

The idea of a 'Knowledge Rich Curriculum' was first shared with the staff at CPS in the autumn term of 2016. It had been a challenging time for the school: we were in the second year of a rapid improvement drive following a bruising RI inspection judgement in 2015 and had spent the last term focussing on standardising delivery across the school. This had been very successful: consistency was improving, the quality of work in the children's book was better than it had ever been and teachers had a much clearer picture about what we wanted teaching to look like. However, it became apparent that, whilst the teaching was better, the curriculum we had mapped out was not fit for purpose. James, our Headteacher, was clear about the need to focus heavily on content and particularly the key knowledge we wanted to impart to the children before they left CPS at the end of KS2. This was shared, initially with SLT and then with the staff in a PD early in the autumn term. The idea of focussing on knowledge seemed radical at the time; as a school we'd largely worked thematically, often teaching generic skills to the children. However, despite some reservations from the SLT about how the message would be received, the majority of staff were quickly on board, galvanised by the idea of rewriting and reimagining our curriculum.

It was clear from the beginning that this was going to be about a lot more than just re writing the long term plan; it was going to be a process that took terms rather than weeks and would need to encompass everything we did at the school. However, we needed to begin somewhere, and mapping out the children's entitlement and the knowledge we wanted them to secure seemed an obvious starting place.

Clear about the vision and what we wanted to achieve, I set about writing my first knowledge organiser for our Year 2 Topic 'The Great Fire of London'. Today, if you Google 'knowledge organisers' you are hit with a plethora of results. Schools, whether or not they are following a KRC, are seemingly placing increasing value on laying out the content that children are to learn before they teach it. Back in 2016 the same google search yielded paltry results and so, other than a couple of knowledge organisers from a London secondary, I was on my own.

This initial Knowledge organiser was 3 pages long, contained the name of every person associated with the Great Fire, key facts and figures (how many died, the percentage of London destroyed, how many houses, how many shops etc.), a timeline with an hour by hour description of the fire, a list of key vocabulary and series of bullet pointed facts about why the fire spread and how London responded. Armed with the Knowledge organiser we set about beginning to teach the unit with plenty of practice of the key facts and figures and names of the key characters involved.

It became quickly apparent that the children were thriving on their new found knowledge; their recall was impressive and the levels of engagement were greater than they had ever been across all three Year 2 classes. It also became apparent that the amount of knowledge we were asking them to retain was just too much and some of it was just not that relevant to what we were trying to achieve in the unit. So we learnt from our mistakes when creating the next set of Knowledge organisers, sharing our experience with other colleagues who then went on to write their own.

The use of Knowledge organisers across the school has evolved hugely since these early attempts. As we grew to understand that the Knowledge Rich curriculum was about so much more than producing a knowledge organiser, the planning process and our delivery methods went through a radical overhaul to ensure that we were delivering a phenomenal curriculum to our children. The knowledge organisers still sit centrally within our planning process but the thought behind them, their intentionality and discussions which sit alongside their creation is a long way from those early attempts where we aimed for the children to learn a large number of 'facts'. This evolution has largely resulted from a series of questions we have had to ask ourselves along the way.

How much knowledge?

Our initial attempts at creating and teaching the content of our knowledge organisers often led to cognitive overload for some children. We need to have high aspirations for what all of our children will achieve but also be realistic about what they will retain. For true learning to occur the children need to have retained the knowledge, linked it to other knowledge they have and then applied it. Asking them to do this with 30 or 40 pieces of knowledge is simply unrealistic. We work on a basis of 12-15 key pieces of 'powerful' knowledge which can be linked to provide the children with a clear schema for this unit.

What knowledge should we choose?

This is the key question and the part of unit planning that warrants the biggest discussion. This process was missing in the creation of our early knowledge organisers; it is very easy to just pick the knowledge you think is interesting to the children or to follow a formulaic pattern of choosing key figures, key numbers key dates. Each piece of knowledge chosen needs to be there for a reason; it needs to play a key role in deepening the children's understanding of the concepts being taught. For every piece of knowledge chosen, we need to be questioning- Why is this here? How will the children use it in their knowledge schemata? How will it be linked to other knowledge in the unit?

Knowledge needs to be useful or we risk creating a 'pub quiz' curriculum where children simply recite facts. For example, when teaching KS1 children about the features of the UK, whilst the name and location of its highest peak may be useful, getting children to learn the exact height may be less so. This is particularly the case with facts, figures and dates. Dates are important - they support children's chronological understanding and allow them to draw links between events within a period of history - however, an expectation that children will learn and recite a series of dates won't lead to an understanding of their importance; a child who knows that Magna Carta was signed in 1215 doesn't necessarily understand the reasoning behind its signing or the impact it had on the political future of the UK. The important knowledge here, is not the when but the what and why- what was it, why was it signed?

How does the Knowledge organiser sit alongside planning?

The linking of knowledge organisers to planning is vital. As mentioned above, the planning process at CPS has undergone a radical overhaul. We plan as a team and we plan from scratch. We map out the unit in advance and then week by week add in the detail. When we planned initially we began by identifying the knowledge and then producing the knowledge organiser. This process has reversed itself recently after we found that the plans would often become full of 'silos' of discrete knowledge, with one or two pieces of knowledge being taught in each session and links not being drawn between sessions or between different units.

We now begin at the end - by the end of this unit, what key questions will we want the children to be able to answer? The knowledge comes next, as in order to answer these questions, what key knowledge do they need? What vocabulary will they need to be exposed to? It is at this point that we begin the creation of the knowledge organiser, mapping out the important knowledge. Finally, what are the steps the children need to go through to reach our end point? How will the knowledge be sequenced and how will each piece of knowledge link to the next? We aim to limit the new knowledge in each session with children drawing upon what they have learnt so far and linking in the new knowledge. It is not until this is mapped out that we can begin thinking about how the knowledge will be imparted and what the outcomes of this knowledge will be. This is an ever evolving process: as our understanding of how the children learn and how quickly they make links is

increasing, our planning and teaching methods are developing: we've come a long way but there is still a lot to learn!

How do we ensure the knowledge is retained?

We expect a lot of our children at CPS. We aim for all children to retain all of the knowledge we place on a knowledge organiser and be able to apply it by the end of a unit. Delivery of this aspiration has necessitated a change in our teaching methods and these changes have largely been the result of reading around cognitive psychology. We use the work of Doug Lemov with techniques such as 'Cold Calling' and 'Targeted Questioning' to ensure that we know what the children have understood; we expect children to frame their answers but primarily we include a large amount of retrieval practice. Children are exposed to weekly quizzes, recalling what they have learnt in low stakes quizzes. Increasingly we use multiple choice, making careful choices so that common errors are included as possible answers. We revisit previous content before moving on to new, building the knowledge bit by bit. This retrieval practice and its regular spacing has proved vital. Where children have retained the best they have been exposed to the knowledge over and over again and, importantly across the course of a number of weeks. The retention of knowledge has been best when children have been taught the content across a term rather than in a blocked or 'periodised' unit. Another tactic which has proved vital has been the provision of scaffolds (particularly the use of visual images), which allows the children to pin their knowledge to a particular image or set of initial letter clues. Again, we're still learning; the retention is certainly improving, and our children are beginning to draw upon knowledge learnt in previous years to make links however, groups of children still struggle to retain and apply and this is our next challenge.

Knowledge organisers play a key role in a knowledge rich curriculum: they map out the key knowledge we want the children to know, provide a facility to communicate our intended learning to parents and they also provide an excellent source of professional development for teachers. The creation of the knowledge organisers is a collaborative process; staff are expected to go away and read about a subject before contributing to discussions about which knowledge is going to be used ensuring that all team members have the requisite subject knowledge for the subject they are about to teach. However, the curriculum is about far more than the knowledge organiser: the discussions that sit behind the careful choice of knowledge, the planning that is formulated as a result of the chosen knowledge and the methods of delivery which sit within these plans are vital in ensuring that the children are able to succeed and progress. These conversations will need to continue to happen long after the knowledge organisers have been produced.