# Assignment One

## **Teaching Plan: Inclusion of ICT Resources**

by

Alan Hubbard

S326012

for

Dr Jon Mason

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#### Overview

Through this Plan, I will discuss and explore the methods I intend to use to enhance lessons, content, student engagement and the curriculum, through the use of Information and Communications Technology (ICT). Whilst this Plan does not specifically discuss an individual lesson plan or unit plan, it will utilise examples that may be modified or manipulated to suit a variety of classrooms. Furthermore, this Plan does not specify a class cohort, by year or subject, however, is predominantly to the secondary education curriculum teaching areas or Digital Technologies and Health and Physical Education.

#### **Teaching Philosophy**

My teaching philosophy is that students are individuals with individual needs and experiences that affect their interaction with others and their surroundings. These experiences are an important part of their journey to discovery of self-identity. Through deliberate interaction and relationship building, it is my desire to guide students on this journey and to allow their discovery of various tools to aid their appreciation of becoming a global citizen. Further, I will provide an environment that enables risk, to challenge thoughts and ideas, to better enable critical thinking and problem solving.

I aim to use my previous experiences, with an open mind and continuous appreciation of my opinions and practice, to facilitate the best outcomes for each student. I believe that continuous professional development is critical in discovering best practices for the variety of personalities, abilities and situations that students and the environment will present, in and out of the classroom.

#### **Open and Paid Resources**

I plan to use established and proven resources available online to enhance or enable students learning within digital technologies, such as Learn Python (n.d.) and Codecademy (n.d.). The specific program would need to be critically assessed for suitability but teaching and administrative staff to ensure its efficacy, however, some of these courses are being used in schools currently. These courses can provide progressive and regressive individualise approaches to learning progression, that further relieve burden from teachers to create multiple lesson plans for various groups of students or individuals within each classroom and lesson.

Grok Learning, (n.d.) in particular, has been used to provide content and context for coding within Digital Technologies. The framework provides all the learning content and quantifiable assessments to allow student development with this field. In addition, Grok Learning provides online tutors to aid in problem solving that can relieve the stress placed upon teachers that may not have subject matter expertise within Digital Technologies.

In an experiment by Tullis and Benjamin, (2011), it was found that students with control of the length of time studied achieved higher results than the control group that was directed the amount of time to study. This experiment also factored the time studied by each group to add control to the data, that is, to ensure that one group did not conduct significantly more study than another.

Further, self-paced learning through mobile learning integration shows significantly higher comprehension and retention of information when integrated with traditional learning models. The freedom of choice seems to be a significant factor within learning; whilst it has

long been applied to adult learning environments, adolescent and young learners are beginning to show evidence of the benefits for self-paced learning in the classrooms. Whilst it is not always practical or feasible to utilise mobile or digital learning, integrated in traditional classroom, when the opportunity presents, this method should be captured. (Wang, 2017)

However, in Wang, (2017), a single group of students did not fully accept the technology through mobile learning integration, therefore, did not yield similar results to the other groups. The non-acceptance of a learning model, whether new technology or a more traditional model, yields the expected outcome that learning will not be as effective compared when the learning method is accepted or preferred. This leads to the implication that teachers must adapt, not only their teaching style, but also the resources used to maximise student engagement and learning with the content.

## **Incorporating ICT in Health and Physical Education**

Within the Health and Physical Education discipline, an approach to including ICT is to use ICT tools to create projects and assessment products using ICT. For example, through a task of creating an individual fitness plan, students will be able develop their own plan. The project will also involve students conducting baseline testing to collect information on their own and other's performance.

The use of specialist equipment to measure metrics can be used, however, it is unlikely that schools, without other needs for this equipment, will have it available. Rather, simple and easily accessible technologies can be used to enable the collection and communication of information, such as smartphones and tablet devices. One point to note, regarding this is that

not all students will have smartphones as personal devices and may not have the proficiency required. In this case, students will need to be provided a replacement device and may need to be taught or coached through their use.

These devices can then be integrated into a variety of media, to present their project, such as through video, website, paper submission, et cetera. This style of assessment through projects does not only apply to the task of creating an individual fitness plan, as discussed. This can be used across almost any curriculum stream. For example, in Art, students can use smartphones or tablets to capture images of art and take videos of their reflections on the piece of work. Similar functions can be used to record science experiments.

### **Assessing ICT Uses**

Through one unit of work, within the Health and Physical Education specialty, students will be asked to assess the use of various media to gain an audience with a particular topic or message, relating to "Investigate and select strategies to promote health, safety and wellbeing (ACPPS073 - Scootle)". Through this content description, students will first identify and assess how media is used to affect our health and well-being. (Australian Curriculum, n.d.-b)

Further, this may redirect the students to also investigate the numerous fitness programs and mobile applications available on the internet that can be used to monitor and gauge progress. This may include commonly used applications, such as Stava, where you can send "kudos" or like someone's performance. This will also bring the psychology of social media into consideration and how it can be used to affect performance.

Students will then be directed to use one or more of these strategies to promote a health-related media message, to provide a positive influence on their school or community. Through this avenue, they will then be able to apply the knowledge they are attained, through self-guided discovery, to use effective methods to convey information using ICT. Again, students will be afforded the opportunity to identify the most appropriate medium. This selection will require a number of considerations, such as accessibility to the audience, but also their familiarity with the method or platform.

This strategy identifies a method to incorporate all five interrelated elements of ICT Capability, being applying social and ethical protocols and practices when using ICT, investigating with ICT, creating with ICT, communication with ICT and managing and operating ICT. This strategy can be imitated with other specialties and modified for primary school students to ensure the content remains within their abilities and the curriculum. The plan described above can be used at any teaching level then follow a natural progression of learning, dependent on the class cohort and their abilities. Further, it can be scaffolded to suit a variety of abilities within the same classroom. (Australian Curriculum, n.d.-a)

This plan has discussed a limited number of situations and methods available to be used for specific specialties, however the concepts can be applied across the curriculum. Further, these methods also incorporate General Capabilities of the Australian Curriculum, that enables cross-curriculum learning. My intent is to provide students a breadth of exposure to a variety of skills that will enable their participation within a globalised society.

It is important to discuss benefits and dis-benefits of ICT interfaces, and to develop uses that will benefit individuals and communities. It is also my intent that this method of learning engages ethical understanding and, through demonstration, methods that ensure that students use ICT in a socially acceptable and a responsible manner.

#### Conclusion

This plan identifies a finite number of resources and applications for the use of ICT within a setting where the resources traditionally suit its use and within those that do not. These resources can be used in other circumstances with suitable adjustments. Importantly, though, there are a near infinite resources available to teachers that seek them out, with more being produced every day. I intent to continue to expand my knowledge of various resources, particularly within the use of ICT, to benefit my teaching practice and therefore the students' learning and engagement with various contents. Further, as mentioned in Wang, (2017), it is critical that students apply ICT concepts within context, therefore increasing their engagement, as they perceive relevance to their own environment or situation.

#### References

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