

APPRENTICESHIP WORKFORCE DEVELOPMENT PROGRAMME

Adaptive teaching resources – to support teachers to adapt delivery for alternative delivery methods.

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Introduction

Related courses

- Enhancing teaching and training skills
- Planning and maintaining high quality and effective teaching and training
- Improving curriculum design for apprentice Success
- Planning effective curriculum design

What is this resource for

These adaptive teaching resources are designed to assist colleagues to adapt classroom delivery and customise their instructional methods to suit different delivery formats, such as in-person, online, or hybrid learning environments.

Whilst some aspects of apprenticeship training may be delivered in large group “lecture” style settings there are many standards or aspects of apprenticeships that will be more suited to alternative delivery methods.

This resource will explore classroom-based delivery considerations and approaches as a foundation for apprenticeship delivery. This resource will also provide an overview of different delivery methods with possible applications to support apprenticeship delivery in a range of settings.

This resource is broken down into 2 sections:

Section 1

- Classroom-based delivery
- Working 1-1 with apprentices

Section 2

- Online delivery tools and apps
- Collaborative delivery with employers
- Recall retrieval and reflection

Each section will provide an overview of different approaches that can be applied in apprenticeship delivery.

How to use this resource

You can use this resource in several ways to suit your needs, for example:

- To support your delivery team to widen their use and integration of different tools
- To develop your existing lesson plans
- To explore potential new online tools to support engaging delivery
- To adapt your lessons to suit a variety of scenarios including 1-1 learning
- To suggest fun and engaging ways of capturing learners ‘distance travelled’ in learning new topics etc.

Classroom based delivery

Many apprenticeships will include some aspect of face-to-face classroom delivery. There are several theories and approaches to teaching practice that can be considered when planning classroom-based delivery.

Present Apply Review Model (PAR) Petty, G. (2020)

- 1) The learner is [presented](#) with new knowledge, concepts, skills, theories, and explanations. Explanations are given, (or better, constructed by the apprentice) to persuasively link the material to prior learning and experience.

Possible strategies:

- PowerPoint presentations
- Giving documents
- Modelling worked examples
- Peer explanations
- Reading written material

- 2) The learner carries out an activity that requires them to [apply](#) the material presented (learning by doing). Working towards a more challenging goal such as problem-solving, answering questions about a case study or making decisions. Apprentices are very likely to be engaged in a range of applied, practical and experiential tasks.

Possible strategies:

- Q&A session
- Evaluating a case study
- Problems relating to their role/work/subject for them to solve
- Exercises and examples

- 3) The key points are [reviewed](#), confirmed and emphasised with explanations that link the new learning with former learning. This strengthens the links that will be used during subsequent recall. This also summarises, reviews and explores the learning and checks if goals/objectives have been met.

Possible strategies:

- Peer assessment
- Self-assessment
- Teacher assessment
- Quiz, test

Educational Psychologist Robert Gagne's nine-stage theory of instruction can be helpful when planning and structuring your approach to teaching sessions.

- 1) Gain learners' attention make connections, establish expectations and develop a rapport (this can be done prior to the session using Blackboard quizzes, getting to know your activities in the first face-to-face session).
- 2) Inform learners of outcomes (in the module and course handbooks, on your Blackboard and clearly defining how sessions meet the objectives and how the assessments will show that apprentices have met the learning objectives).
- 3) Recall and retrieve (brainstorming, knowledge check quizzes, class discussion)
- 4) Present new stimulus. For apprentices it may be best to presented new information asynchronously in a flipped context on virtual learning tools in the form of a pre-session task, reading exercise, Padlet for the group to annotate etc. You can then bring in the topic and start building on and contextualising knowledge in the class.
- 5) Modelling and scaffolding explain the difference
- 6) Elicit performance to a given task
- 7) What's working well and where guidance is needed
- 8) Check learners understanding
- 9) Apprentices should be able to use their new learning in new and different contexts, such as their workplace or in their end-point assessment.

Rosenshine's Ten Principles of Instruction

- 1) **Daily Review** - Taught sessions should start with a short review, around 5-10 minutes, of previous learning.

Possible Methods

- Class discussion
- Quiz
- Gap-fill exercises
- Monitor peer discussion
- Checking answers to asynchronous activities

- 2) **Present new material and information using small steps** - We have a very limited amount of working memory space so spend sufficient time presenting new information and material to apprentices in small chunks or step by step

Possible Methods

- Whiteboard work
- Class discussion
- Complete activity on Padlet and then get learners to discuss
- Complete a process or cycle projected on the whiteboard

3. **Ask Questions** - Questioning apprentices helps them to practise and connect new material to their prior learning. It also provides valuable feedback on what has been understood and what needs further coverage.

Possible Methods

- You may ask questions specifically or at random in class or as you monitor learners as they complete tasks.
- Questions may be provided asynchronously via Padlet/ tasks on Blackboard.
- You can use also quizzes, peer feedback

4. **Provide models** - Help apprentices develop a deeper understanding by providing appropriate prompts, models, worked examples and applied real-life

Possible Methods

- Provide models in a range of ways:
 - reading
 - video
 - voiced PowerPoint
 - recorded screencast
 - handouts/class materials

5. **Guide learners' practice** - Spend time guiding apprentices as they practice and rehearse the new material. Support developing knowledge and skills with prompts so that the new material is neither too overwhelming nor too easy.

Possible Methods

- Suggesting which parts of an article to read/focus on first
- Giving completed model answers/tasks for them to work to or work backwards from

6. **Check learners understanding** - Carry out frequent checks to make sure there are no misconceptions. Observe and question apprentices to ensure they understand content, material and specific processes/procedures.

Possible Methods

- Nominating specific learners to answer questions/demonstrate
- Whole class feedback
- PowerPoint or materials with gaps for learners to fill
- Asking learners to annotate a text/task projected on the screen

7. **Obtain high success rate** - Ensure that all apprentices are mastering the small steps of new material and learning. If too many are not successful, then they may not be ready to move onto more challenging content.

Possible Methods

- You may have to practice differentiation as some learners will be stronger/more experienced than others and have different work rates according to the amount of time they need to process tasks/instructions.
- Have additional activities ready to keep stronger learners engaged while you support others.
- Encourage stronger learners to support weaker in group/pair work.

8. **Provide scaffolds for difficult tasks** - Provide apprentices with useful scaffolding and support that helps them work towards learning challenging new knowledge and skills.

Possible Methods

- Frameworks
- Checklists
- Prompts (verbal or written)

9. **Independent practice** - In order for apprentices to be successful in the workplace they need to learn new knowledge, skills and behaviours, but also to use what they have learned with colleagues, clients, customers or patients.

Possible Methods

- Set appropriate tasks or projects individually or in pairs/groups:
- Roleplays
- Scenarios
- Practical application e.g., how to administer a medication/ write up a police report/ apply a SWOT analysis

10. **Weekly and Monthly review** - Despite effective instruction, apprentices will forget new material, even if they remember it soon after being taught.

Possible Methods

- Regular quizzes
- Application of knowledge in different scenarios
- Reflective practice e.g., a journal which encourages going over specific key points
- starting sessions by recapping what has been covered previously

Working 1-1 with apprentices

Whilst some delivery of apprenticeships may be in small group or through employer-led activities often tutors will be working 1-1 with apprentices both online and face-to-face.

All the tools and techniques in this resource can be adapted to support 1-1 and very small group teaching and support activities alongside some of the following approaches.

Reflective Discussion – These are a prime opportunity to engage apprentices in thoughtful conversations that encourage them to reflect on their learning experiences, understandings, and insights. This focused 1-1 discussion can support the apprentice in reflecting on their overall progress, development and application of KSBs.

Question and Answer – Whilst reflective discussions are characterized by open-ended dialogue and collaborative exploration of ideas, Q&A sessions are more focused on addressing specific questions and providing direct responses. This allows for a more directed approach and finer detail focus on specific topics, areas of applications of KSBs.

A Q&A session can focus on addressing and exploring specific areas of the KSBs to test and reaffirm knowledge or understanding or identify where a specific skill or behaviour has been applied.

Portfolio Based Interview – As a common assessment method in end-point assessment using PBIs within 1-1 and small group activities supports EPA readiness as well as supporting wider on programme development.

The apprentice can be asked specific questions that require they present a portfolio of their work samples or specific artefacts, projects, and accomplishments to demonstrate their development or competence in specific areas of the KSBs.

Demonstration - Demonstrations can be a highly effective tool in apprenticeships for providing hands-on learning experiences and practical skill development. They can be used in a range of ways including:

- **Skill Acquisition**: Apprentices can have focused 1-1 time to observe skilled professionals (tutor or workplace mentors) demonstrate various techniques, processes, or procedures relevant to their trade or profession. This provides apprentices with firsthand focused exposure to best practices and industry standards.
- **Step-by-Step**: Tutor or workplace mentor demonstrations either in the workplace or other settings break down complex tasks into sequential steps, making them easier for apprentices to understand and replicate and then in turn teach a peer or talk a

tutor through each stage. This can ensure the apprentice can learn the proper sequence and techniques involved and to gain feedback as needed.

- Feedback and correction: Demonstrations provide opportunities for mentors or instructors to observe apprentices' performance and provide immediate feedback and correction. This real-time feedback helps apprentices identify areas for improvement and refine their skills.

Problem-based learning - Problem-based learning (PBL) can be a highly effective approach in apprenticeships for developing critical thinking, problem-solving skills, and real-world application of knowledge. Steps for this can include:

1. Tutors presents a problem or challenges that apprentices are likely to encounter in their future careers. These problems should require the application of knowledge, skills, and critical thinking to solve effectively.
2. Tutors provides relevant context, background information, and any necessary resources to help apprentices understand the problem and its significance.
3. The apprentice with support as needed can explore problem-solving strategies and techniques, such as brainstorming, mind mapping, root cause analysis, and decision-making frameworks.
4. Where appropriate the Tutor can support hands-on application of knowledge and skills by encouraging apprentices to design and implement solutions to the problem. This may involve conducting experiments, developing prototypes, or creating practical solutions in a simulated or real-world setting.
5. Reflection and evaluation – Tutor lead reflection and evaluation of the approach taken by the apprentice, the outcome and any areas for improvement for future activity.

Role play/simulation - Role play can be a highly effective instructional strategy in apprenticeships for developing communication skills, problem-solving abilities, and professional competencies.

Tutor-designed role-play should draw on scenarios that simulate real-world situations and challenges that apprentices are likely to encounter in their future careers. These scenarios should reflect the tasks, interactions, and decision-making processes relevant to the apprenticeship.

Each role play/simulation activity should embed the opportunity for feedback and a debriefing to ensure the reflection and refinement cycle.

Tutors can integrate focused role-play activities with the existing curriculum and learning objectives of the apprenticeship program alongside within the 1-1 focused activities. Tutor need to ensure that role-play experiences align with the skills, competencies, and knowledge areas that apprentices are expected to develop.

Online delivery tools and apps

Many providers utilise some aspects on online or blended approaches within their apprenticeship delivery. The highest quality delivery will embed a seamless blend of online activities with face-to-face learning whilst ensuring the individual needs of apprentices are addressed.

Providers will often have a central virtual learning environment (VLE) or e-portfolio system that provides a central point for accessing learning content and submitting assignments of evidence. These systems may also provide tracking functionality for progress from start point to gateway. Some of these systems allow for 3rd party tool and app integration, whilst others will require the tools and apps to be used separately within delivery activities.

	Tools or application	Description	Utilisation within apprenticeship delivery
	AnswerGarden https://answer-garden.ch/	AnswerGarden is a powerful yet super minimal feedback tool that aims to make giving responses from teachers to apprentices easier. This is a purely digital platform so it can be used both in the classroom and also for remote learning or hybrid classes. This all works using the power of word clouds for clear and quick responses. There is also a live, real-time participation feature, allowing it to be integrated into the learning experience or used for activities such as brainstorming.	Get personal This is a great way to play games with a class to help them to get to know one another. Post a question, or ask an apprentice to do it, and have the class guess the answer, live on a big screen in the class. Take a vote Use the Brainstorming mode that allows for multiple votes and have the class respond to a question or request. Start/End of lesson activity to assess knowledge Retrieval recap question(s) can be used as a plenary or starter to lessons to check understanding.
	Padlet https://padlet.com/	Padlet is a platform in which tutors can create a single or multiple walls that are able to house all the posts. From videos and images to documents and audio, it is literally a blank slate. It's collaborative, too, allowing tutors to involve apprentices, other	From a brainstorming board to a live questions bank, there are lots of ways to use Padlet. Brainstorm Use an open Padlet to let apprentices add ideas and comments for a brainstorming session. This can span a week or a single

		teachers, and stakeholders including employers. Tutors can only allow invited members to use the wall, which is the ideal setup for education. Share the link and anyone invited can enter easily.	lesson and helps encourage creativity. Go live Teaching in a hybrid way, use a live Padlet to let apprentices post questions as the lesson progresses – so the tutor can address any at the moment or at the end. Collate research Create a hub for apprentices to post research on a subject. This encourages everyone to check what's up and find something new by thinking differently. Use exit tickets Create exit tickets using Padlet, allowing for a debrief from the lesson -- from writing down something learned to adding a reflection, there are many options. Work with colleagues Collaborate with other colleagues and even beyond to share resources, give opinions, place notes, and more.
 Mentimeter	Mentimeter https://www.mentimeter.com/	Mentimeter is a presentation tool that is designed to work digitally, live. It's built both for use in the classroom as well as for remote education. Unlike a PowerPoint or Slides presentation, this tool allows teachers to interact with the apprentices in real time, take a poll, present a quiz, and more. This should be more engaging	Test skills first Use an Action Priority Matrix to find skills to teach first, followed by a quiz to see how these concepts are being absorbed and understood. Brainstorm Use the word cloud feature to brainstorm anything being working on in class or the workplace. Apprentice led

		for apprentices to help them learn, even when not in the class. This tool can be used via a web browser, making it simple to access from nearly any device. Dedicated apps also help to make it even easier for apprentices to use on their own smartphones and tablets wherever they are.	Apprentices can use Mentimeter to create presentations that get the class interacting. Then spin-off more presentations using the reactions of apprentices.
	Kahoot https://kahoot.com/	Kahoot! is a cloud-based quiz platform that is ideal for apprentices and tutors. Since the game-based platform allows tutors to create new quizzes from scratch, it's possible to be creative and offer bespoke learning options for apprentices.	Drive the class Set a quiz at the start of lesson and adapt teaching for that lesson based on how everyone does, letting the tutor tailor it to each apprentice as needed. Save time with pre-written questions Use questions that are already in Kahoot! to build a personalized quiz but without having to take the time to write out every question. Play with ghosts Use Ghost mode to allow apprentices to progress against their previous high-score. A great way to compare the start and end of a lesson to see improvements. Let apprentices create Apprentices can create their own quizzes to share in the class, helping others learn but also showing the tutor how much they know in order to create.

	Microsoft Onenote https://www.onenote.com/	Microsoft OneNote is a smart digital notepad that allows tutors and apprentices to get their ideas down and organized. All the notes stay in the cloud, via OneDrive, so they can access them any across devices. OneNote allows type text, write words, and draw with a stylus, finger, or mouse, as well as import images, videos, and more from the web. Collaboration is possible across devices, making it a great space for classes or apprentices in groups working on projects. Microsoft OneNote is useful for tutors to organize lesson plans and courses for the year and can act as a handy personal notebook. Sharing is another big feature as tutors can digitally export notes, in various formats, to be viewed by others or used in projects.	Verbal feedback The audio notes, in particular, can be a nice way to annotate a apprentice work, for example, giving it a personal touch while also helping to clarify any point that needs to be made. Immersive Reader This is a great teacher-specific feature. With it, tutors can adjust the page for reading with aspects such as reading speed or text size as OneNote is used as an e-reader. Classroom management and feedback Class Notebook is another teacher-focused addition that helps with organisation. Turtors can manage a classroom and feedback all in one place. Also since it is a great space for apprentices to compile information for a project, it gives teachers a chance to check in to see if they are progressing in the right direction.
	Flip / Flipgrid https://info.flip.com/	Flip, previously known as Flipgrid, is a useful tool in education for anyone who wants to use video-based interactivity inside as well as outside the classroom. At its most basic this operates like a private social media space, allowing tutors and apprentices to share videos back and forth which can support workplace evidence	Use stop-motion Apprentices and tutors can rearrange recordings by simply hitting pause. This lets tutors build a collection of images, essentially, which can be used in the order that's needed to create a stop-motion video. Great for showing project stages and to help encourage creativity. Get MixTapes

		collection for portfolio building. A tutor can post a video, with text, emojis, and more, to which apprentices can reply with their own videos. This sets up a space for rich communication that allows even less confident apprentices to interact. It also makes for a safe place to express opinions and discuss topics of varying natures. The service works online so it can be accessed via web browser from nearly any device, or through the app, making it good for laptops, tablets, smartphones, Chromebooks, and desktop computers.	A MixTape is a collation of videos that you've built up that is compiled into one useful video. This is a simple way to share a collection of ideas or as a study aid for apprentices. Equally, it provides an easy way for students to share ideas with tutors. Communicate with Shorts The Shorts in Flip are videos that are limited to three minutes in length. As such, this is a great way to communicate succinctly, using video. That doesn't mean being limited though, as tutors can use stickers, draw on video, add text, filters, and more.
	Wakelet https://wakelet.com/	Wakelet is a digital curation tool, so it offers a way to collate online resources in one place, called a wake. These wakes can then be shared with a link to be accessed online, easily, by anyone. Tutors can create wakes as a way to pool resources, say on a certain topic, allowing apprentices to explore the various information ahead of a lesson. Crucially, this is an open platform, so apprentices can go off and explore wakes created by others to learn more. Wakelet can be used by a collective group or	Build portfolios Use the space to build portfolios for apprentices, perhaps for their work over the year, or preparing for a job or college application in the future. Lesson plan This space is ideal for collating resources for teaching a lesson, either to share before or during, or simply as a reference point.

		individually. It works as a digital platform and also lets you export to PDF so tutors can print and use it as a physical classroom resource too.	
	Trello https://trello.com/	Trello is a collaboration tool that works using boards (collections of lists), lists and cards (tasks) to organize workflow. Trello is a tool that organizes, allows tutors to invite colleagues /cohort, work in real time, and use web devices to execute a project. In the classroom, tutors can group apprentices to work together on a project.	General To-Do List A common use case for Trello is keeping track of all your tasks and to-do's. Tutors can organize Trello boards in a couple of different ways, but the most common way is a "To Do", "Doing", and "Done" list structure. Remote-Based Learning Manage the remote learning environment video chats, digital files, timetable schedules in one place. Lesson Planning Tutors can also easily plan out your curriculum in Trello to make sure they have everything they need, while also giving the flexibility to move it around as schedules change. Use cards to describe what is being taught and attach relevant links and a checklist, so tutors have all the materials needed for a lesson at their fingertips. Tutors can even use the card comments feature to add any notes after class and help tutors reflect on what to change for the next time they teach that lesson. Coordinate With Colleagues Collaborating with others is as simple as adding someone to a board.

			Student Assessment Data Tutors can group it all in one place and make it easy to review with parents. Tutors can even use the checklist feature to add goals, milestones, and deadlines.
	Mural https://mural.co/	Mural is rich with features yet simple to use, it can be a helpful way for tutors and apprentices to be together in a digital space. It can be useful in a flipped classroom but also in a traditional one, where apprentices can follow a presentation on their own devices and even interact. Mural is a digital collaborative whiteboard space that can be accessed via a web browser on nearly any device and is totally free to use for the basic version. This can act as an interactive space for working or as a point to access for apprentices. Mural works like a slideshow presentation tool, with apprentices and teachers able to build from templates to present to the "room," which is a defined space people can be in, or not. The idea is to offer video-based slideshows that can be seen by all but also allow to edit live while in the space, as if in the room together even when that's not the case. Lots of templates are available but most are	Pair projects Have apprentices pair up and set them the task of creating a presentation project to share with the class. This will teach them to collaborate remotely, communicate, and work together while also hopefully creating something useful for the rest of the class to learn from. Build live Use the tool to build a presentation with the class, allowing them to learn how to use Mural but also teaching the content of the presentation as it is worked through. Go anonymous Set an open project in which everyone has freedom to express themselves, then let them submit anonymously. This will help even more shy apprentices be expressive and share with the class.

		business-focused, yet there are some specifically tailored to education. Either way, all of these can be fully edited. Usefully, and as tutors might expect from Microsoft, there is a lot of integration with Mural and other platforms including Slack, Microsoft Teams, and Google Calendar, to name a few. Mural is a great tool for the flipped classroom or for remote learning, however, it can also be used in the room with apprentices as tutors present to everyone's devices. Helpful tools are available for live feedback while working through the presentation but more on that in the next section.	
	Popplet https://www.popplet.com/	Popplet is a dynamic organizational tool available on the web or as an app where users create mind maps on a board. Apprentices can use text, drawings, images, or video. To create a popple (a section within a Popplet), apprentices can double-click. Background colour, box colour, and other details are also customizable. Once created, Popplets can be connected to others, forming an interactive outline of related ideas -- a mind map.	Group and individual work Mind mapping, or linking ideas as Popplet allows, is a creative way to get thoughts onto the screen. Popplets allow apprentices to share and make sense of their ideas using words, images, drawings, and video. They can link ideas to form the outline structure for a speech, paper, or presentation and then add details elaborating even more. Reflective practice Organisation Popplet can help apprentices organize their thoughts and make sense

		Popplet boards are shareable via emailing or texting the image as a JPEG or PDF. The paid version allows unlimited creation, while a free account allows for creation of only one mind map. There's a library of public Popples and a tab to view maps that another user has shared.	of the information they're learning both on and off the job. Assessment The labelled collaboration feature also makes it possible to use it as a formative assessment or to keep track of contributions during a group assignment. It makes group work a bit easier for distance learning.
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NB. Many of these online tools and apps are free however it is always important to check costs and also integration with existing systems.

Collaborative delivery with employers

Employment based shadowing.

“Work shadowing involved observing a professional in their place of work to gain a better understanding of the role¹”.

Work shadowing can be a valuable component of the apprenticeship programme. Shadowing can provide opportunities to experience roles beyond the day-to-day activities of the apprentice job to support insights into wider organisational practices and processes. Shadowing can also provide exposure to opportunities required by the occupational standard that are not within the apprentice's role but are required to develop occupational competency.

Shadowing can take different forms including:

- **Observation** - Time is spent observing the work of the apprentice line manager including, watching what they do on a day-to-day basis. This type of shadowing is the most common and particularly useful to apprentices looking to gain a greater understanding of a certain role or the next level or seniority in an organisation.
- **Regular briefings** - Shadowing a staff member for specific activities over a period of time, this may involve a mini brief beforehand and a follow-up debrief. Providing short periods of focused activity, this type of work shadowing works well when the apprentice already work alongside their host - for example, in supporting insights into an area of the organisation the apprentice doesn't usually access.
- **Hands-on** - A progression of the observation method, hands-on job shadowing is where an apprentice starts to carry out some of the tasks they have been observing under the supervision of the host. This type of shadowing can be time consuming for the host and so isn't always possible, but can be highly valuable to an apprentice if possible.

Employer driven project-based learning.

Project based learning is commonplace amongst apprenticeship provision, however ensuring employer involvement provides a strong bridge between the work-based setting and off the job learning. This allows contextualisation of learning and further development and refinement of previously learnt knowledge, skills and behaviours.

Projected based activity allows apprentices to work individually or in groups. Group work will allow apprentices to define the roles and responsibilities of the individual team members. It also allows apprentices to consider the transferrable skills including teamwork alongside those specifically being focused upon within the project activity. Project work also includes opportunities to support formative feedback informally from peers as the group develop materials as well as through tutors.

¹ <https://www.prospects.ac.uk/jobs-and-work-experience/work-experience-and-internships/work-shadowing>

Employer driven project-based learning can be in direct response to a work-based demand / activity or something developed between the employer and provider to specifically target an area of the occupational standard that requires focus and development.

Common topics and activities for work-based projects within apprenticeships focus upon:

- Resolution of a business issue or need
- Continuous improvement
- Development of a new business product, process or procedure.

The process of completing a work-based project should also enable apprentices to reflect on their own ways of working and develop a broad range of knowledge, skills and behaviours agreed between the employer and provider and then clearly articulated through the project brief.

Flip learning – develop at work then peer to peer delivery in study setting to deepen understanding and refine practice.

Flipped learning is a pedagogical approach in which the conventional notion of classroom-based learning is inverted so that students are introduced to the learning material before class with classroom time then being used to deepen understanding through discussion with peers and problem-solving activities facilitated by teachers.(Advanced HE)

As part of a study in 2011, a class of undergraduate physics students were split during the 12th week of their course. Half the students were taught face to face as usual while the other half experienced flipped learning with no formal lectures. At the end of the week, the two groups were tested. In the control group, students gained an average score of 41%, but the flipped group scored an average of 74%.(JISC https://apprenticeship-toolkit.data.alpha.jisc.ac.uk/assets/documents/Flipped_learning_i1.doc)

A useful reference is the ‘Four Pillars of Flip²’ which provides a framework for thinking about some of the wider issues including the role of the learning environment and the teacher.

Flexible environment – space mode of delivery and timelines for learning;

Learning culture – a learner centred approach to encourage deep learning;

Intentional content – that maximises learning;

Professional educator – who guides learning and continuously improves practice.

² http://www.flippedlearning.org/cms/lib07/VA01923112/Centricity/Domain/46/FLIP_handout_FNL_Web.pdf

Retrieval and reflection

The distance between the start of an apprenticeship and end-point assessment can seem significant – so it is important to ensure retrieval and reflection are embedded across the apprenticeship delivery.

Retrieval (or remembering) is where information stored in long term memory is recalled. It is an important mechanism to consolidate information and secure it within long term memory. Research shows that regular and immediate rehearsal of information is more likely to resolute in encoding the long-term memory. This underpinned by Ebbinghaus's forgetting curve³ which was first proposed in 1885. The principles from this can be considered and applied within teaching for apprenticeships.

Some aspects you may wish to consider include⁴:

Approach	Description	Application to apprenticeships
Retrieval practice	Practice and rehearsal of newly developed knowledge causes information to become automatically accessible, freeing up the brains limited capacity to pay conscious attention and so be ready for further learning.	Regular use of low stakes tests that revise recent previous learning e.g. quizzes, short skills tests, past paper questions, or online tests.
Distributed / spaced practice	The practice of having break between repeated content rather than massing repetitions into blocked learning.	KSB developed near the start of the programme is revisited every few months until end-point assessment.
Elaborative interrogation	This practice supports the apprentice understanding <i>why</i> something is true rather than just recalling the “raw” facts. Discussions and questioning around topics can support apprentices make connections between KSBs.	Small and large group-based discussion topics / questions that lead to more questions or “next time questions” can be applied across KSBs.

³ https://en.wikipedia.org/wiki/Forgetting_curve

⁴ <https://community.stem.org.uk/blogs/chris-carr/2021/10/27/making-it-memorable-teaching-strategies>

Retrieval grids can provide a quick activity at the start of a taught session or within a review or discussion. Retrieval grids involve recalling knowledge, skills or behaviours learning and applied over a mixture of timescales. They can be adapted to different challenge levels (including complexity of question or response) and different periods of time to ensure individualised activity.

Masterclass 2 - Retrieval Challenge Grid			
What type of pedestrian crossing allows bikes to cross?	A 22% reduction in fuel can be achieved by reducing speed from 56mph to what?	Who is the Safeguarding Lead at TPMT?	What does 'ADR' stand for?
The acronym 'SAFED' stands for what?	What is a 'calorie'?	A typical 420hp heavy-duty engine consumes fuel and the rate of ___ litres an hour whilst idling or stationary?	If a bridge strike were to occur, what would be the immediate 3 steps to take?
When is an 'O' license required?	What is the difference between these signs.	State a law or legislation related to your role?	What is the difference between these and when are they mandatory?
Last lesson (1)	Last lesson + 1 (2)	Last lesson + 2 (3)	Further back! (4)

Customer Service Role, Organisation and Legislation Masterclass				
4 Points	Describe how you have developed skills or knowledge in the past week and how you then applied it to your role.			
3 Points	Summarise language considerations during face-to-face communication		How do you organisations core values links to your service culture?	
2 Points	Given an example of when you used each of the named verbal and non verbal skills within your role over the past 2 weeks.	Given an example of when you have used each prioritisation technique.	What are the targets or goals your role needs to delivery against?	
1 Point	Name 3 verbal and non verbal communication skills.	Name 3 ways you can prioritise your own workload.	Name 3 products or services offered by your organisation	What are your organisations core values? Name 3 responsibilities of your role

A similar concept is the **retrieval pyramid** where the higher up the pyramid more complex knowledge or skills/behaviour recall requirement of the apprentice.

Retrieval grids and pyramids can also be used as a developmental activity where apprentices develop them for peers. This supports the apprentice to not only reflecting on their own development, but also consider different questions approaches that could be applied to each.

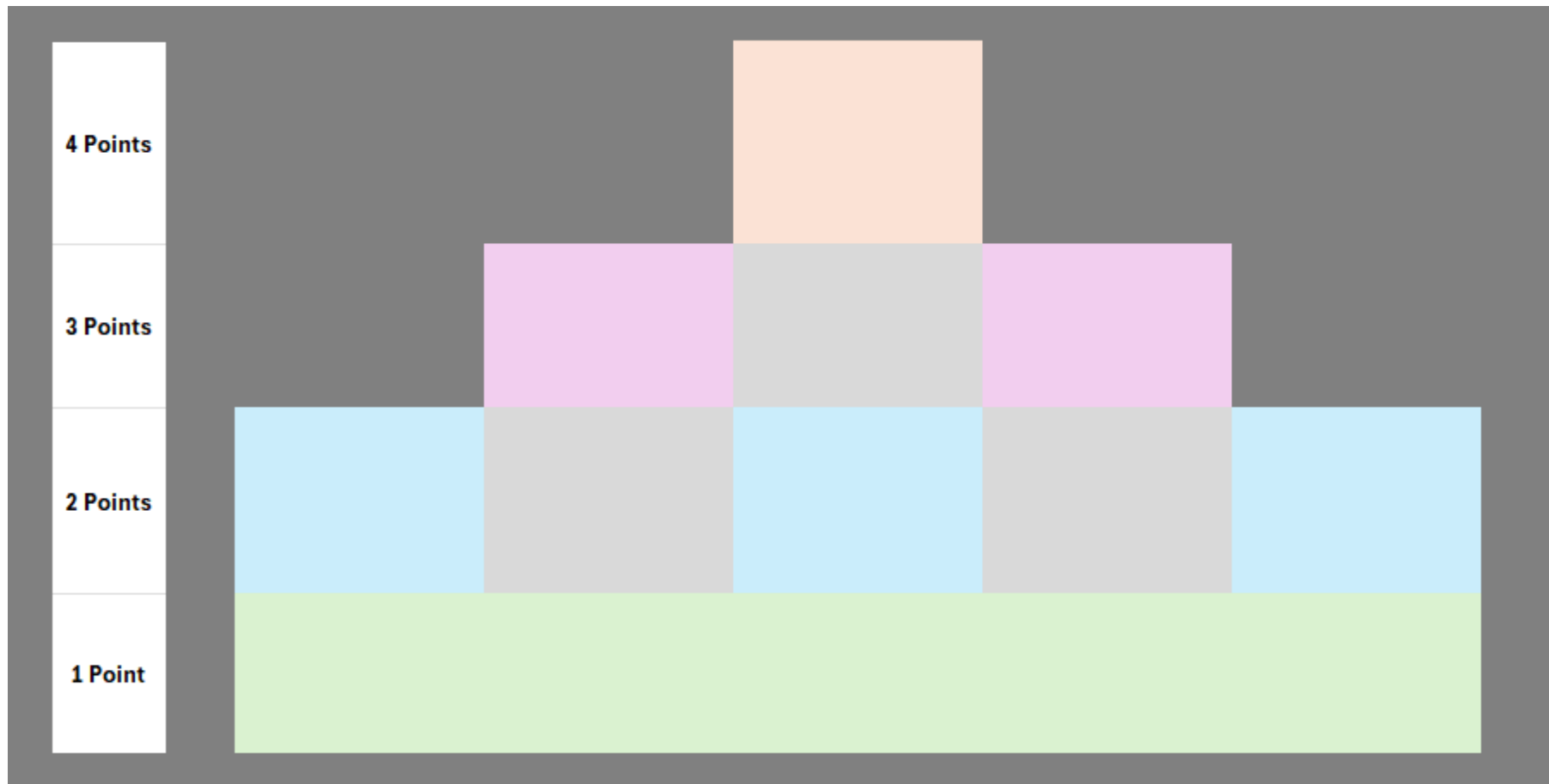
A 3x4 grid of colored squares. The colors are arranged in a repeating pattern: Row 1: Red, Purple, Cyan, Red; Row 2: Green, Cyan, Purple, Green; Row 3: Red, Green, Cyan, Purple. Below the grid is a legend with four colored boxes and their corresponding labels: Red box labeled 'Last lesson (1)', Purple box labeled 'Last lesson + 1 (2)', Cyan box labeled 'Last lesson + 2 (3)', and Green box labeled 'Further back! (4)'.

Red	Purple	Cyan	Red
Green	Cyan	Purple	Green
Red	Green	Cyan	Purple

Red	Purple	Cyan	Green
Last lesson (1)	Last lesson + 1 (2)	Last lesson + 2 (3)	Further back! (4)

Last lesson (1)	Last lesson + 1 (2)	Last lesson + 2 (3)	Further back! (4)
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Example Retrieval Pyramid



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