

Some Things Stay the Same

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If we were to look at curriculum as the “product” in an educational enterprise, then the timetable represents the “delivery” of that product. So, the development of a timetable in any educational institution is of critical importance and it is no surprise then, that the development of a timetable has also been affected by the events of the last two years.

Timetabling

Timetabling in a normal year is a complex undertaking, but it is far more difficult in times of change and pressure. The construction of a timetable in a school setting means organizing a range of limited resources, these are students, teachers, time and spaces. Quite some time before COVID-19, I was responsible for the development of a timetable for an amalgamating school. Throughout the 1990's in Victoria, there was a widespread move to amalgamate smaller schools in response to demographic changes across the state. This affected Government and Catholic schools which were effectively part of a “system” and so I became Deputy Principal for Curriculum in school that was amalgamating three smaller school into a three campus, 1500 student operation within a six-month period in 1996. There was a neat synergy between the three, with one school having a surplus of space and some good technical facilities, a second school had high numbers and was desperately short of space while the third, one kilometre away had built up a cash surplus. In project management terms, the project had been initiated by the “system” authorities with a deadline set for February 2nd.

Project Management

In the waterfall model of project management, several successive steps, one depending on the other, were necessary before the timetable could be developed. First curriculum leaders needed to be appointed for all areas to manage the process. This was time-consuming, but not as time consuming as merging the three separated curriculums into one comprehensive program. The newly appointed curriculum leaders along with myself, had to work through all the issues raised, some moving more quickly than others. Staff were wedded to their previous practice but part of the brief for the new entity was to provide increased opportunity for all students. On the one hand, while arguments raged about what novels were suitable for girls, a quick decision was made that boys would study Fabric (what used to be called Sewing) while girls would study Woodwork. This decision now created the need for a shuttlebus and the transport of students throughout the day from one campus to another. This is just one example of a multitude of decisions that had to be made before a timetable could be constructed and, in effect, each of these decisions created many micro-projects that needed to be resolved along the way before. Each independent choice impacted on resources and personnel, and so during planning, while what might have been a possible allocation of resources in one week, would be rendered impossible by another decision. So it became clear that all decisions, that is all the data, needed to be in place before the timetable could be executed.

The three smaller schools did not formally conclude operations until the end of the school year in December. There were formalities surrounding the closures and farewelling of staff. These were sensitive personnel matters and needed to be allowed to proceed affording the individuals respect for their contributions. So, while planning decisions had been made, no work on the actual timetable could take place. This was followed by the Christmas-New Year

break and pre-planned holidays. The Daily Organiser (DO) who was working on the timetable with me arrived back January 16, giving us two weeks to have everything ready. Like many projects, this amalgamation had critics, with people waiting for chaos to ensue. A great deal of prestige for the new entity, and personal integrity rested on its completion. A sentence from the movie Apollo 13 was often quoted, "Failure is not an option". Needless to say, there was a great deal of pressure.

Timetabling tool

The tool we were using was a sophisticated timetabling program developed locally. The first step was data entry which was an exacting process in itself. All the restrictions such as part time staff, and specialist room usage have to be entered first, followed by staff names and their teaching areas and then class sizes and student names and subjects. In future years, most of the data would rollover, but the initial phase meant entering everything. This took a week, leaving one week to complete the task. Even the most sophisticated software can only complete 90% of a timetable. Every school is different, and a drama or music class cannot be scheduled in a room beside a silent reading English class. Certain leadership staff need to have Period 1 free each day to attend to student needs and indeed the list goes on. The program is run, and a draft timetable is produced along with a table of resources, staff and or student allocation clashes that cannot be resolved.

Projects occur within a human environment, and these have impacts. By the last week of a stifling January, the DO and I were working 18 to 20-hour days and getting a few hours' sleep in the staff room. The DO's wife was 8 months pregnant and moved into the sick bay at the school to be near him and in case the baby would not wait. Meanwhile work continued. The process was one of iteration. Fixing one or two problems at a time and re-running the program making sure the changes did not cause any more issues. This was a method of controlling and monitoring progress through the project. As each problem was revealed, it took time to think it through, canvas possible solutions, input the desired response and run the program again. Perhaps not unexpectedly, as we got closer to the end, each remaining problem became much more complicated, difficult and time-consuming to resolve. The night of February 1 into February 2 was very warm and muggy. We sat outside the school reception building, while the DO's wife brought coffee to us. At about 3am a police car pulled up and two officers walked in and asked us what we were doing. The DO, unmoved, said "Having a smoke." I intervened to explain the situation, when the DO's wife appeared. Taken aback momentarily she then asked if they wanted a coffee. This was not something these officers came across every day, but they decided our situation was too bizarre to be made up and left.

At around 5am we finished and began printing the individual timetables and class lists. At 6.45am, this paperwork was taken to the various administration offices where the secretaries who began at 7.30 would distribute them. At 8.45 on February second the new school commenced with a functioning timetable.

New and different set of challenges

Jump to February 2020. I am managing 8 schools delivering VCE across China. The international staff have left for the Lunar New Year holiday, travelling home to countries which include Trinidad and Tobago, Poland, the Ukraine, New Zealand and some to visit relatives in Japan. Meanwhile, in China, where millions are travelling domestically, COVID is spreading rapidly and lockdowns are being instituted, first in Wuhan and then to various other cities. Elsewhere (O'Connor 2022) I have described the pivot to online learning that took place in this scenario. The delivery of resources - that is the timetabling - took on a completely different set of challenges. The normal class setting of teacher and students in a room disappeared. The

students were all at home in China in what turned out to be an extended lockdown, while teachers were stranded in various countries across the planet. With the decision to go to online learning, there had to be a new approach to timetabling. School resumed in the last week of February and a structure had to be in place for classes to start. The immovable factor was over 500 students in China, while the other constant was the mobile phone, with all students owning one. So that screen would in effect become the learning portal. For each day we needed to provide six hours of online teaching. By examining the different time zones and negotiating with teachers, a class schedule was set up, with some teachers working at 4am in their local time. However, it was not physically possible to provide constant “in person” online learning so some sessions were recorded and slotted in during the day. In addition, in Melbourne, a series of online classes was recorded to be used when the inevitable illness or problem occurred in any of the locations where teachers were based. The results meant school commenced but it was a taxing time for all concerned.

Innovative solutions to problems encountered

The COVID-19 pandemic has produced some innovative solutions to problems. The essentials of secondary school timetabling remain the same; putting students into a space where a teacher can communicate with them. There have been major changes to the concept of teaching. First has been the concept of asynchronous classes, where recorded lessons are used at a part of the daily schedule but are also available “out of hours”, so the notion of when school happens is more fluid. The second is the removal of the need to be in one physical space. The electronic classroom has become a viable option and the location of teachers and students is in some ways secondary, as long as there is an internet connection there is teaching. While the basics of timetabling have not changed, the parameters have expanded, reinventing schooling and in doing so creating far greater demands on the lonely timetable.



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