**Paper for post-Covid19 SEDA Educational Developments Special issue**

**Changing assessment for good: a major opportunity for educational developers**

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**Introduction**

For decades, many have argued for a radical restructuring of assessment in Higher Education to integrate assessment more fully into the learning process as Assessment for Learning (Sambell et al 2013) thereby ensuring it is more fit-for-purpose and beneficial to students. In particular, the prevalence of traditional unseen, time-constrained invigilated on-site exams has long been critiqued for its lack of authenticity and relevance to students’ future lives, the challenges it presents to inclusivity and the deleterious impact on students’ approaches to learning (Brown and Knight, 1994, Sambell et al, 1997, Gibbs and Simpson, 2005).

In the Spring of 2020, a dramatic hiatus in university and college assessment occurred globally, caused by the closing of campuses due to the Coronavirus-19 pandemic which triggered dramatic changes since students could not attend on site, and to maintain some level of continuity for students and their qualifications, at very great speed major changes were made to managing assessment processes remotely. This provided a prime opportunity for educational developers generally, and scholars of assessment in particular, to make interventions that could potentially change HE assessment for good. In this paper, using our sound backgrounds in assessment research over three decades, we argue that there are few educationally valid reasons for reverting to many of our traditional assessment routines, especially unseen exams. Indeed, many positive features of the alternatives put into practice during the recent online switch could make lasting and helpful changes to future systems and processes.

When the major interruption to routine assessment custom and practice occurred, we witnessed large-scale rapid change happening in four phases, which our papers sought to respond to:

1. **Phase one**: emergency planning when exams can’t be run (Sambell and Brown, March 2020) focused on what we as educational developers and assessment scholars could do immediately to put into place arrangements to conduct this academic year’s assessment where we needed to replace all campus-based assessment with something university systems and students can manage. For many HEIs this phase involved major upheaval and the rapid instigation of emergency protocols and change management processes, which proved especially problematic where there was a prevalence of outmoded and inflexible traditional assessment methods such as the unseen, time-constrained invigilated on-site exam.
2. **Phase two**: how can we switch to other formats immediately? (Sambell and Brown, April 2020) focused on what kinds of replacements could educational developers advise Higher Education Institutions (HEIs) offer to face-to-face exams (for example, open-book exams)?
3. **Phase three**: workable alternatives to exams (Sambell and Brown, June 2020) explored the changing pedagogic landscape when there was a slightly longer lead in to make changes for those who did not wish to (or could not) do a straight replacement for traditional exams, at a point in the new academic year where campus access was still likely to be patchy. It considered what alternative forms of assignment could be put into place, which are likely also to have benefits for learners?
4. **Our fourth phase** of thinking over the summer of 2020, making changes for good, has considered how, having managed the emergency processes with appropriate contingencies in this most unusual year, those of us who wish to radically change assessment in higher education can build on the best aspects of the change processes that have already occurred, to ensure that systems, methods and processes are ultimately improved long term. Can assessment thereby be redesigned to become more future-focused administratively and, more importantly, philosophically in design, rather than returning to business-as-usual conservatism?

Over this period, positive feedback on our work has encouraged us to develop further our argument that higher education practitioners must never slip back into old ways of traditional exams being seen as a default option for assessment in universities and colleges: many have discovered that there are educationally better ways of (re)designing assessment and we must build on this to make assessment better serve student needs, moving inexorably towards that radical rethinking that many of us have sought for years (Brown and Knight, 1994 and Sambell et al, 2013, *op cit*, Bloxham and Boyd, 2007, Boud and Associates 2010). This is clearly the move away from Assessment just *of* pastLearning to Assessment *for* learning that we have been advocating for years. It’s high time to rethink assessment and feedback processes so they more seamlessly integrate with learning and teaching rather than tacked on as an afterthought, and hence better able to support sustainable learning for the longer term (Boud, 2000).

**Why move away from traditional exams?**

Exams have been the prime locus of anxiety during the crisis months, and the site of most immediate change substantially because this was where urgent action was most needed. We now have an opportunity to trigger a major rethink about how assessment can really work in students’ favour. For us, traditional exam formats should never again be adopted as a dominant approach. Our critique of what we see as deeply inauthentic traditional examinations, centres around issues including:

* The time/place/duration constraints carry **high risks** if for some reason (university closure / students’ own issues etc.) prevent the traditional exam being taken, and 2020 has made us much more sensitive to the dangers of business continuity interruption, for which we need to plan flexibly for mitigations. At the time of writing, the debacle in the UK associated with crucial outcomes of public exams being based on flawed algorithms is causing many to question the value of exams as a means of evaluating student knowledge, capability and potential.
* It is almost unknown in post-education contexts for graduates to have to performatively write for 2-3 hours under pressure, this form of assessment **lacks relevance** to their future lives. Some argue that it is good practice for their later lives for students to demonstrate that they can work under pressure, but this is rarely in any meaningful way a valid representation of what work or life challenges actually require.
* The **range of activities** that students can be asked to do in a traditional written exam is very limited, since they usually require writing with a pen rather than a keyboard individually in silence, with no reference to the web or other resources. In employment and wider contexts, most will have internet access and a keyboard to work on, as well as the expectation that they will work as team members, often in interdisciplinary settings.
* Because (in the UK at least), traditional unseen exams rarely perform a rich **feedback** function, the process of sitting an exam fails to develop students’ sense of their strengths and areas for development (Nicol, 2019).
* Traditional exams often unintentionally encourage short-term performance goals and ‘cramming’ rather than long term learning goals (Sambell and McDowell, 1998). In the Covid-19 crisis, notwithstanding the many and serious disruptions to learning, for many students, the change of focus to more **authentic approaches** has been hugely beneficial.
* There is a golden opportunity to tackle **over-assessment** and generate instead **integrative tasks** which span modules rather than atomise assessment, as end-of-module exams are prone to do. Relevant here is the work from Bradford University on Programme Focused assessment (Hartley and Whitfield, 2011). In the next section, we map in more detail what the four phases involved in our transformative vision for educational developers and assessment experts to influence higher education permanently.

**Phase one**

As the emergent Covid-19 situation developed, university leaders realised that they needed to make changes to the delivery of the summer 2020 diet of assessments in the light of closed access to campuses. At this point educational developers, learning technologists, quality assurance staff and managers, pedagogic experts and many others were called upon to work together to undertake emergency firefighting. In our first paper we proposed **five basic strategies** that might be adopted in times of crisis:

1. That HEIs defer or re-schedule deadlines for submission of course work and different schedules for giving feedback on submitted work: this had benefits in terms of being reasonably manageable, but had potential knock-on effects for staff marking work and the requirement to reschedule assessment and exam boards.
2. That programme teams assess only what has been taught *before* campus-based restrictions. This recognised that in the immediate aftermath of closures, prior to implementation of alternative off-site teaching arrangements, it could be viable to concentrate on aspects of the programme already covered by the time of shutdown. This evidently had the merits of simplicity and could work well for continuing students who could catch up with unassessed learning outcomes during the remainder of their programme, but had implications where professional bodies mandated particular elements of assessment at particular levels.
3. That they waive further assessment (as was undertaken with UK secondary school public examinations) and simply average marks on work already submitted: again this had the benefits of simplicity but was rarely considered appropriate for final year students who need to demonstrate achievement of all learning outcomes to successfully graduate.
4. That they change the mode of submission by moving over to electronically submitted means, ideally through established university e-submission systems but also, in the final resort, via email to a named contact. This could be reasonably straight forward in text-based (including mathematical and science) disciplines, but less so where assessment of practice or artefacts was involved.
5. That they offer alternative assessment formats: at first, most HEIs concentrated on offering some reasonable adjustments, which could offer students some manageable alternatives in challenging times. This area proved the most productive in terms of creative approaches to assessment and may ultimately have the greatest long-term impact on post-compulsory assessment, since having made changes from traditional assessments in the first place, the logic of continuing these after the Covid-19 crisis seems unarguable, particularly where the replacements could prove to be more authentic and fit for purpose.

**Phase Two**

In phase two-the educational development community was often specifically asked to help with the switch from exams to other formats. At this point SEDA, National Teaching Fellows and Principal Fellows networks, alongside the #lthechat Tweetchat community and others rallied to crowd-source and share quick-fire solutions to the current immediate problems. In terms of assessment, we drew upon all of these to next explore in Paper 2 **replacements for traditional exams**, (Sambell and Brown, 2020b). At this point many HEIs adopted **‘open book’** or virtual formats which in many cases comprised **‘take-away exam papers’** (in which students might be given a week or more as a ‘window’ in which to complete and submit the unseen exam questions or tasks) or **‘online exams taken remotely’** (where students undertake the unseen exam on a specific day with a more stringent set time limit -perhaps five hours-within which the set questions have to be undertaken and submitted).

In exploring these approaches, our thinking was principally concerned about how to strike a better balance in new alternative provision between the diverse purposes assessment must simultaneously fulfil based on pedagogically sound, and evidence-informed approaches. These purposes include judging outputs, seeking to maintain reliability, validity and consistency, while maintaining the integrity of the assessment process, and supporting student learning. It was also essential to ensure that all stakeholders (students, assessors, quality assurance colleagues, management, employers, placement providers, PSRBs and others) recognised the challenges that this would present and worked to mitigate the difficulties faced by students and others in compassionate ways. With everyone working beyond their normal comfort zones, issues of manageability, fairness, justice and inclusivity hove particularly into the fore. Clear and sensible planning was paramount for such replacements, taking account of quality assurance requirements to ensure the integrity of any awards offered and maintained consistency of standards, which would require additional substantial efforts to achieve with markers working remotely, making moderation and comparison of marking outcomes even more difficult than normal since informal conversations and moderating meetings were harder to manage.

Alongside this was the recognition that students and staff alike were working in highly unusual circumstances, often with sub-optimal IT equipment and connection capabilities at home, competing demands on time where caring and home schooling duties often made it difficult to concentrate, and when isolation from peer groups impacted on morale and the potential for support, not to mention the emotional pressures exerted by the dangerous and worrying situation. At this point, sometimes marginalised staff such as learning developers, writing development teams and inclusivity officers found their services much in demand and called centre stage to help cope with an emergency situation, in ways that may well pay dividends for their roles longer term.

**Phase Three**

Here, we drew on notions that out of crisis can come opportunities for reflection and positive change. This for educational developers provided a lever to enact the changes we had long sought in order to tip the balance towards more learning-oriented assessment and feedback designs. In particular, the situation offered an opportunity to help make assessment more fit-for-purpose and authentic, a term which deserves some further unpacking.

Assessment which makes a difference to learners and has integral value in itself can change the orientation of learners when approaching assessment significantly. For some this means an exclusive or predominant focus on employability: Villarroel *et al* (2019) argue:

“Authenticity has been identified as a key characteristic of assessment design which promotes learning. Authentic assessment aims to replicate the tasks and performance standards typically found in the world of work and has been found to have a positive impact on student learning, solve problems skills, autonomy, motivation, self-regulation and metacognition, abilities highly related with employability.”

But for us, authenticity implies much more than this. If they are to become agents for change in their own lives and beyond students need assessment which involves cognitive challenge, development of metacognitive capabilities, shaping of identity, building of confidence and supports a growth towards active citizenship. Hence, we are keen to develop and value assessment practices which are transformative, and which stimulate student engagement, both now and in the longer term.

“This entails redesigning assessment practices to foster individual engagement in learning activities and subject matter, but also involves the development of assessment practices whereby students learn via participation and the development of identity (Sambell, Brown and Race, 2019)

Our table of alternative approaches in our third paper on how to move forward into positive and proactive planning for change in the medium term (Sambell and Brown, 2020 c) has been frequently downloaded and widely discussed among the educational development community, who have contributed further suggestions to our emergent thinking in broader landscapes in the UK and beyond. For example, the collaborative project between Hong Kong Baptist University (HKBU) and Education University Hong Kong (EdUHK) “Towards a paradigm shift for a new model of alternative assessment” draws substantially and builds on our work.

As the frailties of the extant system have emerged and been recognised, a recognition of the **imperative for a thorough reconfiguration of assessment long-term** has spread across the sector, with many senior managers as well as academics and educational developers convinced that simply going back, post-crisis, to old ways of assessing is simply not tenable, both in terms of managing the risk of any future situation of this kind interrupting the business of assessment, and in terms of an acknowledgment that there are better ways to develop and evaluate the knowledge, skills and capabilities of students than the old ways of doing things. In this changing landscape it became important not just to do things right, but also to do the right things, that is to make assessment of student learning a positive and productive process in itself which adds value to the student experience and has inherent authentic value.

Rather than simply reverting to old-style traditional exams as the default methodology, it seems unarguable that they should be used much more rarely and only when a strong case could be made for their inclusion in a more balanced diet of assignments. It had become apparent through the process of contingency planning, that the **design of questions** (and the language used in them) in any form of assessment had become more important, with a greater focus on the *usage* rather than the mere recollection of information to future-proof assessment for times when close in-person invigilation might not be possible. In every case, where assessment was to achieve its purposes, it had become necessary to scrutinise and interrogate learning outcomes to check that the questions aligned constructively (Biggs and Tang) with the assessment methods and approaches that claimed to test them, promoting thereby more explaining, reasoning, applying and arguing, and less describing and memorising.

Such changes may, in future, involve a variety of useful technologies to support change, such as the much-debated use for example of remote proctoring or the provision of virtual reality contexts, where live practical settings are not possible, but principally the changes that need to be made are about rethinking the underpinning values of assessment, to make it work in the service of learning, using the expertise of educational developers and assessment experts to avoid quick fixes and flashy formats.

**Formats** also have had to become more flexible, so that these could be readily adapted for use in different scenarios, i.e. face-to-face on site, remotely managed or virtually. Greater use could, then, be made of **asynchronous** assessments, since these are less susceptible to crisis contexts, and can cope better with students accessing exams in different time zones. Indeed, the rationale for and viability of holding time-constrained synchronous exams has come into question, with concomitant rethinking required, to make the issue of students having access to the questions taken by peers in other parts of the globe become less relevant, if the content is less the focus of the test than the ability of students to reflect on practice, to apply information in diverse contexts and to make sense of what they’ve learned.

**Phase Four**

Our fourth phase moves into longer-term more radical and aspirational thinking, which is less about managing damaged administrative processes in a time of crisis and more about having a clear vison of what assessment can and should be like. Four decades of research and innumerable funded and unfunded projects, (e.g. Centres for Excellence in Teaching and Learning, National Teaching Fellowship funded awards, Higher Education Academy projects, SEDA small Grants and institutional projects of all kinds) exploring how to improve assessment suggest that it should be unthinkable for assessment not to be focused centrally on improving student learning. In particular we champion the value of developmental formal and informal feedback designs that enable students both to perceive where their work doesn’t match up to standards required, but also to understand what they would have to do to improve future performances in this and related domains, and to develop vital self-regulatory capabilities. So it is unthinkable that assessment activities of any kind would not contain supportive and developmental guidance of this kind. In the UK at least and in many other nations, feedback on unseen time-constrained exams is normally only available on request if there are issues around why particular marks were awarded, and in most cases this comprises primarily a justification of the mark given rather than fulfilling any supportive ‘feed-forward’ function (Reimann et al, 2019). In the twenty-first century, this approach no longer seems educationally viable or sensible.

When choosing assessments in the future it will be necessary to weigh-up the pros and cons of each format, and to select methods and approaches that genuinely deliver optimal ways to enable students to demonstrate what they can do, rather than what they can’t, in a single, one-off sudden death occasion, as is the case with unseen on-site tests. In the next section we propose some radical revisions to traditional assessment processes and practices to make assessment more future-fit.

**Ensuring business continuity/mitigating future risks**

For the foreseeable future, it makes no sense to revert to time-constrained invigilated exams, with all the risks involved in methodologies that lack flexibility in terms of timing, location and format. Our future assessment diets must inevitably therefore be adaptable, ideally offering an element of choice for students around the media and means by which they satisfy the expectation to demonstrate the required learning outcomes for each accredited programme. Requiring synchronous sitting of exams merely as a means of making until-then unrevealed questions secure, doesn’t have huge pedagogic merits, so we need instead to rethink what exactly it is we require students to do to pass.

For many years we have argued for lesser reliance on memory and recall of facts, and greater expectations of students in terms of usage of information from diverse sources which in turn leads to a requirement for less-risky assessment formats. These will also have the benefit of requiring fewer reasonable adjustments needing to be made for students with special circumstances, for example, for those who have chronic fatigue syndrome and therefore need additional time to complete their papers, with inclusive approaches inbuilt from the outset.

In preparing for increasingly unknowable and unpredictable future worlds, we advocate what is needed are authentic, life-relevant tasks therefore that foster self-regulation and place as much emphasis on process as on outcome. These might usefully require students, for example, to:

* Interpret complex and sometimes incomplete or conflicting data, compiling a summary that is meaningful both for experts and laypersons, leading to a viable action plan.
* Review data from a variety of self-sought published materials, informal media and other sources, and produce an executive summary for a specific audience.
* Set up specialised equipment appropriately and draw up a ‘quick guide’ for peers that would enable them to use it safely and appropriately.
* Articulate the central aspects of a problem, perhaps presented in a case study, and offer a variety of reasoned solutions.
* Argue for a particular solution based on a range of complex contextual factors, together with a reasoned rationale for this choice.
* Evaluate three proposed solutions to a problem and propose a further two of your own, with suggestions about what might work best.
* Compile contingency plans for a professional environment for disaster recovery in case of a serious emergency, leading to mitigations and remediation.
* Prioritise action to be taken in a busy work context where all tasks appear equally urgent.
* In a given context, draw up an action plan with milestones of achievement and measurable indicators of success.
* Research and reference an area of innovation, and draw conclusions from your sources of information for the success or failure of the initiative.
* Offer synopses of multiple and diverse sources including text, image and data which can explain a particular phenomenon discussed within a programme.
* Critique three perspectives on or readings of a text, choosing one that is most convincing to you and giving your reasons for this choice.
* Provide a rationale for a course of action taken in a professional setting, illustrating this with appropriate, relevant and current publications.

All of these tasks would require students to source and evaluate reference material, which they would need to list and formulate appropriately for the context. These tasks could be undertaken under time constraints in specific locations, but could be provided flexibly should circumstances require this.

**Rethinking assessment with a future-focus**

Every assessment activity we ask students to undertake in a post-pandemic context should clearly contribute to the student learning journey, by enabling them to develop as well as demonstrate skills and capabilities as well as knowledge. We know students take assignments more seriously, and undertake them more thoroughly if they can see them to be meaningful and potentially useful so we should design them to:

* Engage and stretch students’ capabilities so they find the work challenging but satisfying, with outcomes that require them to contribute from their inner resources and individual thinking, rather than just using what they’ve learned in class;
* Be demonstrably relevant to 21st century contexts, making use of technologies, data bases, information sources and other evidence that enable them to make research-based decisions relevant to the personal, professional, work or civic society environment;
* Foster integration of learning from different elements of their programmes of study so that theory and practice mutually inform one another leading to holistic approaches;
* Reflect on their learning within and beyond their university studies, fostering life-long learning which builds on asking not just ‘how?’ and ‘what?’, but also ‘why?’ ‘so what?’ and ‘then what?’ or ‘how else?’, so they consider rationales, implications and next steps;
* Provide secure contexts, where students can trust the judgments of assessors to be fair, valid and reliable, with different assessors working to the same standards;
* Take account of common student behaviours and therefore have **clear notional workloads** (e.g. if 24 hours are allowed in total, a guidance note could indicate that students are expected to spend no more than three on the task) to avoid unrealistic and unhealthy self-expectations and also to provide **prescribed indicative word counts** (otherwise the workload for the markers is likely to be unmanageable).
* Rethink feedback processes radically to empower students to learn to self regulate (Nicol, 2019, Sambell and Graham, 2020)
* Avoid over-assessment, which drives students towards surface approaches to learning and elevates the pressure to pass above learning for the longer term.

**Foregrounding the needs of students rather than the institution**

In the past, assessment practices have largely been designed to align with institutional systems and ways of working, rather than the learning needs of students. We have certainly heard of assessors in the past being told, for example, that:

* they had to use a traditional exam format because the external examination halls had been booked and paid for, or
* they couldn’t provide assessment activities outside the two weeks allowed at the end of the semester for exams because that is what students had been told would happen, or
* they couldn’t use in-tray activities using hard-copy documents because the copying expenses of many pages of examination stationery would be too expensive, or
* exams would have to be sat on Friday afternoons/Saturday mornings/Holy days/ late in the day during fasting periods, notwithstanding the large proportions of devout students for whom this would provide genuine conflicts between their beliefs and university requirements; or
* students with any notified special needs would have a single mitigation solution comprising more time to complete the task, even in the case of students with debilitating and painful diseases like arthritis where remaining seated for long periods is likely to make matters worse.

None of these rationales contains any demonstrable pedagogic benefits for students, so while we recognise that organisations have to provide assessments in manageable ways, we argue that it is important to have better reasons for directing assessment designers’ choices than mere institutional convenience.

All this argues for assessment strategies that are more flexible and responsive than they have been formerly. This might include, for example,

* Moving away from always requiring pen and paper examinations, instead allowing usage of laptops, in ways addressing to fears around security, since many IT solutions exist nowadays to ‘lock down’ kit, only ‘whitelisting’ access to particular software packages or data bases;
* Providing choice for students to undertake their summative assignments when they feel ready rather than on single set dates, allowing students to work through programmes at their own pace;
* Fostering a sense of belonging among students, which encourages cooperative rather than competitive behaviours and builds a community of learners that in some ways mirrors the ways in which they will be working and learning after graduation;
* Encouraging professional responsibility and integrity, rather than continuously monitoring performance which assumes all students are keen to cheat and plagiarise; and, above all,
* Developing assessment and feedback approaches that are transformative, (Sambell and Graham, 2020; Serbati et al 2019) that is, leading to changes in behaviour and attitudes of students as they move from student to graduate status and grow in status towards professionalism.

**Conclusions**

Is our proposed vision of post-Covid19 assessment utopian? Perhaps, but it is certainly the case that assessment cannot continue just as it has done in the past. Is it achievable? Assessment scholars certainly can demonstrate that all the elements we propose here can be found in various university systems around the world, and what we argue for is an approach that brings the best global practices together. Will it happen overnight? No, but we have seen substantial changes in the months since the onset of the crisis of a kind that for years we had been firmly told were not possible. If we don’t build on these in the future, we betray not only the trust of our students but also the endeavours of hard-pressed staff who have worked around the clock to make assessments in this year happen for students who otherwise would not have progressed and graduated. The stakes are high, but the risks of not making radical changes are profound. We have to make assessment in this new era truly represent what research (and our hearts) tells us genuinely works!

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**(All three of the above can be found at** https://sally-brown.net/kay-sambell-and-sally-brown-covid-19-assessment-collection/ ) (accessed August 2020)

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