EEET-2251 has been measured by a Google questionnaire for students, in exam questions (where all options were correct), and by a Kahoot session in the lecture.

The exam questions were answered by 202 students, all those who took the exam. 57% reported the employability material had at least some new issues. The issue of resilience and professional mindset got a strong response with 91% seeing it as very important.

The optional survey was only answered by 74 students where 94% saw soft skills as important and 64% reporting that the lectures made a positive change in their attitude to soft skills. 67% reported that the motivation to learn had been increased because of the soft skills material.

The Kahoot session was joined by approximately 85 students and confirmed that the videos on employability and job interviews and curriculum vitae had a positive effect with 87% saying they would incorporate some of the advice in the video into their CVs.

There have been several other useful outcomes:

- The soft skills video was shown to staff in the School of Electrical and Computer Engineering (SECE). This provoked debate and shifted staff attitudes in the direction that soft skills are important to student job prospects. Curriculum planning sessions for the common Design stream in November 2015 have increased the soft skills components.
- EEET-2251 introduced a video assignment where students had to make a four minute job video application as many employers now request. This has resulted in a paper accepted at the AAEE conference in December 2015.
- The work overall resulted in an OLT Seed grant application that was rated as having a good chance of acceptance.
- The employment videos have been incorporated into a purpose-created Google Site on employability that lecturers can easily adapt and deploy in their courses. This may well be used in the first year course Enterprise Engineering in 2016.

Details

EXAM QUESTIONS: the questions and the % responses are shown below.

Q1. In this question ALL answers are correct, but you must make an answer to get the marks, and you must also have properly filled in student details on this exam and the MCQ sheet.

The early lectures talked about employer expectations of graduates and showed a video talking about soft skills. The Video Job assignment required you to make a job application as a short video. How much did this activity help you understand what attributes you must build while here at university?

- 20%: There were several important issues I had not understood previously.
- 37%: There were a few important issues I had not understood previously.
- 17%: I knew all the issues but I learned more about them.
- 22%: The assignment reinforced my existing knowledge about these issues.
- 4%: I learned nothing in doing this assignment.

Analysis: We are clearly giving valuable new information about employability to about 74% of the class.

Q2. In this question ALL answers are correct, but you must make an answer to get the marks, and you must also have properly filled in student details on this exam and the MCQ sheet.

The later lectures introduced the issue of acting as a pupil or professional. The lecturer stated that the lab program would test your professional mind set. In your opinion how important is it to adopt a professional mindset and to structure courses to encourage this attitude?

- 66%: The professional mind set is very important and all students must strive to attain it.
- 25%: The professional mindset is important.
- 7%: The professional mind set should be left to later years.
- 0.5%: It's OK to act as a pupil in a university course.
- 1%: The professional mind set does not matter.

Analysis: The professional mindset is seen as very important to 91% of students. This includes self-directed and self-motivated learning.

QUESTIONNAIRE: this was optional and students were asked to go to a Google Form and fill it in. We obtained 74 responses of 202 active students. There were 3 questions as shown below with responses indicated.

Q1. At this point in time what is your opinion of the importance of soft skills to your employability?

- 70%: Soft skills are very important to my employability.
- 20%: Soft skills are a useful enhancement to my employability.
- 4%: Soft skills may make a positive difference to my employability.
- 5%: Soft skills are not important to my employability.

Q2. Did the lectures and videos on the topic of employability increase your opinion of the value of soft skills?

- 23%: The lectures and videos made a big change and helped me see soft skills as very important.
- 41%: The lectures and videos did make a positive change and I now see soft skills as more important.
- 28%: I always did see soft skills as important and the lectures and videos just confirmed that.
- 8%: I do not see soft skills as that important after seeing the videos and listening to the lectures.


Q3. Has the soft skills and employability material increased your motivation to learn and become a highly competent engineer? (Recall the material on not all graduates get a job, what employers want ...)

32%: Yes my motivation to learn has increased a lot because of the employability/soft skills material.

35%: Yes my motivation to learn has increased because of the employability/soft skills material.

11%: Yes my motivation to learn has increased a little because of the employability/soft skills material.

22%: The employability/soft skills material does not increase motivation to learn.



A Kahoot session was held by staff in the lecture after students watched an 8 minute video about job interviews and writing a CV. Students were asked several questions and they responded via their mobile phones. Approximately 85 students responded.

- 18% of students did not have a CV.
- Only 35% had a fully up to date resume.
- Only 51% felt their resume was effective.
- 59% saw soft skills as vital to a job interview
- 28% find the video offering surprising advice (as in things the students had not thought of before).
- 87% would incorporate some of the advice in the video into their CV and
- only 27% did not want to see career development learning in their courses. Of this number, several commented they knew this stuff already and were not keen for everyone to know it!

Keywords

Employability, first year, motivation.