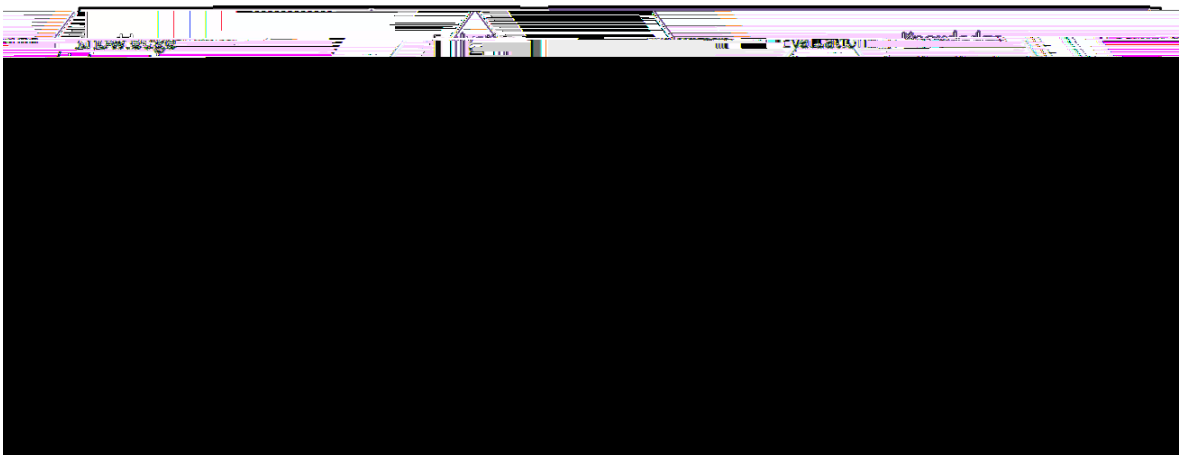
A quick introduction to the flipped teachin method.

Introduction

Essentially 'flippin ' means that we turn flip) Bloom's taxonomy classification) of learnin objectives [1] on its head so that the lower level learnin objective such as acquirin information/ nowled e are moved out of the timetabled slot[1] where they are traditionally covered, to *guided independen s udy*[2] and use the timetabled slot for hi her learn objectives such as application and analysis, where it is normally much better to have help at hand see fi ure 1). Whilst there is a certainly lot of discussion in the peda o ical literature about its merits and shortcomin s, there is published evidence that a flipped approach will improve understandin and examination mar s [2]. The traditional lecture format is around 1000 years old and necessary when printed information was extremely uncommon, i.e. the lecture was used to convey information which was not otherwise accessible. There is now essentially no barrier to access to information.



Figur 1: Bloom's taxonomy of l arning obj ctiv s in pyramid form showing low r l v l l arning obj ctiv s d liv r d in a traditional l ctur format vs. high r l v l l arning obj ctiv addr ss d during th contact tim in a flipp d l ctur . Not that th pyramid r pr s ntation of th taxonomy has r c ntly b n r c iving significant criticism (in fact Bloom did not propos this r pr s ntation) and th taxonomy has b n r vis d r c ntly. For thos int r st d s David Krathwohl's [3] articl : https://www.d pauw. du/fil s/r sourc s/kvid Kranis

Summary

To ive yourself the best chance of developin a ood understandin the material as well as ettin a ood mar in the module, what you need to do is:

Before the timetabled slot:

1. Put aside around 30 minutes to 1 hour in the wee *before* the lecture to watch/read the learnin materials in Learn. Plan in advance where and when you will do this around your other academic/social/sport) commitments. It is not important when you do this, but leave enou h time to do so.
2. Ma e your own notes based on the content of the video and the text material.
3. Attempt the questions associated with each bloc of learnin material to self-assess your level of understandin .
4. Discuss this with your friends. Explainin somethin to someone is a very ood way to ensure you understand it.

In the timetabled slot:

1. As questions, discuss the problems with you fellow class mates and attempt the questions. You may want to initially attempt the questions on your own and then discuss your answer. You may need to occasionally quic ly refer to the notes. This is fine, but there will not be time to watch and read everythin for the first time.

After the timetabled slot:

1. You may need to o bac to the videos and clarify you thou hts and refine your notes. These notes will be invaluable for revision.
2. Attempt the questions a ain and if there are still points you do not understand ma e sure they are explained to you, either by your collea ues or the lecturer.

References

[1] Bloom, B., En lehart, M., Furst, E., Hill, W. & Krathwohl, D., *T xonomy of educ - ion l objec ives: The cl ssific ion of educ ion l go ls. H ndbook I: Cogni ive dom in*, Lon mans, Green and Co. Ltd. London, 1 56.

[2] Weaver G.C. & Sturtevant, H.G., *Design, Implemen ion, nd Ev lu ion of Flipped Form Gener l Chemis ry Course*, J. Chem. Educ., 2015, 2, pp. 1437-1448

[3] David R. Krathwohl, *A Revisr Asw.v'To.v'TT xonol:nogxImple-e-seTF.T.Td,.ToygxImpln o -T.-.T*