## 1C Classroom response with the students' own devices

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It is becoming the norm for students to arrive at class with at least one Internet connected device: a smart phone, laptop or tablet computer. In the 2013 "First Year Student Use of Technology Survey" (Honeychurch & McCluckie 2014), 90% of first year students at the University of Glasgow reported they had a smartphone and 97.4% reported they had a laptop computer. In the past, making use of electronic voting in class required the use of 'clicker' handsets, however with most students carrying a portable Internet device there is the potential for considerably richer interaction, without the inherent logistical and reliability problems of the clicker systems.

In this workshop we will introduce a new classroom response system, YACRS (Yet Another Classroom Response System), which has been developed at the University of Glasgow and is being piloted with classes in Computing Science and Medicine. Unlike 3rd party alternatives, YACRS has been designed to be both flexible, very easy for the teacher to make use of during class, which has been shown to be an important factor (Nielsen et al, 2013). The teacher controls the system using a small floating application on the presentation computer; students interact using the browser on their computer or mobile phone, or by SMS message if they only have an older phone available. We will describe how YACRS is being used to support flipped classroom teaching inspired by Eric Mazur both to increase engagement and to encourage attendance in a first year computing class. As YACRS is an in-house development, it has been possible to allow feedback from teachers to influence the development and this workshop will also allow attendees to provide feedback to the developer which will influence the next iteration of development, and to sign up for the next stage of this project.

## References

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