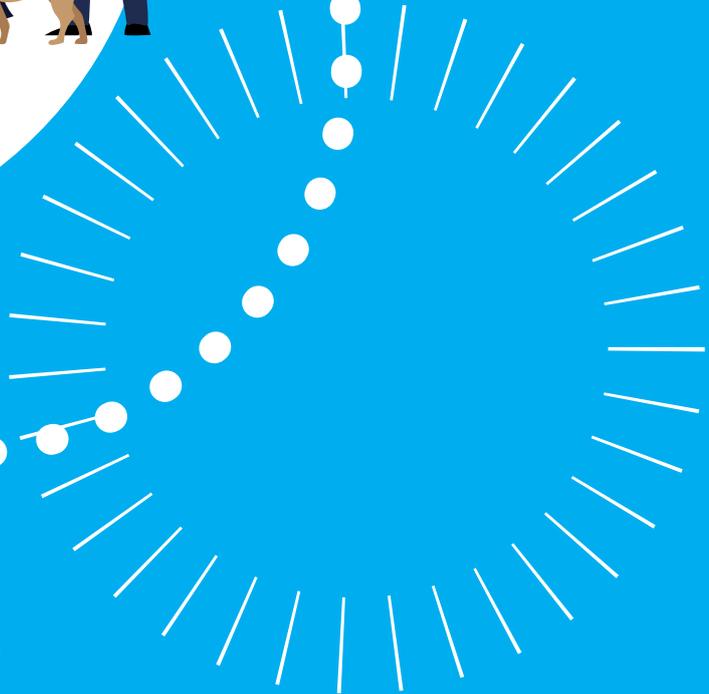
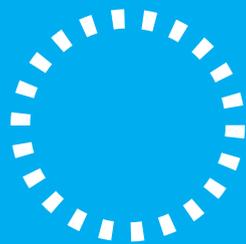
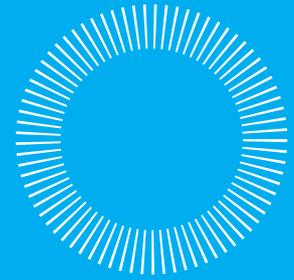


# UDL for FET Practitioners

Guidance for Implementing Universal Design for Learning in Irish Further Education and Training



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# UDL for FET Practitioners

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Guidance for Implementing  
Universal Design for Learning in  
Irish Further Education and Training



# Foreword

**Further Education and Training (FET) is unique.  
FET is for everyone.**

Further Education and Training (FET) is unique. FET is for everyone. FET is available in every community in Ireland. It offers every individual, regardless of any previous level of education, a pathway to take them as far as they want to go. To enable this vision, *'Inclusion for all'* must be at the heart of the Further Education and Training sector. In full recognition of this inclusive approach, the new *Future FET: Transforming Learning Strategy (2020-2024)* places inclusion as one of three key pillars, alongside skills and pathways.

Further Education and Training practitioners' commitment to tailoring learning and support to meet learners' needs is immediately evident across all provision. However, while a learner-centred ethos is clear, more needs to be done to ensure consistent and integrated supports are in place for learners in all Further Education and Training settings.

A key priority for the FET Strategy 2020 -2024 is to ensure consistency of support for all learners, underpinned by a universal design approach. *'A Conceptual Framework of Universal Design for Learning (UDL) for the Irish Further Education and Training Sector'* (SOLAS 2020) delivers, in part, on this commitment.

This accompanying '*UDL for FET Practitioners: Guidance for Implementing UDL in Irish Further Education and Training*' document provides practitioners with the knowledge they need to implement universal design for learning. This will assist in the further delivery of the FET 2020- 2024 commitments regarding adopting a UDL approach in shaping #FutureFET.

Universal design for learning principles and practices can help practitioners address variability in their learner cohorts and reduce barriers to learning by building flexibility, accessibility, learner voice, and choice in the fabric of the learning interactions they design.

It represents the culmination of a significant consultation and engagement process with FET practitioners and leaders across multiple FET sites around the country, national and international UD/UDL and inclusive education experts, and senior representatives from relevant government agencies and support organisations.

Most importantly, this practical guidance document builds on existing good inclusion practices in the FET sector. It showcases impressive examples of good UDL practice already being implemented by innovative, thought-leading FET practitioners, whose initiative, drive and commitment to inclusive teaching and learning stand as an example of this vital learning resource for all. It also provides a vision for how practitioners can implement UDL together as part of their local and national FET communities – learning and sharing good practices as they evolve.

The commitment to adopting the UDL approach is further evidenced through the embedding of the *'Conceptual Framework of Universal Design for Learning for the Irish Further Education and Training 'Sector'* and this guidance document, as key inclusion enablers within all SOLAS / ETB Strategic Performance Agreements. SOLAS, Ahead and ETBI are delighted to bring this critical resource to the sector and offer thanks to everyone who gave their time to contribute to its development.



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# Welcome and Introduction

## Does This Sound Familiar?

Our Further Education and Training (FET) learners<sup>1</sup> are more diverse than ever. They come to us from all different socio-economic backgrounds, levels of preparedness for study, language groups, gender identities, cultural groups, and ability profiles—to name just a few of their diverse characteristics. This variability is a strength of the sector in many ways, and it presents challenges in others.

As FET practitioners, we now serve more learners who don't fit easily into the traditional models of teaching and learning which many of us experienced in our own schooling. As practitioners, we need to know how best to respond to learners with autism, learners whose first language isn't English, learners with work and family responsibilities, learners with disabilities, or learners with previous home-life and school-life issues—and these examples are only a few of the various circumstances that our learners bring to our classrooms.

## FET Diversity



Figure 1 - FET Diversity

<sup>1</sup> Throughout this guidance, we will refer to “learners” rather than “students”. See *Learners* in the Glossary for details.

Many of us will have experienced the reasonable accommodations process for learners who have documented disabilities. You've made one change, one time, for one learner, such as providing alternative-format documents or granting extra time in examinations—and those changes likely helped those learners to have a better chance at being able to learn, study, and show their skills in your FET programme. Individual accommodations are a professional obligation for all of us, and we must often provide them with little advanced notice and significant effort.

Although we can never eliminate the need to individually accommodate learners with disabilities, there is a design approach that reduces the need to make those individual-support accommodations in the first place—and also maximises everyone's learning opportunities. By thinking and working according to the principles of Universal Design for Learning (UDL), you can lower barriers for all of your learners—and for yourself. UDL allows more of your learners to feel “a part of” rather than “apart from” their learning. This approach helps them to do their best work and to thrive in your FET programmes.

This guidance will introduce you to colleagues from across the FET sector who are implementing UDL practices and will define the UDL principles for you as an FET practitioner (hint: it's all about “plus-one” thinking: if there's one way to interact now, add one more way). You will find concrete, easy-to-start methods for harnessing the potential—and addressing the variability—of your learners in a positive, supportive, and collaborative way. We hope you will be inspired and encouraged to find lessons in the stories from your FET colleagues, to engage with the reflection prompts, to try out the activities, and to have conversations with your colleagues about your UDL experiences.

## Who Should Use this Guidance?

This guidance is aimed at practitioners who design and deliver FET programmes of all kinds, especially instructors and college/centre support staff. But this guidance has value for everyone working in the FET sector: directors, administrators, tutors, guidance counsellors, communications officers, support teachers, administrators, and librarians—UDL has significant implications for all professional groups. One of the FET strategic priorities is to foster inclusion.<sup>2</sup> All of us have roles to play in creating an FET system where inclusion is everybody's business.

For example, FET guidance counsellors play a number of roles. They provide career guidance services and are often contact points for those with disability support roles. Their work has no “one size fits all” model; they work with learners as they are, as individuals. Regardless of the role you play in FET, you can design your interactions with learners—whether in a classroom or in-service conversations—to go more smoothly, offer learners options and choices, and to make your own work less repetitive and more effective. A UDL approach improves service provision for all professional groups by reducing barriers to learning and by reducing the number of add-on supports that learners might need.

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2 SOLAS. (2020). *Future FET: Transforming learning: The national further education and training (FET) strategy*, 44. Available at [https://www.solas.ie/f/70398/x/64d0718c9e/solas\\_fet\\_strategy\\_web.pdf](https://www.solas.ie/f/70398/x/64d0718c9e/solas_fet_strategy_web.pdf).

# How to Use This Guidance

There are three ways for you to get value from this guidance:

## **Experience UDL in action**

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You will learn about your FET colleagues' lived UDL practices, as well as the theory behind why they are effective. You will take away sustainable and practical ways to apply UDL in your own FET work.

## **Address learner variability**

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By taking a problem-based learning (PBL) approach, you will see how your FET colleagues are designing their learning interactions using UDL principles in order to address the broadly diverse strengths and needs of their learners.

## **Take action to increase access**

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This guidance includes frequent pause points for reflection, guided practice, and experimentation. Use these sections in the guidance in order to learn, plan, and apply the UDL principles in small ways to find good matches for your specific programme, learners, and circumstances—and in so doing, lower the barriers for your learners and for yourself. Beyond this guidance, use the reflective tools designed to work alongside it as well as the ideas, examples, and resources shared [in the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).

From a UDL perspective, the most significant barriers to learning are present within our learning environments, not within our learners: in classrooms, buildings, assignment designs, and teaching practices that prevent learners from fully internalising information, staying engaged, and showing their skills and knowledge.

You can use the practices explored here to design more inclusive learning interactions that reduce such barriers to learning and make a real difference to the experiences of every one of your learners. As showcased in the stories from your FET colleagues, applying the UDL principles can significantly increase access to education for all learners while simultaneously reducing the need for individual add-on supports for those learners who have different needs.

We hope that the stories of UDL as practiced by your colleagues in FET, the reflective prompts, and the practical tips in this guidance will inspire you to get started on your own UDL journey and encourage you to work together with your colleagues to build an FET system where inclusion is everybody's business.

## Foundations in Research and Practice

This guidance is part of the Universal Design for Learning for Further Education and Training project from An tSeirbhís Oideachais Leanúnaigh agus Scileanna (SOLAS),<sup>3</sup> Education and Training Boards Ireland (ETBI), and the Association for Higher Education Access and Disability (AHEAD). All of the strategies recommended in this guidance are based on research about how humans learn, as well as the actual experiences of your colleagues in FET, both in Ireland and worldwide.

The guidance builds on the first output from this project, *A Conceptual Framework of Universal Design for Learning (UDL) for the Further Education and Training (FET) Sector in Ireland*,<sup>4</sup> which explores the development of UDL and defines key concepts to address when implementing UDL in FET settings.

As you will experience, a wealth of consultation with the FET sector went into the creation of this guidance, including input and guidance from the National Advisory Committee for Universal Design for Learning (NAC UDL) for the Further Education and Training Sector and its Sub-committee (see Appendix), site visits to seven FET centres of differing types across Ireland, a national world-café consultation event, and interviews with numerous individual practitioners, some of whose work is featured in the case narratives in this guidance.

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3 The UDL framework and approach in this guidance addresses Priority 6, Fostering Inclusion, in the [SOLAS FET strategy 2020-2024](#).

4 Quirke, M., & McCarthy, P. (2020). *A conceptual framework of universal design for learning (UDL) for the Irish further education and training sector: Where inclusion is everybody's business*. Dublin, IE: SOLAS & AHEAD Ireland. 49, 55-57. Available at <https://www.solas.ie/f/70398/x/b1aa8a51b6/a-conceptual-framework-of-universal-design-for-learning-udl-for-the-ir.pdf>.

The consultation process provided AHEAD with opportunities to discover inclusive practices taking place at local levels throughout FET, to understand current thinking and receptiveness to the concept of UDL, and, importantly, to invite FET practitioners to become co-creators of this guidance by contributing their examples of UDL practices.

The FET sector encompasses a diverse range of programmes, practitioners who deliver them, and learners who engage with them. We already have a rich history of creative and inclusive practices across the FET sector. UDL is a lens through which we can further focus those practices in an intentional way.

## The Policy Landscape in Ireland

UDL is now an established practice. As such, it is embedded in the policies, guidelines, and strategies of key national bodies, including the Department of Education and Skills; the Department of Further and Higher Education, Research, Innovation and Science; SOLAS; Quality and Qualifications Ireland (QQI); and the Centre for Excellence in Universal Design (CEUD). The entire Irish educational system is committed to offering education that is as inclusive as possible for all learners.

The recently published SOLAS strategy, *Future FET: Transforming Learning*, requires FET to go beyond just the physical environment in order to make education more inclusive. UDL is now an explicit goal for the entire FET sector. All FET programmes should provide “consistent and integrated support offered to all learners in all FET settings” by

**“developing and applying good practice guides and toolkits on inclusive practice across the system adopting a universal design for learning (UDL) approach in shaping its future provision.”<sup>5</sup>**

QQI’s Core Statutory Quality Assurance Guidelines also align with the principles of UDL. Section 5 (Teaching & Learning) outlines that education and training providers should create a learning environment that:

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5 SOLAS. (2020). *Future FET: Transforming learning: The national further education and training (FET) strategy*. Available at [https://www.solas.ie/f/70398/x/64d0718c9e/solas\\_fet\\_strategy\\_web.pdf](https://www.solas.ie/f/70398/x/64d0718c9e/solas_fet_strategy_web.pdf).

- “respects and attends to the diversity of learners and their needs, enabling flexible learning pathways;
- considers the use of different modes of delivery, where appropriate;
- flexibly uses a variety of pedagogical methods that are evaluated and monitored and adjusted accordingly; [and]
- encourages a sense of autonomy in the learner, while encouraging adequate guidance and support for the learner.”<sup>6</sup>

Implementing UDL does not negate the legal requirement for the provision of reasonable accommodations for people with disabilities, but it has the potential to reduce the need for many accommodations in the first place.

This guidance will help you to create both a mindset and specific practices to align your teaching and design practices within the FET policy landscape, without having to become an expert in reading the policy fine print yourself. Use this guidance to offer your diverse learner body learning interactions that are as barrier-free as possible and sufficiently flexible to engage them and respond to their learning needs. This guidance is also supported by a Resource Hub that lists further reading and information on policies and legislation that support inclusion efforts of all kinds.<sup>7</sup> You can find the [Resource Hub at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).

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6 Quality and Qualifications Ireland (QQI). (2016). *Core statutory quality assurance guidelines developed by QQI for use by all providers. Version 2*. 13-14. Available at <https://www.qqi.ie/Downloads/Core-Statutory-Quality-Assurance-Guidelines.pdf>.

7 For instance, see Centre for Excellence in Universal Design (CEUD). (2020). *Universal design in education and training—Policy landscape in Ireland*. Available at <https://bit.ly/32qMWLg>.

# What is Universal Design for Learning?

“Learning is as unique to individuals as their fingerprints or DNA.”<sup>8</sup>



<sup>8</sup> Hall, T. E., Meyer, A., & Rose, D. H. (2012). *Universal design for learning in the classroom: Practical applications*. New York: Guilford Press.

Universal Design for Learning (UDL) is a set of principles and guidelines that aim to develop expert learners<sup>9</sup> by using a variety of teaching methods in order to lower barriers to learning and give all learners equal opportunities to succeed. By applying the principles of UDL in our FET programmes, we build in flexibility that addresses learners' strengths and needs.

The practices of UDL are grounded in decades of research in neuroscience, cognitive psychology, and applied learning science about the ways in which humans learn. The lecture style of teaching, in which instructors talk and learners take notes, ignores the vast variety among our learners. They come to FET with different levels of preparedness, from across the ability spectrum, and from as many different life circumstances as we can think of: their ages, national origins, career goals, gender identities, first languages, home situations, and many more.

Because we serve such a variety of learners among the wide variety of our FET programmes, we need a way to think about, design for, and teach them that

- keeps our learners motivated,
- offers them flexibility in how they learn with us, and
- grants them choices and control over their learning experiences.

UDL helps us to do this without making us change what we teach. This guidance will help you to apply UDL principles to your own FET practices.

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9 Expert learners are "purposeful and motivated, resourceful and knowledgeable, and strategic and goal-directed." See CAST. (2017). UDL tips for fostering expert learners. Available at <http://www.cast.org/publications/2017/udl-tips-fostering-expert-learners>.

# Meet Jennifer



Jennifer Lynch teaches dental and healthcare modules in Marino College of Further Education (Dublin). Her experience of applying UDL in her teaching practice began when she catalogued the characteristics of the learners who took her courses:

**“I often find that one of the most challenging aspects of being an educator is how to design and deliver curriculum for an increasingly diverse learner population. In Marino College of Further Education, we cater to a diverse learner population such as early school leavers, learners who recently completed their leaving certificate but missed out on their course of choice, single parents, those from poor or low-income families, foreign nationals, asylum seekers, and people with disabilities.”**

Jennifer made a connection between the variety of her learners’ situations and the approach she takes to designing the learning interactions in her courses:

**“What has become increasingly evident over the past few years is that the learning abilities of learners are extremely varied. UDL has taught me that all learners absorb, process, comprehend, and retain information differently. Understanding the key principles of UDL has provided me with a variety of strategies and resources to help meet their diverse learning needs.”**

This guidance will help you to think about your own interactions with learners. Along the way, you’ll work on thought exercises, reflection prompts, and guided creation tasks in order to give your learners paths to take that can keep them engaged, help them learn new information, and allow them to show what they know—and this work will save you time and energy in the classroom, as well.

In working through this guidance, your goal should be the same as Jennifer's. Once she understood the principles of UDL and made a conscious effort to incorporate them into her practice, she saw a positive change in her classroom.

**“Giving learners the option of how they would like to engage with the subject encouraged them to connect with the curriculum. It became very evident, quite quickly, that the learners began to understand the subject more. By allowing the learners to present evidence of learning in a format that they were comfortable with, it enabled more engagement, creativity, innovation, and independent thinking.”**

You will learn more about Jennifer's story toward the end of this guidance document. Meanwhile, take a moment to think about your own interactions with learners.



## Pause and Reflect

Think about the variability of the learners in your own FET setting and the various barriers to learning that might be present in your programme. Every learner encounters some barriers on their learning journey. Some barriers might be immediately obvious and overt, such as inaccessible classrooms or language barriers. But many less-obvious barriers to learning exist as well, like long commute times or scarce child-care resources.

Think about the barriers that you yourself might encounter, were you to be a learner in your own classroom. What tools, interactions, and resources would help you to overcome these barriers?

If you like, you can use the **Pause and Reflect Tool** to record some notes on your responses to the Pause and Reflect exercises throughout this guidance. This tool and the others developed to accompany this guidance can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).



## The Origins of UDL

Now that we've heard about Jennifer Lynch's experience of implementing UDL in her teaching practice, let's take a look at the origins of UDL and the theory behind it. First conceptualised in the 1960s, Universal Design (UD) is "the design of products, environments, programmes and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design."<sup>10</sup>

For example, many building entrances have sets of steps leading up to heavy doors with high handles, all of which are barriers to physical access for a range of users including wheelchair users, parents pushing buggies, the elderly, and delivery staff carrying large packages.

When building entrances are universally designed from the beginning with level entrances and automatic doors, then barriers are lowered. Access is much easier for everyone, including those with mobility difficulties.<sup>11</sup>

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10 United Nations General Assembly. (2007). *Convention on the rights of persons with disabilities. Resolution 61.106*. Available at [https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A\\_RES\\_61\\_106.pdf](https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_61_106.pdf).

11 The [Disability Act of 2005](#) led to the establishment of the [Centre for Excellence in Universal Design](#) that produces standards and resources for use in many sectors, including education. See [Universal design in education and training—Policy landscape in Ireland](#) (2020).

The Disability Act of 2005 defined the universal design of environments:

**“Universal design means the design and composition of an environment so that it may be accessed, understood and used (i) to the greatest practicable extent, (ii) in the most independent and natural manner possible, (iii) in the widest possible range of situations, and (iv) without the need for adaptation, modification, assistive devices or specialised solutions.”<sup>12</sup>**

The Disability Act 2005 also established the Centre for Excellence in Universal Design, which promotes the implementation of universal design across a wide range of sectors, including education and training.

UDL takes the goals of UD and applies them to the teaching and learning environment. It gives us a set of principles that can reduce barriers for all learners, including those with disabilities. It is a growing movement that recognises that there is no such thing as an average learner and that in order to reach and teach everyone, we need to give learners greater choice and agency in how they engage with our programmes, absorb learning materials, and interact with us as educators.

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12 Oireachtas Éireann. (2005). *Disability Act 2005*.14. Available at <http://www.irishstatutebook.ie/eli/2005/act/14/enacted/en/print.html>.

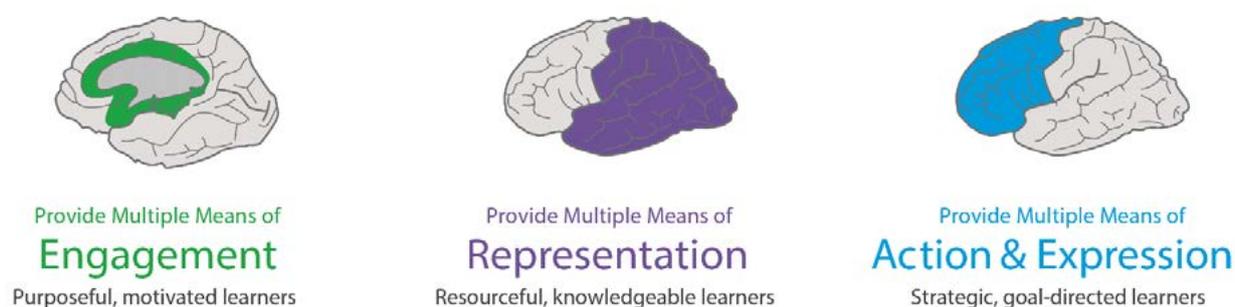
## UDL as a Lens: You and Your Learners Are the Key

Successfully implementing UDL requires you to reflect meaningfully on *your* teaching, for *your* learners, in *your* setting. It is not a case of doing X, Y, and Z in order to be somehow “UDL compliant.” Because UDL is a mindset and not a series of specific practices, it allows you to create opportunities for—and with—your learners, so that they have a say in how they learn.

Effective implementation of the UDL principles and guidelines looks very different in different settings, delivered by different practitioners with different skill-sets and to different cohorts of learners. It’s why UDL has been used effectively for more than 25 years in educational settings—from primary to postgraduate levels. So, think of UDL as a lens that can guide you in identifying areas where you can reduce access barriers for your diverse learners and support the development of their learning skills. In other words, rather than telling you what is best for your learners, the function of this guidance is to support you in engaging in meaningful reflection and consultation with your learners to decide what changes can create a more inclusive learning environment for all.

## The Three Principles of UDL

The three core principles of UDL support you as a practitioner to effectively respond to the variability in your classroom by incorporating variety, flexibility, and choice into how you design and deliver your programme. Figure 2 represents a high-level understanding of UDL.



*Figure 2 - The Three Principles of UDL (CAST, 2018, reproduced with permission)*

The three principles of UDL are:

- **Provide multiple means of engagement.** The “WHY” of learning concerns how practitioners make learning relevant and meaningful to the learner by giving them a variety of ways to engage positively with their programme. The aim of this principle is to create purposeful and motivated learners.
- **Provide multiple means of representation.** The “WHAT” of learning concerns how practitioners represent knowledge and content and offer choice to the learner in how they access and process learning. The aim of this principle is to create knowledgeable and resourceful learners.

- **Provide multiple means of action and expression.** The “HOW” of learning concerns how practitioners offer ways that learners can express themselves and demonstrate what they know in a way that works for them, as well as how they can plan to effectively use their knowledge to reach their learning goals. The aim of this principle is to create strategic and goal-directed learners.

UDL locates the source of barriers to learning in our learning-environment designs and teaching practices, rather than within learners themselves. David Rose, one of the originators of UDL, asks the question “what are the disabilities in your curriculum?”<sup>13</sup>

By implementing the three principles and the associated guidelines (explored in greater depth later in this guidance),<sup>14</sup> you can reduce access barriers to learning for all of your learners. But it’s not just about access.

The overarching aim of UDL is to create expert learners by developing a mastery of learning itself, which they can use successfully in future learning settings and in the world of work. In this guidance, we examine the three key principles of UDL and explore what the guidelines look like in practice in FET settings.

Note that while we look at the principles here in separate chapters, it is important to understand that all three overlap and connect. Actions that you take under one principle will support the others (e.g., if you add options for how learners can express themselves, they will likely feel more engaged in the learning process and feel more ownership over their studies).

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13 Rose, D. (2015). *Universal to personal: Teaching with universal design for learning in heart & mind*. Presentation to the UDL: A License to Learn Conference. Dublin, IE: AHEAD Ireland. <http://youtu.be/1b4o-n6f5S8>.

14 CAST. (2018). *The UDL guidelines*. Version 2.2. <http://udlguidelines.cast.org/>.

There is also a simpler way to think about UDL: the plus-one approach. Think about the interactions that you want your learners to have—with materials, with each other, with their instructors, with support staff, and with the wider world.

Is there only one way that those interactions can take place right now? Create just one more way: this is the plus-one approach, and it helps you to narrow your scope and effort when you apply inclusive practices like UDL. The ideal, of course, would be to design learning interactions in an inclusive fashion right from the beginning (and UDL helps us do that, too). But most of us are not designing brand-new interactions, so the plus-one approach helps us to focus our limited resources where they will have the biggest positive impact. You will learn more about the plus-one approach as you work through this guide.

# Development of the UDL Principles and Guidelines

The principles of UDL were developed in the 1990s by a group of Harvard University neuroscientists who created the organisation CAST.<sup>15</sup> The neuroscience that underpins UDL tells us that when we learn anything, we need to activate three key chemical pathways, or networks, in our brains.

Although this guidance won't discuss the details of brain chemistry, you should know that in response to the same situation or stimuli, everyone's brains will behave differently in terms of the levels and types of activities generated within these networks. We all react and respond differently to what we learn. These key networks of the brain are:

- **The affective network**, in the centre of the brain, which controls emotions and governs our motivation. This network decides whether we find something interesting, frightening, important, stressful, or joyful.
- **The recognition network**, at the back of the brain, which controls how we take in information from the outside world and make sense of it. This network decides how we categorise, interpret, and store information for later use.

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<sup>15</sup> Initially the Center for Applied Special Technology (CAST), the organisation dropped the expanded name and became just "CAST" in 2017. See <http://www.cast.org/about/timeline.html>.

- **The strategic network**, at the front of the brain, which controls how we act upon what we know. This network helps us to express ourselves and to plan, execute, and monitor useful actions based on the knowledge we have internalised.

Because these findings were strongly supported by research in the learning sciences, the scientists at CAST mapped the brain networks onto the three principles of the UDL framework, along with more specific guidelines and practice suggestions that you will encounter through the lens of specific FET practices in this guidance.

CAST's UDL principles are further expanded in a framework of nine guidelines, each of which is further detailed in multiple checkpoints.<sup>16</sup> There are a total of 31 checkpoints in the full UDL framework. In this guidance, you will encounter a selection of these checkpoints, selected and re-framed specifically for FET learners. After you have engaged with this guidance, a good next step is to engage with the full list of UDL checkpoints. A link to the full CAST UDL guidelines is included in [the UDL for FET Resource Hub at ahead.ie/UDLforFET](http://ahead.ie/UDLforFET).

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<sup>16</sup> CAST. (2008). Universal design for learning guidelines. Version 2.2. Available at <http://udlguidelines.cast.org>.

# UDL Principle



# Provide Multiple Means of Engagement

The first of the three UDL principles is to **provide learners with multiple means of engagement**. Regardless of our learning preferences, circumstances, and what we bring to learning interactions, we don't learn or retain anything unless we have a reason to learn it. Providing engagement that "clicks" with various learners helps them to answer the "why" question about learning. Learners come to FET programmes for a wide range of reasons. Their needs, motivations, goals, ability profiles, and cultural and linguistic backgrounds are very different. When we design our learning environments to be welcoming and flexible, learners are more likely to perceive that the learning we have to offer applies to them and benefits them personally.

FET has a rich history of innovation and learner-centred pedagogy. You can harness your existing strong practices by using UDL as a guide for intentionally creating interactions and a climate of inclusion. This section of the guidance will help you to look at your own practice and answer questions like:

- How can we pique the interest of our learners right away?
- What motivates learners to stay the course and succeed in our programmes?
- How can we help our learners to engage with their peers, with the college or centre, and with the community at large?
- Under what circumstances do learners feel that their contributions matter?

# Meet Helena



Before we look more in depth at the principle of multiple means of engagement, let's meet a FET practitioner who has used the principle to help her to meet challenges in her classroom.

Helena Farrell has taught Health Sciences courses for a number of years at Kinsale College, in County Cork. She recently completed a UDL course that helped her to address a challenge in her QQI-Level-6 Health Supervisory Management Skills programme.

The learners at Kinsale College have a few things in common. The majority of Helena’s learners live in rural areas, tend to be adult learners returning to education after raising families, and tend to struggle with confidence in their academic skills—perhaps because it has been a long time since they were last in classroom settings, or because they are dealing with (often undiagnosed) learning difficulties, or because their first language is not English, or a combination of challenges like these.

Within these commonalities, there is a wide variety in the backgrounds and levels of preparedness for study that learners bring to Helena’s programme. Helena teaches stay-at-home parents returning to education after raising their families, people looking to re-skill after becoming unemployed, as well as straight-from-school post-secondary learners. Helena’s learners in recent years have come from over 30 different countries, so cultural and language barriers have been issues, as well.

## Helena's Challenge



Figure 3 - Helena's Challenge

The challenge that Helena had was that, as part of the Health Promotion module in her Health Supervisory Management Skills programme, her learners often struggled with writing a healthy-lifestyle plan for a selected group of people. The module is designed to demonstrate learner skills at “raising community awareness of health-related issues and holistic approaches to health” and “establishing and evaluating health promotion programmes in work related areas.”<sup>17</sup>

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17 Quality and Qualifications Ireland (QQI). (2016). *Component specification NFQ Level 6: Health promotion 6N2214*. Available at [https://www.qqi.ie/sites/docs/AwardsLibraryPdf/6N2214\\_AwardSpecifications\\_English.pdf](https://www.qqi.ie/sites/docs/AwardsLibraryPdf/6N2214_AwardSpecifications_English.pdf).

## Why This Was a Challenge

Because Helena’s learners came from such varying backgrounds and circumstances, it was challenging to find a single way to motivate them all to get interested and engaged with the concepts in the Health Supervisory Management Skills programme.

For every learner who did well with the plan-writing assignment, many others submitted poorly detailed work, did not connect their work to the module’s learning outcomes, or struggled to respond fully in a written format. Helena spent extra time grading and offering feedback, and sometimes had to re-teach concepts and ideas to individual learners and to the entire group. Their lack of connection to the activity made it more like “busy work” than the engaging, connection-making experience that Helena wanted her learners to have. We’ll check in with Helena again later in this section.



## Pause and Reflect

Take a moment to think and express your ideas around the following questions as they relate to your own teaching:

- Over all of the times you have taught your programmes, what kinds of variability do you perceive among your learners? In other words, what ranges of variability seem to be present regularly?
- When was the last time learners expressed concerns about being able to engage with your programme? What were the barriers that prevented them from giving their best attention?

Remember, you can use the **Pause and Reflect Tool** to record some notes on your responses to the Pause and Reflect exercises throughout this guidance for later reference. This tool and others developed to accompany this guide can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).

Engagement can be complex or simple. It can be achieved in many ways by involving learners.



# Multiple Means of Engagement— The Guidelines

**Engagement can be complex or simple. It can be achieved in many ways by involving learners.**

CAST’s guidelines begin with the principle of providing multiple means of engagement for learners.<sup>18</sup> Within this principle are three practices that help learners to get access to learning, to build their own expertise, and to internalise their new knowledge and skills.

- Provide options for recruiting interest.
- Provide options for sustaining effort and persistence.
- Provide options for self-regulation.

The goal of providing learners with multiple ways of engaging is to give them a reason to want to continue learning, connecting their previous experiences in a meaningful way to the new ideas that we have to offer as FET practitioners. We want to develop purposeful and motivated learners and to create interactions that lower as many barriers as we can, by design.

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18 CAST. (2018). Universal design for learning guidelines. Version 2.2. <http://udlguidelines.cast.org/>.

## Provide Options for Recruiting Interest

“I tried to hide my difficulty with reading and writing. I was quite embarrassed about it. It took me a while to learn to trust the teachers and learner support. I left school very early ... and had a difficult experience. ... I think the relationship that learners have with teachers is very important. The support gives me courage.”

—FET learner

Your FET learners come from a wide variety of backgrounds and circumstances, and most of the barriers to learning that they face are invisible. No single method of getting them interested will work for everyone, so design your learning activities and interactions to provide at least two ways for learners to feel connected to the topics, ideas, and skills you are exploring with them.



Figure 4 - Options for Recruiting Interest

## Be clear about your learning outcomes and programme goals

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Not all learners have recent academic experience. The course-related language itself may present a barrier. Ensure that learners know what they are meant to do and understand the learning outcomes on which their work will be assessed. Ask your learners to describe the learning outcomes in their own words, and provide them with options to write, speak, or record.

## Make space for listening to your learners

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Because the learning outcomes of FET programmes are often fixed, it can seem to learners as though their choices for engaging with us are also fixed. By explicitly making time to ask how learners see and understand our fields and ideas—whether we are training beauticians, working with adult learners on basic literacy, or conducting web design courses—we discover together how our learners prefer to work with us.<sup>19</sup> Make sure to give your learners more than one way to join the conversation: speaking out loud, free-writing, recording a quick mobile-phone video, creating word-processed text, and so on.

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<sup>19</sup> This understanding helps us to implement the other two UDL principles: multiple means of representation and multiple means of action & expression. You will learn more about these in later sections of this guidance.

## **Explain the connections between your learning outcomes and your learners**

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Sometimes we forget to say out loud why learning this or that content is relevant for our learners. Use practical, real-world stories to illustrate why your learners should engage with you, and then help them to define for themselves why they should pay attention, care, and learn with you. Paint the bigger picture about options within your programme, and do so in more than one way: explain the connections aloud during class conversation and include similar written text in your class documents.

## **Create a safe learning environment**

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One of the biggest barriers that many FET learners have relates to their confidence in their learning skills. Whether they have been away from the classroom for a while, a language barrier exists, or a disability necessitates working differently than others, nearly all of our learners feel at one time or another as though they might be embarrassed by not knowing how to respond in various situations. Ask your learners to collaborate on a code of respectful learning behaviours for your classroom, and encourage them to feel comfortable expressing themselves, asking questions, and clarifying uncertainties—all in various formats.

## **Use repeating routines to make learning feel manageable**

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Create predictable in-class routines like opening each lesson with the stated goals of the session and closing it by highlighting next-step learning actions for learners to follow up on the lesson content. Knowing what types of interactions may feature in class, and getting familiar with how to engage with them, will help your learners to feel at ease and minimise distractions and anxieties which prevent them from participating to their best ability. Use schedules and cues that increase the predictability of recurring tasks so that your learners know what's coming next.



## Get Started

Take a few minutes and think about the courses and programmes in which you teach. Think of a single interaction (e.g., a lecture topic, class reading, in-class activity, or individual-practice task) where you perceive that your learners lose interest with you, or never spark a connection in the first place.

For that interaction, sketch out a plan for strengthening the connection between your learners and the learning you want them to acquire. When you are finished reading this guidance, the **Starting Small with UDL Tool** can help you to quickly get started implementing each UDL principle and can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).

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## Provide Options for Sustaining Effort and Persistence

**“I feel that the social support really helped, too, because I had been really isolated before I came to college and was afraid of meeting new people. In the ... course, we were brought for coffees and visited art galleries. ... This support really helped me, and I would really like to see more of that in other courses because, for everyone, the social part can be difficult.”**

*—FET learner*

Once your learners start engaging with the course content, with each other, with you as the instructor, and with the wider world, the next challenge is to help them to stay with the hard work of learning. The aim is to give your learners more than one way that they can understand learning goals, create and find communities to help keep them going, and feel that they are making progress toward mastering the skills and knowledge contained in your learning outcomes.



Figure 5 - Options for Sustaining Effort and Persistence

## Check often for understanding and progress

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Throughout your activities, units, and modules, ask your learners to communicate in their own words what they are supposed to be doing—and why. Review the lesson outcomes together. Ensure your learners understand the field-specific terminology. Ask them what they are supposed to have accomplished at certain points throughout their study and work, and compare it to your suggested progress indicators. Work together with learners to address gaps and misunderstandings. Let your learners tell you all of these things in more than one format.

## **Show learners how to collaborate well, even when they are working alone**

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This seems like a paradox. Show your learners what sorts of collaborative behaviours are expected and helpful, even when working on individual assessments of skills. These are things such as studying together with classmates, asking classmates for clarification or their own understanding of ideas, and mentoring one another on good study habits and skills.

## **Encourage learners to set up and run groups when they value them**

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Set up group activities as possibilities, not mandatory structures. Create safe environments for peer mentoring, discussion forums, and cooperative learning. Ask groups, when they do form, to design their own working codes.

## **Give formative feedback frequently**

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Formative feedback is given while a given project, assessment, or assignment is still in progress. Unlike summative assessment that happens after learners complete tasks, formative feedback doesn't need to be tied to grades, and can be quite brief. Focus on showing how learners are meeting milestones and building new skills on good foundations. Suggest how learners can productively address challenges and gaps. Encourage self-reflection, peer review, and process awareness—and provide your feedback in multiple ways, so that learners can select how they wish to take in your ideas from moment to moment.



## Get Started

Think of a learning interaction where your learners sometimes misunderstand the purpose of the interaction or parts of the instructions.

Record at least two ways that you can check on their understanding, provide structure for reaching out to friends, and share your feedback in quick help-them-right-now segments. You will thus come up with a total of six strategies.

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## Provide Options for Self-Regulation

“I liked that I knew I could contact you if I had a problem with anything. You gave me your email address at the start of the year and showed me how to make appointments with you. We met lots throughout the year and it was good. I got to do all of my exams on a computer, which is best for me.”

—FET learner

Self-regulation goes far beyond just good time-management skills. A big part of FET learner success is adopting the mindset of capability. The goal for self-regulation is to create learners who expect and believe that they are capable of successful practice with us, who have useful coping strategies for meeting challenges, and who can assess their own practices with a reflective perspective.



Figure 6 - Options for Self-Regulation

## Reflect your learners

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Ensure that the learners can see themselves reflected in your practice by using stories and pictures of learner success from a diverse range of learners. Even better, ask for (and document) their permission to collect the work that your learners are doing now, and then share it with your future learners.

## Show struggles

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Show how you, as an expert in your FET subject, go through the process—from not-knowing to curiosity, experimentation, practice, and eventual expertise. Be explicit about everyone starting from a beginner position, and treat learner mis-cues, mistakes, and misunderstandings as opportunities for growth rather than progress-ending errors. Say this out loud, write it in your documentation, and show success as a product of hard work that can take many paths.

## Give learners coping examples

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Share how you approach problems and challenges. Address together with your learners how to handle common barriers like interruptions in child care, illnesses in the family, a dip in motivation, or car trouble. Help them to decide ahead of time how they would handle competing deadlines in multiple classes, and how they can stay motivated to follow the progress of work and learning you have set for them. Send reminders and set expectations together with your learners.

## Chunk learning

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Remember that practitioners often understand complex ideas and processes by grouping related elements and steps together. It can be hard to break them back apart when we explain them to our learners. Break up your lectures into their smallest pieces. Show the connections and logic among those pieces. Pause after each discrete element to check with learners. Provide learners with scaffolds such as templates, to-do lists, and exemplars—in more than one format. Encourage self-assessment, too, by providing checklists and encourage learners to develop their own assessment criteria and mechanisms.



## Get Started

Think of a time when one of your learners just stopped responding in the middle of one of your courses. Why did that happen (if you don't know for certain, take your best guess)?

List at least one way that you can help learners ahead of time to plan for common challenges and believe that they are capable of meeting them. Then think of one more way that you could get the same message of support across to learners.





## Pause and Reflect

Take a moment to think and express your ideas around the following question as it relates to your own teaching:

- As you have been planning multiple ways for recruiting interest, sustaining effort and persistence, and self-regulation in this section, which one approach or action seems like it will have the most immediate impact for you and your learners?

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**Hearing and responding to learners is a key to increased engagement. Just listening and providing options makes effective improvements to their experience, even if it is not always possible to grant them everything they want.**

.....



## How Helena Addressed the Challenge with UDL

Now, let's check in again with Helena. After undertaking a course on UDL, Helena knew that engagement with, and for, our learners is an area of existing strength among FET practitioners. We are already invested in knowing our learners and wanting to see them succeed. Helena incorporated good engagement practices into the Health Promotion module in her Health Supervisory Management Skills programme, based on the UDL principles.

Helena explored the twenty-two learning outcomes for the assessment and worked backward from them. The learning outcomes included the following:

- Explain how food is converted into energy and identify the factors that can affect the energy requirements of an individual: weight, height, and exercise level.
- Outline current diet guidelines and explain the link between exercise and well-being.
- Demonstrate a basic knowledge of substance and drug abuse.
- Demonstrate awareness about common illnesses in the population: emphysema, COPD, asthma, diabetes, heart disease, etc.
- Identify health issues in the local community.
- Identify key agencies at local and national levels (e.g., medical, social, education, religious, and sporting).

- Demonstrate the importance of being a positive role model in promoting a healthy lifestyle in others.<sup>20</sup>

Recognising that QQI allows for assessment evidence to be submitted in various formats<sup>21</sup>—not just as written text documents—Helena re-wrote the healthy-lifestyle plan assignment:

The learner is required to devise a healthy lifestyle plan for a chosen group (e.g., menu, exercise plan). This plan may be carried out as an individual or a group exercise.

The plan must include:

- Research
- Rationale
- Plan
- Implementation
- Review and evaluation
- Recommendations

Evidence for this assessment technique may take the form of written, oral, graphic, audio, visual, or digital evidence, or any combination of these. Any audio, video, or digital evidence must be provided in a suitable format.<sup>22</sup>

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20 Quality and Qualifications Ireland (QQI). (2016). *Component specification NFQ Level 6: Health promotion 6N2214*. Available at [https://www.qqi.ie/sites/docs/AwardsLibraryPdf/6N2214\\_AwardSpecifications\\_English.pdf](https://www.qqi.ie/sites/docs/AwardsLibraryPdf/6N2214_AwardSpecifications_English.pdf).

21 Quality and Qualifications Ireland (QQI). (2013). *Quality assuring assessment guidelines for providers*. Available at [https://www.qqi.ie/Downloads/Quality Assuring Assessment - Guidelines for Providers: Revised 2013.pdf](https://www.qqi.ie/Downloads/Quality%20Assuring%20Assessment%20-%20Guidelines%20for%20Providers%20-%20Revised%202013.pdf).

22 Farrell, H. (2019). *Health supervisory management skills programme syllabus*. n.p.

Helena also taught her learners about the concept of UDL so they would understand why she was giving them choices in the activities and assessments, and so that they would better understand the learning process itself.

Then, she listened to the learners. Helena arranged world-café-style meetings with them to collaborate and brainstorm. The learners collectively chose to have a Health Promotion Week as a forum where they would provide written, audio, and digital materials. Helena could thus assess all of the learning outcomes via one single event.

This collaborative approach with the learners encouraged them to understand better what learning outcomes are and to unpack the process of learning itself. For example, Helena's learners interpreted the learning outcome "Identify health issues in the local community" as college participation in healthy behaviours. Some learners designed and implemented a survey, gathered data, and identified the focus areas for Health Promotion Week (see Figure 7 below).

Helena's learners reported extremely positive experiences while working on the Health Promotion activity. Forty percent of her learners who completed the module speak a language other than English as their first language. The inclusion of an intercultural day within the Health Promotion Week provided them with an opportunity to celebrate their own cultures, meet the assessment criteria, and achieve a sense of belonging within the Health Supervisory Management Skills programme, as well as a feeling of community participation within the college as a whole.

Learners were very proud of their achievements. The Health Promotion Week allowed them to meet the module’s learning outcomes using varied assessment techniques that were judged using the same criteria regardless of the way in which the learners chose to demonstrate their knowledge. Learners reported that they felt valued and that the collaboration provided them with a sense of ownership over their learning and motivation beyond just earning a grade, which was very important to them.

*Helena applied the engagement principle by...*



Figure 7 - How Helena Applied UDL



## Pause and Reflect

Take a moment to think and express your ideas around the following questions as they relate to your own teaching:

- Helena provided multiple means of engagement for her learners in one activity in her course, by involving them in the decisions and planning for that activity. In your own teaching, identify an interaction where your learners are currently the least engaged—where they drop out, do poorly, or do the minimum possible.
- What is one way you could expand opportunities for engagement in that activity?



## Simplifying the Principle

Helena’s UDL success story and the three aspects of the UDL principle of multiple means of engagement (provide options for recruiting interest, for sustaining effort and persistence, and for self-regulation) can be simplified to a single approach.

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**Engagement works best when it is built in collaboration with learners. Ask them.**

.....

Without UDL, we would constantly have to think back to how previous learners stayed engaged with our courses and programmes, or make our best guesses about how to design interactions to link learner engagement to the ideas and practices we wish to share with them.

Instead, we should always actually ask our learners to share their experiences and challenges with us in a supportive environment. Why does this work to improve learner success?

We make connections, become engaged with, and pursue subjects that relate to our life stories. With the goal of making our curriculum relevant for learners and building resilience in learners, “providing multiple means of engagement will help you to do this more effectively.”<sup>23</sup>

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23 Novak, K. (2016). *UDL now!: A teacher’s guide to applying universal design for learning in today’s classrooms*. Boston, MA: CAST Professional Publishing: 22.

As you have seen, FET learners vary widely: they are stimulated by different things and are motivated to learn for different reasons. They pay little attention to information that does not interest them or is not relevant to their needs—this is true of all individuals.<sup>24</sup> So, setting up multiple ways that we can connect with our learners is important to identifying their interests and needs. And to do that, we should just ask them.

Helena started her UDL journey by getting the learners themselves involved in the planning process and ensuring that they understood there were many choices and options available to them. This collaboration gave her learners a deeper and more personal understanding of the learning outcomes of the course. They demonstrated the learning outcomes in meaningful ways that gave value to their own experiences and helped them to take on leadership roles and transferable skills that they can bring to the workplace.

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24 Smallwood, J. et al. (2004). Subjective experience and the attentional lapse: Task engagement and disengagement during sustained attention. *Conscious and Cognition*, 13(4), 657-690. DOI:[10.1016/j.concog.2004.06.003](https://doi.org/10.1016/j.concog.2004.06.003).

## Summary

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**What is clear from learners’ responses to practitioner evaluations highlighted in this section is that FET learners value their positive relationship with their teachers, especially when they felt listened to, when they benefited from instructors’ understanding, and when they were able to use the supports provided to them to stay motivated and engaged.**

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Recent research on FET programmes<sup>25</sup> highlights that authentic relationships with learners are an existing area of strength in the FET sector.

Listening and responding to learners is a key part of engagement and in making effective improvements to their experience, even if it is not always possible to grant them everything they want. Research also highlights the importance of authentic relationships with learners and responding to their feedback<sup>26</sup> as keys to success.

A study of higher-education learners on their views about exceptional teachers highlighted “kind”, “caring”, “encouraging”, and “approachable” as traits that learners say support their success.<sup>27</sup> Collaboration and authentic partnerships with learners are significant drivers of learner engagement.

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25 McGuinness, S. et al. (2018). *Evaluation of PLC Programme Provision*. ESRI Research Series 61. Dublin, IE: SOLAS. Available at [https://www.solas.ie/f/70398/x/83dc934f29/esri\\_plc\\_evaluation.pdf](https://www.solas.ie/f/70398/x/83dc934f29/esri_plc_evaluation.pdf).

26 Boud, D., & Molloy, E. (2013). Rethinking models of feedback for learning: The challenge of design. *Assessment & Evaluation in Higher Education*, 38(6), 698-712, DOI: [10.1080/02602938.2012.691462](https://doi.org/10.1080/02602938.2012.691462).

27 National Forum for the Enhancement of Teaching and Learning in Higher Education. (2019). *Making a difference: A student view of excellent teaching*. Available at <https://www.teachingandlearning.ie/publication/making-a-difference-a-student-view-of-excellent-teaching/>.

“Learners as partners” is a reciprocal process through which all participants have the opportunity to contribute equally, although not necessarily in the same ways, to curricular or pedagogical conceptualisation, decision-making, implementation, investigation, or analysis.<sup>28</sup>

When asked directly, learners have the opportunity to provide clear and articulate answers about what engagement in learning means to them.

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28 Cook-Sather, A., Bovill, C., & Felten, P. (2014). *Engaging learners as partners in learning and teaching: A guide for faculty*. New York, NY: John Wiley & Sons: 7.

# Meet Vivienne



Vivienne Doherty works as a Coordinator for a Back to Education Initiative (BTEI) course in Donegal. All new BTEI learners must take the Induction session to the course, which, to date, has been delivered as a verbal lecture that many learners found lengthy and boring.

Vivienne reflected on how she herself would want to be welcomed to a course. She re-designed the Induction session in order to make it more engaging—and even a bit fun.

She changed the layout of the room from rows of chairs to a more interactive physical space, using the guideline of providing options to recruit interest. Her classroom now has clusters of a few seats together, a small circle of chairs, and, yes, still a few rows of desks in the traditional pattern. On first entering the space, learners could choose to be in places where they felt more comfortable.

Vivienne also introduced short “hello exercises” in which learners paired up, introduced themselves, and found out three things about each other. Pairs of learners then introduced their partners to the rest of the class. Learners had multiple options for how they discovered the three details about each other: talking out loud or writing down an introduction for their partner to share. Having a “buddy” in the classroom helped to create a sense of belonging right away.

In addition to the verbal lecture content, Vivienne introduced short videos on the BTEI programme and set up interactive group activities to discuss learners’ individual goals for doing the course. Given challenges such as time management, learners used either a paper or electronic copy of the course’s *Learner Guidance* to find solutions for staying engaged.

Vivienne used Mentimeter,<sup>29</sup> an interactive presentation software application, to gather anonymous feedback in a fun and engaging way. This exercise lowered a barrier for learners to stay engaged by allowing them to express fears and concerns about their learning process without having to “out” themselves.

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29 Mentimeter® (2020). <https://www.mentimeter.com/>.

Vivienne's learners really benefited from the re-designed Induction session. They found it welcoming, fun, and interactive. Learners felt more positive about their experience of the course, as well as more engaged with the other members of the class. They also found the *Learner Guidance*—a resource that previously went largely unread—to be more understandable and easier to use.

Vivienne found that her UDL-based changes around the issue of engagement made the session more meaningful and more enjoyable not only for the learners, but for her, too. The interactive discussions that asked learners to share in the decision-making and socialisation for the course enabled Vivienne to find out far more about what the learners wanted from it, and that helped her to respond not only to her learners' content needs, but also to how they worked through the process of being learners together.

## Reflection and Practice

Providing learners with multiple means of engagement is the first principle of UDL. Learner engagement is influenced by many factors: their cultural backgrounds, their prior experience in learning environments, as well as the options and choices that we provide within our programmes, colleges, and centres.

This UDL for FET guidance provides you with non-prescriptive tools to help you to identify barriers in your learning environments, and to affirm your current good practices in involving learners in making choices in your interactions.



Review your responses to the thought and reflection exercises throughout this section of the guidance.

Put together a plan for increasing the ways in which you encourage and support your learners' engagement in just one of the learning interactions that you have with them, whether it's an individual activity, a module, or an entire programme.

The goal is to lower the barriers to learners getting involved, engaged, and motivated to learn with you.

Then, take action: share your plan with a colleague and commit to implementing your changes and sharing the results with your colleague.





## Growing Your Practice

When you want to expand your engagement practices, it helps to collaborate with colleagues and think beyond the classroom and courses. What interactions do your college or centre offer to learners, but seem under-utilized? Identify ways to “plus one” those interactions by asking learners to tell you about their experiences or by experiencing the interactions yourself from a learner perspective.

For example, think about how learners choose to study with your college or centre in the first place. Visit your own web site and try to connect with someone who could answer questions from prospective students. Ask your tutor colleagues about how they reach out to learners and keep them motivated to continue and strengthen their studies. Any interaction that learners have with staff members or instructors is a place to apply UDL, not just the classroom.

Once you are finished reading this guidance, the **Starting Small with UDL** and **Grow Your UDL Practice Tools** can help you to quickly get started with UDL and/or further develop your UDL practice. These tools can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).



## No Tech, Low Tech, High Tech

Engagement is the first step in learning, regardless of whether it takes place in a classroom, in a lab, or remotely via learners' mobile devices and computers. As you design interactions for your learners, think about ways to spark their interest, keep them going, and help them manage their efforts.

A no-tech example is to minimise distractions. Vary the number of concepts that learners will work on at one time, and provide breaks for discussion and reflection. Create class routines and use schedules and cues that increase the predictability of recurring tasks.

Low-tech methods for engagement include things like giving briefer, more frequent feedback that focuses on progress rather than absolute grades or final assessment. Share your thoughts with learners via mobile-device text or in your virtual learning environment (VLE), rather than saving up feedback only for major activities.

Help learners to strengthen their attention and study skills with high-tech tools like self-quizzing apps and time-management apps. You can find more no-tech, low-tech, and high-tech UDL ideas, examples, and resources [in the online Resource Hub at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).



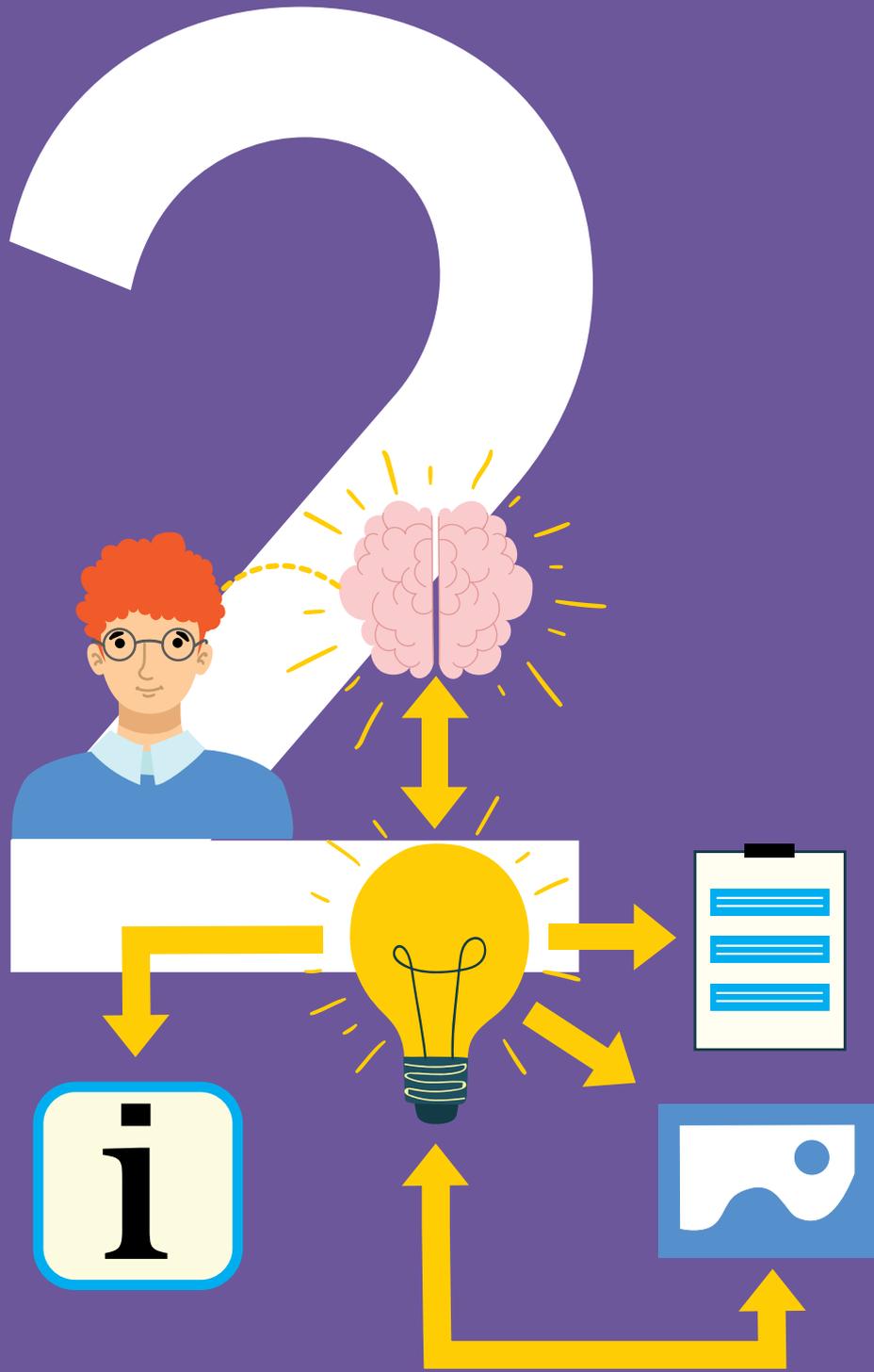
The big take-away about providing multiple means of engagement is that when we give our learners choices about how they can get started, stay focused, and sustain their effort and attention, they can use that sustained attention to ‘level up’ from being just rote memorisers to becoming more active explorers—if our goal is to create new practitioners in our fields, starting with engagement shifts our whole mindset from ‘teach them ideas’ to ‘prepare them to be colleagues.’

Remember, too, that there are a host of national, European, and international policies, laws, and practices that support inclusive education approaches like UDL. To learn more about UDL in these contexts, see the *Conceptual Framework of UDL for FET* and CEUD’s *Universal Design in Education and Training* publications.<sup>30</sup>

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30 Quirke, M., & McCarthy, P. (2020). A conceptual framework of universal design for learning (UDL) for the Irish further education and training sector: Where inclusion is everybody’s business. Dublin, IE: SOLAS & AHEAD Ireland. 49, 55-57. Available at <https://www.solas.ie/f/70398/x/b1aa8a51b6/a-conceptual-framework-of-universal-design-for-learning-udl-for-the-ir.pdf>, and Centre for Excellence in Universal Design (CEUD). (2020). *Universal design in education and training—Policy landscape in Ireland*. Available at <https://bit.ly/32qMWLg>.

# UDL Principle



# Provide Multiple Means of Representation

The second of the three UDL principles is to provide multiple means of representing information. This is what most of us think about when we say “accessibility”: providing alternative formats for information and content, such as captions for videos, transcripts for audio files, and alternative text to describe images.

In the design of our FET educational content, it can feel like we have to cover all of the possible ways that learners might need to experience it: text, audio, visuals—tactile formats, too. Remember, though, that UDL is about lowering access barriers and creating expert learners.

We don’t need to anticipate every possibility, and we do not have enough time, people, and funding to do so, anyway. Rather, think about the materials that you and your learners use regularly. Is there only one way to take in that information right now? Then create just one more way: this is the plus-one approach that you read about earlier.

In classrooms of the past, it was more difficult to provide information in various ways. These days, it’s much easier to help learners to increase their fluency and competence with a number of formats, especially by offering them choices in how they receive and understand the content, ideas, and information that we have to share.

By presenting content in multiple and flexible ways, more learners have the opportunity to study, take in information, practice, and learn. The learning outcomes for our FET programmes are fixed, but how we guide learners toward those outcomes is usually not.

This section of the guidance will help you to answer questions like these in your own FET practices:

- How can we help learners to find time for study away from our classrooms?
- What formats do learners already use for formal and informal learning in their everyday lives?
- How can we expand access to materials and information to meet learners where they are?
- Without reducing the complexity or rigour of our content, how do we lower barriers for getting access to it in the first place?

# Meet Dave



Over the course of ten years, Dave Mulvaney has taught a number of subjects for the Crumlin Youthreach centre in Dublin: mathematics, information technology, biology, and bookkeeping.

Dave came to Youthreach from a varied and successful career. After studying for three years to be an accountant, he changed course and became a chef, working for twenty years at the highest levels of the catering industry.

In 2010, Dave began teaching catering for Crumlin Youthreach. When the mathematics position became vacant, he took that on, as well. Now, he has left the catering role and focuses on mathematics and IT. In 2016, Dave was voted Teacher of the Year<sup>31</sup> by the Youthreach learners.

Dave's learners wanted to become successful high achievers, despite a number of barriers that many learners throughout the Youthreach system have experienced in their previous primary and secondary learning. One learner recalled his previous experience of school:

**“I just didn't like it. I just didn't like the teachers [in my secondary school]; I couldn't get along with them.”<sup>32</sup>**

—Youthreach learner, Moy centre

Learners in Youthreach programmes are young people, aged 16 years and older. Many of them are from disadvantaged backgrounds. Some dropped out of school initially because of bullying, because they simply hated their experiences, or because they saw no value in it for themselves.

Other learners have had traumatic experiences that interrupted their cognitive development and education. Previous negative experiences of school can leave learners feeling vulnerable when they enter new education environments.

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31 City of Dublin Education and Training Board. *Great things ahead for class of 2016*. Available at <http://cityofdublin.etb.ie/latest-news/great-things-ahead-class-2016/>.

32 Smith, E. et al. (2019). *Evaluation of the National Youthreach Programme*. ESRI Research Series 82. Available at <https://www.esri.ie/publications/evaluation-of-the-national-youthreach-programme>.

“If I did something small, like, I—I’d just get turned around the place; they weren’t really helping me in there. They were just throwing me into the back of the class and just leaving me there, basically.”<sup>33</sup>

—Youthreach learner, Bann centre

Some of Dave’s learners had likewise adopted a “hard” attitude in school in order to protect themselves against the fear of failure. Because they pushed back against their teachers, they were labelled as trouble. That attitude often masked a more basic challenge: struggles with understanding and taking in print-based information.<sup>34</sup>

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<sup>33</sup> *Ibid*, 60.

<sup>34</sup> Carson, D. (2017). *The influence of college readiness and institutional intervention upon intention to persist among GED credentialed community college learners*. Doctoral dissertation. Iowa State University. <https://lib.dr.iastate.edu/etd/15274/>.

## Dave's Challenge

Dave's learners came to him with varied levels of preparation, literacy, and numeracy. Many of them had low expectations, poor self-esteem, and negative past experiences of schooling. Some spoke Arabic, French, and Spanish as their first languages, making learning in English challenging. It was no wonder that such learners expressed their distrust by dropping out as soon as they felt overwhelmed or that they could not cope.



*Figure 8 - Dave's Challenge*

Dave teaches mathematics, a concrete and systematic area of learning that can seem remote from the everyday lived experiences of his learners. For every learner who takes Dave's course to lay the groundwork for a possible career in software development or game design, there are dozens more who don't have clearly defined goals and don't know why Dave's maths course should be important to them.

## Why This Was a Challenge

Because Dave’s learners had few ways to connect the information he taught to their lived experiences, and because a significant number of them struggled with literacy and numeracy issues, Dave spent a lot of time re-teaching concepts and ideas, and engaged in a lot of one-to-one tutoring. This had a good effect, but there is only one of Dave, and he could not consistently provide individual help to every struggling learner.

When he surveyed his maths learners, Dave discovered that most of them were not doing the reading and practice problem sets that he had assigned, and so were coming to class unprepared. Dave realised that his “trouble” learners were disrupting his classroom and tuning out because they struggled to understand—and some thought they were even incapable of understanding—the information that he had to share.

Dave’s challenge, then, was to find any way to make his content understandable to his learners. An often-used teaching method for maths is to ask learners to read sample problems, work through them alone, attend classes, and then perform on tests. Learners who struggled at any point in this progression often just gave up.

Dave wanted his learners to be better prepared for in-class time and to take a more active role in their own learning, so he began to think about how he could help his learners to study and prepare in a more meaningful way. He recognised that many of his learners gave up because they struggled with reading the text-based problems and understanding the way that the mathematical symbols work in the largely print-based materials that he assigned.

Further, Dave observed that his culinary-arts learners had far fewer instances of giving up. They came to class prepared more often, even though they came from similar backgrounds and struggled with similar issues as his pure-maths learners. What was the difference? Part of the answer is likely in one of your kitchen drawers. We'll check in with Dave again later in this section.



## Pause and Reflect

Take a moment to think and express your ideas around the following questions as they relate to your own teaching:

- How often do learners come to you saying that they are “not good at” your subject because of their previous experiences?
- When you assign out-of-class readings or otherwise ask learners to prepare ahead of time for your interactions together, what percentage of them typically arrive to class fully ready to take an active part?

If you like, you can use the **Pause and Reflect Tool** to record some notes on your responses to the Pause and Reflect exercises throughout this guidance for later reference. This tool and others developed to accompany this guide can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).



# Multiple Means of Representation— The Guidelines

Think of how you use a search engine to find online information. You enter search terms, and then you select from among the videos, web pages, downloadable texts, and audio clips to find one that fits your needs best. In everyday situations, we often switch among available content formats until we find one that works for us. Having the choice of formats means we are more likely to stick with our inquiries.<sup>35</sup>

Fortunately, our FET programmes don't need to cover every possible way that learners could use materials. Just two formats will do quite nicely: the plus-one design concept again.

CAST's guidelines include the principle of providing multiple means of representing information.<sup>36</sup> Within this principle are three practices that help learners to know what they are studying, to take in information effectively, and to understand what it means and connect it to their existing knowledge.

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35 Lesgold, A. M. & Welch-Ross, M. (2012). Motivation, engagement, and persistence. In *Improving adult literacy instruction: Options for practice and research*. Available at <https://www.nap.edu/read/13242/chapter/7>.

36 CAST. (2018). *Universal Design for Learning Guidelines*. Version 2.2. Available at <http://udlguidelines.cast.org/>.

- Provide options for perception.
- Provide options for language, mathematical expressions, and symbols.
- Provide options for comprehension.

The goal of providing learners with multiple representations of information is to give them the best chance of being prepared and understanding the subjects that we teach in our FET programmes. We want to create learners who are confident in their study habits and foundation-level knowledge. And we want to create materials that lower as many barriers as we can, by design.

## Provide Options for Perception

“I was able to go home and look at the video clips for maths over and over.”

—FET learner, Cork ETB

Think about the last time you saw closed captions playing on a television. Chances are it wasn't that long ago. In places where the TV sound would be intrusive or hard to hear, such as pubs, gyms, hospital waiting rooms, and airports, the closed captions provide us with access options without anyone having to ask for it. That is our goal for making content and materials perceivable in more than one way. Just providing a plus-one option allows our learners a better chance of being able to get access to our content and understand it, without having to take any special action first.

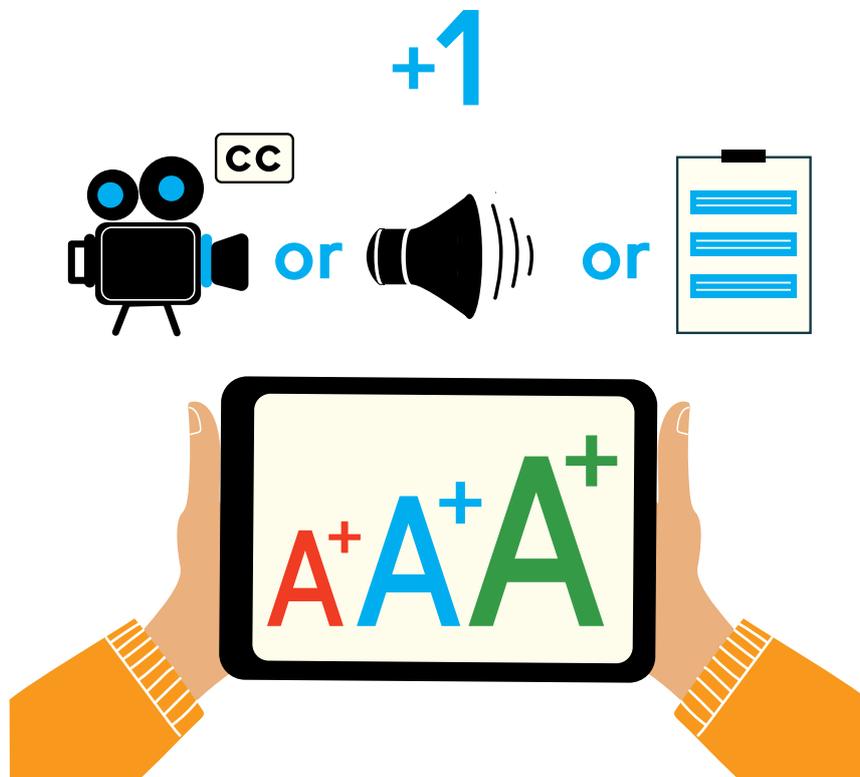


Figure 9 - Options for Perception

## Provide alternatives for visuals and audio

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When you present or share information with your learners, give them at least two formats from which to choose. If this sounds like a big task (if you are retro-fitting existing materials, it can be), start by creating plus-one alternatives to support interactions where things consistently don't go the way you had planned, and then expand from there in future offerings of your programmes. And when you create new documents and content, adopt the plus-one approach from the start.

## Offer ways to customise the display of information

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Many of the tools we use routinely, such as web browsers, the learning management system (LMS), our mobile devices, and common software, have alternative-access features. Most of us—instructors and learner alike—don't know much about them. Work with your colleagues and find out how to change things like fonts, colour schemes, playback speed, and volume for the materials you share with your learners, and then give them step-by-step directions for how to make such changes.



## Get Started

Take a few minutes and think about the concepts, ideas, and practices with which your learners often struggle. Select one that is currently supported by materials that exist in only one format (or that you speak out loud during class, but for which there are no materials yet).

For the concept or idea that you select, draft notes for making an alternative version, providing a way for learners to customise how they perceive the information, or how you will offer them plus-one access to the information through the use of high-, low-, or no-tech alternatives.

When you are finished reading this guidance, the **Starting Small with UDL Tool** can help you to quickly get started implementing each UDL principle and can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://theonlineResourceHubthataccompaniesthisguidanceatahead.ie/UDLforFET).

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## Provide Options for Language, Mathematical Expressions, and Symbols

Your learners come from different backgrounds, use different spoken and written languages, and have different past experiences of education. The technical and occupational language specific to your field, as well as the ways that you express ideas, problems, and solutions—all contribute to your learners' sense of belonging or exclusion in your classroom.



*Figure 10 - Options for Language and Symbols*

## Clarify syntax and structure

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Good teachers help their learners to understand complex ideas and practitioner jargon by using simpler language at first, then tying it to deeper and more complicated ideas and terms as the group moves forward together. Far from “dumbing down” their work, this mental scaffolding provides your learners with a clear understanding of how professionals in your field actually do their work.

Make it easier for your learners to follow and remember information by breaking it down, putting it into context, using memory-aid practices, and creating options for how they can interact with the information you are sharing. Show the structure of information, and share how you created it.

## Clarify vocabulary and symbols to be used

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We all understand the directions for our own assignments, tasks, and classroom practices: we wrote them! That does not mean that our learners get the same information that we intend. Because we are experts and practitioners in our fields, we assume knowledge that beginners and early practitioners don’t have yet, and we do so unconsciously.<sup>37</sup> Highlight new vocabulary and symbolic concepts for learners.

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<sup>37</sup> Fisher, M., & Kiel, F. C. (2015). The curse of expertise: When more knowledge leads to mis-calibrated explanatory insight. *Cognitive Science*, 40(5), 1251-1269. Available at <https://cogdevlab.yale.edu/sites/default/files/files/Fisher2015.pdf>.

## **Check with your learners for their understanding on a regular basis**

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In addition to explaining the meanings and context for the words, symbols, and visuals that we use in our fields, ask your learners to explain your assignment directions, for instance, in their own words. Where you find gaps, have the conversation with your learners and re-write, re-frame, or add context.

## **Adopt technologies that create alternatives for language and symbols**

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Software such as voice recognition, language-translation software, and immersive-reader programs can give learners access to content in alternative ways. There are many free apps and programs that run on learners' mobile devices which can support their understanding of language and symbols. Don't forget about low-tech and no-tech alternatives, as well: use 12-point or larger sans-serif fonts on handouts and worksheets, and demonstrate live practices with pauses for note-taking and reflection.



## Get Started

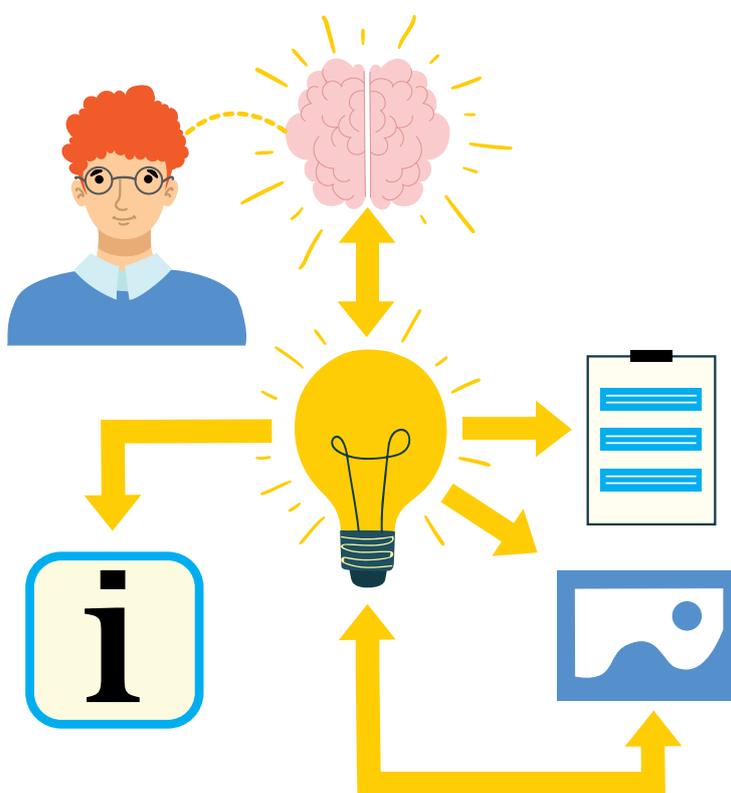
Think about an assignment, class activity, or test question where a good portion of your learners create responses that are off the mark, where they appear to be responding to a different assignment or providing an incomplete response.

Ask a colleague outside your subject area to experience the same activity and provide you with feedback about what words, concepts, symbols, and language might be challenging or require foundation-level knowledge. Test any changes you make by sharing the “before” and “after” versions with your learners and ask for their comments and input.

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## Provide Options for Comprehension

Our FET learners have varying levels of the prerequisite skills that they will need in order to build their understanding in our programmes. Wherever possible, uncover the “hidden curriculum” that lies behind the choices and practices that we ask our learners to do for us. Support them to make connections between what they already know, their expectations, and the learning outcomes of your programme.



*Figure 11 - Provide Options for Comprehension*

**Activate or supply background knowledge**

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Barriers exist when some learners lack the background knowledge for assimilating or using new information—or when they have the necessary background knowledge, but don't know that it is relevant. Give your learners options that supply or activate relevant prior knowledge, or link to the pre-requisite information elsewhere, such as;

- “anchoring” instruction by using both spoken and visual content, or by establishing concept mastery routines (“do this in order to study this idea”);
- using advanced organisers like concept maps and KWL (Know, Want to Know, Learned) inquiries;<sup>38</sup> demonstrating or modelling critical foundation-level concepts; and
- bridging concepts via analogies and metaphors that relate course content to the real world.

## **Highlight patterns, critical information, big ideas, and relationships**

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Explicitly map out the connections between class activities and learner expectations. Many learners have difficulty seeing the value of everyday activities, especially when they are challenging. Remind the learners how the day-to-day activities connect predictably with the programme learning outcomes and with their individual and occupational goals.

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38 Ogle, D. M. (1986). K-W-L: A teaching model that develops active reading of expository text. *The Reading Teacher*, 39(6), 564-570. <https://1filedownload.com/wp-content/uploads/2020/01/Ogle.pdf>.

The more you are able to pull back the metaphorical curtain to show learners connections, the more they will look for them as you progress through your interactions. Have you noticed how the format of this guidance highlights important information through the use of headings, sub-headings, and call-out boxes?

## Guide information processing and visualisation

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Some of our FET learners come to us with mental models for how information can be “summarised, categorised, prioritised, contextualised and remembered.”<sup>39</sup> Many, though, arrive without such models. It’s up to us to make the steps inherent within our processes visible to our learners.

Two good ways to put this into practice are;

- to start your course with a lot of structure and detail, and then gradually fade them back as learners build more of a knowledge base; and
- to release new content and information only once the class masters and understands previous content.

In the section of this guidance about providing multiple means of engagement, you already saw that chunking information into smaller bits was an engagement strategy; it’s also an excellent way to guide how learners experience and internalise information.

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<sup>39</sup> CAST. (2018). *UDL guidelines: Checkpoint 3.3*. <http://udlguidelines.cast.org/representation/comprehension/processing-visualization>.



## Get Started

“Comprehension” does not mean grasping the content in your field. It refers to the process of understanding itself. Think about what you want your FET learners to know and do by the time they complete your programme. The programme learning outcomes are an excellent guide for this.

Once you know what you want your learners to be able to do, think of as many ways that you can in order to show the different parts of processes involved, the steps of your thinking when you do them, and talk to learners not only about what they need to know, but how you actually do those practices in your own work.

Create a “missing steps” document and ask your learners to collaborate with you in identifying and discussing where they perceive gaps.

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## Pause and Reflect

Take a moment to think and express your ideas around the following questions as they relate to your own teaching:

- When was the last time you learned something completely new? It might have been some time ago or very recently, but think about your experience in learning it.
- How much explanation, structure, and “extra” support did you need initially?
- How did you approach learning more about that topic? What learning path did you choose from the options you had for studying, preparing, or practicing?

## How Dave Addressed the Challenge with UDL

Remember Dave’s “challenging” learners in his mathematics courses? He realised that in his culinary arts courses, he provided learners with multiple forms of the same information every time they met: he talked about knife safety, gave his learners a knife-safety fact sheet, and then actually demonstrated knife safety.

His learners could choose how they took in the information, and they saw how each specific skill and lesson was part of a larger pattern of professional kitchen practices that they then performed themselves. That’s why Dave had fewer “challenging” learners in culinary-arts courses: they were all more focused on the content because they had multiple ways to understand how it applied to their potential careers.

When Dave later learned about UDL, he applied it to his mathematics courses, using the elements of multiple means of representation that you’ve just experienced above, and the change in his learners’ behaviour and performance was dramatic.

Dave understood how difficult his learners found the language of mathematics. For each mathematical function, such as estimating area and length, he mapped it to relevant occupations, using examples like carpenters and electricians.

What really hooked one class in particular was when Dave revealed the “hidden steps” that contractors use on the job: when he asked learners to learn how to estimate costs, he tied it to the need to ensure you get paid properly and don’t sell yourself short. His learners paid close attention in that lesson.

Dave also recognised that his learners were not completing practice exercises because they were only text-based problems in a book: one format, and not very accessible.

Working with his ETB centre leaders, Dave lent iPads to his learners and provided them with lists of alternative-format materials for each maths concept in the course. Learners were able to work on challenging areas at their own pace and level, and more of them started to come to class prepared with both successes and questions.

**“Having an iPad meant that I could write and do maths for the first time ever by myself.”**

*—Level 4 maths learner, Crumlin Youthreach centre*

As his course developed over time, Dave created his own short mathematics video clips to explain formulas, simultaneous equations, and other tricky concepts. The learners have these videos, as well as alternative-format worksheets and problem sets, on their loaned devices, allowing them to control the pace of their learning. Learners can pause, review, practice the answers, and then, when they feel ready, answer practice questions.

In the classroom, Dave also applies plus-one ways of representing information. He uses a microphone to amplify his lecture and conversation. Using the free PowerPoint add-in Microsoft Presentation Translator,<sup>40</sup> his words are captioned by machine intelligence in real time, and learners who want to follow along in other languages can do so through their mobile devices.

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40 Microsoft Corporation. (2018). *Presentation Translator for PowerPoint*. <https://www.microsoft.com/en-us/translator/apps/presentation-translator/>.

Because he's a self-described techie, Dave uses real-time quizzes, Nearpod<sup>41</sup> interactive-lesson software, and Kahoot!<sup>42</sup> learning-games software in order to

- give information to learners in various ways,
- get immediate feedback on the understanding and performance of individual learners, and
- identify the pinch points where most learners are having difficulties.

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41 NearPod. (2020). <https://nearpod.com/>.

42 Kahoot! (2019). <https://kahoot.com/>.

## Dave applied the representation principle by...



Figure 12 - How Dave Applied UDL

Dave also doesn't neglect the low-tech part of representing information, either. All of the tech-based methods are just options for learners; they still have access to Dave's worksheets and paper-and-pencil exercises—the point is that they can choose their paths and materials in the moment.



## Pause and Reflect

Take a moment to think and express your ideas around the following questions as they relate to your own teaching:

- Dave has used technology to clarify language and symbols and to promote deeper understanding and independent learning. How could you use technology to enhance learning?
- How do you know that your own learners understand what has to be done, the tasks they should practice, and the standards to be reached?
- Where can you give learners scaffolds, background knowledge, or insight into the steps of your work in order to build their skills to manage the course work and to become independent and active learners?



## Simplifying the Principle

Dave Mulvaney’s UDL success story applies the three aspects of the UDL principle of multiple means of representation (provide options for perception, for language/math/symbols, and for comprehension). They, in turn, can be simplified to a single approach:

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**Information is no good if it isn’t used. Give learners choices for encountering data, facts, and ideas.**

.....

Whenever you see learners struggling, acting up, or tuning out, investigate to see how, when, and where they are using the content and materials that you are providing for them.<sup>43</sup>

Apply multiple means of representing your information to widen learners’ windows for studying, preparing, and practicing. And don’t feel like you have to “plus one” every single piece of material in your programme. Focus first on the places where your learners aren’t always prepared or ready for the interactions you want to have with them, even though you’ve asked them to get ready.

Dave started his UDL journey by noticing how multiple sources of information in his culinary-arts courses kept those learners on track, and he asked “what’s different” about his mathematics courses. Having the UDL framework as a guide helped Dave, who used it to be intentional about examining gaps and missed expectations without attributing blame. By lowering barriers to access, Dave addressed a behaviour challenge, as well.

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43 For a tool that helps you to frame information in multiple ways, see Centre for Excellence in Universal Design. (2019). *Customer communications toolkit for the public service—A universal design approach*. <http://universaldesign.ie/Products-Services/Customer-Communications-Toolkit-for-the-Public-Service-A-Universal-Design-Approach/>.

## Summary

“In here, you can just do whatever you feel like you can, and you can go at your own pace. We set our own time and go how we want.”

—Youthreach learner, Moy centre

This learner from Moy centre appears to be describing classroom anarchy. Surely, his teachers don't just let him and his classmates “go how we want.” And they don't.

But offering learners choices about how they encounter information both feels like agency to them, and it also provides them with ways to customise their learning paths.

By being able to choose to study from among materials provided in more than one format, learners increase their comfort with various media, reduce wasted effort trying to make their study time conform to single-stream activities, and improve the efficiency and success rates for their studies.<sup>44</sup>

The UDL principle of providing multiple means of representing information allows us to offer our learners choices within clearly defined boundaries. By adopting the plus-one approach, we don't have to try to cover all of the format possibilities: just two, or a few.

That freedom to study and prepare for class in ways that best suit learners' learning preferences in the moment—that learner autonomy and motivation—feels like real freedom, especially to learners whose previous experience of teaching and learning has largely been “if you can't do it this one way, you are a failure.”

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44 Tobin, T. J. (2014). Increase online learner retention with universal design for learning. *Quarterly Review of Distance Education*, 15(3), 15-16.

# Meet Carol



Carol Neenan teaches at Cork ETB and Coláiste Stiofáin Naofa. Her anatomy and physiology (A&P) courses are heavily technical, with occupational language and complex procedures that learners must master and understand in order to move forward into more practice-based study. Such demands place considerable stress on the linguistic, memory, and comprehension abilities of all of her learners.

One module includes memorising the names and functions of animal-cell organelles,<sup>45</sup> structures inside cells that perform specific tasks. Most of us have heard of the nucleus . . . and perhaps the mitochondria.

There are dozens more parts to cells, all with special functions and interactions among one another—and Carol’s learners need to know them all. This memorisation task consistently posed difficulties for all of Carol’s learners and was a common area of learner anxiety and under-performance on tests and quizzes.

For a long time, the only way that Carol could show what the various organelles are and how they function was to refer to text-based lists or photocopies of images from textbooks. Carol recognised that only some of her learners learned the content well when the information was only in these formats. The rest struggled to draw the organelles from memory or to take in or understand the information in a meaningful way. Worse, many crammed to pass the test but then quickly forgot the information when it was called upon later in the course.

Carol learned about UDL and adopted a plus-one strategy: she found YouTube video animations demonstrating how to draw organelles of animal cells. She also briefly explained what each of the terms referred to and the job that each of the organelles fulfils in animal cells. The learners then could follow the videos and draw at their own pace, stopping and starting where they needed to. The learners created either text or drawings that explained the cell functions, sharing their creations with the entire class. Carol’s learners said that the lesson became “much easier,” and that they found that they retained the information longer and more accurately.

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45 National Human Genome Research Institute. (2015). Organelle. *Talking glossary of genetic terms*. National Institutes of Health. Available at <https://www.genome.gov/genetics-glossary/Organelle>.

When she reviewed her course materials the next year, Carol hit upon another “plus one”—an interactive game. Carol talked about one cell structure, the Golgi apparatus, as a processing plant for proteins, likening it to a night club where the condition of those coming out was very different and varied from how they went in. She suggested narratives for the “jobs” that other organelles did within the cell. For example, learners could imagine the organelles all driving different vehicles: the lysosomes that remove waste from the cells became the “Country Clean” and “Greenstar” bin collectors in their garbage-hauling trucks, and the vacuoles that store and transport cellular materials took on the role of taxi drivers who served the other organelles on their routes.

Carol let the learners decide how they studied and reinforced the information, those who preferred to read text, draw cell structures, or watch the videos—or a combination of strategies.

Notice that this plus-one format came from Carol’s conversations and interactions with the learners—not every part of UDL has to be created by the instructor. You can support learner learning and reduce your work as an instructor at the same time by meaningfully involving your learners in the creation and selection of course content. You will see in the next section how Carol’s example combines multiple means of representing information with multiple means of action and expression, too.

With both of the plus-one strategies in place, Carol’s learners didn’t just say that the organelle lesson was more effective. A majority of them said that “it was fun,” and that their hands-on characterisations of the organelles made it much easier to remember the function of these cell components.

## Reflection and Practice

Providing multiple means of representation for content and information is the second principle of UDL. The barrier that we aim to lower by applying this principle is access to information. Some of our FET learners struggle with reading and numeracy skills for lots of reasons. More broadly, though, the biggest barrier that FET learners have is time. We serve learners who have family, work, and service commitments that keep them busy all the time. Providing them with access options that give them even twenty more minutes for study every day can be the difference between struggling and keeping up.

This guidance provides you with supportive methods for selecting where to start with your efforts to provide multiple ways to share content and materials, as well as specific practices for formatting and sharing those materials with your learners.



## Starting Small: A Call to Action

Review your responses to the thought and reflection exercises throughout this section of the guidance.

Put together a list of materials and information that you want learners to experience in just one of the learning interactions that you have with them, whether it's an individual activity, a module, or an entire programme. Then, brainstorm ways to create plus-one format alternatives for that information.

The goal is to lower the barriers to learners having access to, and being able to understand and use, the information that you have to share with them.

Then, take action: share your list with a colleague and commit to implementing one alternative from the list—and share the results with each other.





## Growing Your Practice

When you want to act at a systemic level about representing information in a plus-one way, connect with your colleagues to examine the information to which learners need access on a regular basis. Find information that tells learners how to do the most common required actions at your college or centre: things like registering for programmes, connecting with guidance counsellors, and getting access to email, your virtual learning environment (VLE), and other technology tools. How easy is it to find that information? And once it's been found, how many ways can learners perceive or interact with the information?

A useful exercise is to ask a few of your learners to go through the process of starting a term or a course, from the very beginning of signing up all the way to seeking help during the course, with a member of your team watching or carbon-copied on learners' messages. Knowing where and how your learners seek information helps you identify the places where your college or centre can expand the formats in which you share vital information with learners.

Once you are finished reading this guidance, the **Starting Small with UDL** and **Grow Your UDL Practice Tools** can help you to quickly get started with UDL and/or further develop your UDL practice. These tools can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).



## No Tech, Low Tech, High Tech

Multiple means of representation is what most of us think of when we talk about accessibility. And most people automatically think about the high-tech ways to provide information: things like captions for online videos, text transcripts for audio podcasts, and alternative text descriptions for images on web pages. As you design interactions for your learners, think about ways to give information in ways that can be perceived, communicated, and understood in ways that lower barriers.

While the high-tech approaches are in many people's minds, the low- and no-tech strategies for representing information can be surprisingly easy to implement. For example, a no-tech practice is to highlight patterns in the content that you share with learners, using an outline, a graphic organiser, chalk & chalkboard, or even verbally summarising the structure of materials. Many learners have heard the old adage that "if the instructor writes it on the board, it must be important." Humans are primed to pay attention to patterns,<sup>46</sup> so design patterns into your interactions in an intentional and multiple-format way to help your learners pay better attention.

A low-tech way to represent information in multiple ways is to clarify specialised language and symbols: use your virtual learning environment (VLE) to create a glossary of terms that learners need to understand. Better yet, engage your learners to add terms to the collective glossary and then describe them in their own words.

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46 Hassan, M. M., Uddin, Z., Mohamed, A., & Almogren, A. (2018). A robust human activity recognition system using smartphone sensors and deep learning. *Future Generation Computer Systems*, 81(1), 307-313. DOI: [10.1016/j.future.2017.11.029](https://doi.org/10.1016/j.future.2017.11.029).

This works well for classroom instructors as well as service-focused staff like librarians and guidance counsellors, as well: any place where learners need to use specialised information, alternative ways to define and use that information will lower barriers. You can find more no-tech, low-tech, and high-tech UDL ideas, examples and resources in [the online Resource Hub at ahead.ie/UDLforFET](https://www.ahead.ie/UDLforFET).

The big take-away about providing multiple means of representation is that learning doesn't happen unless we can understand and use information from the world around us. Information is not just text in a book or on a screen. Think broadly about information: it can be observed phenomena in a lab or out in the world, a phone call or remote-video session with a practitioner in your field or a classmate, a how-to video on YouTube, or a where-to-focus video from an instructor. Create multiple ways that learners can take in and then apply information, content, and ideas, and you will lower another barrier to learning.

Remember, too, that there are a host of national, European, and international policies, laws, and practices that support inclusive education approaches like UDL. To learn more about UDL in these contexts, see the *Conceptual Framework of UDL for FET* and CEUD's *Universal Design in Education and Training* publications.<sup>47</sup>

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47 Quirke, M., & McCarthy, P. (2020). A conceptual framework of universal design for learning (UDL) for the Irish further education and training sector: Where inclusion is everybody's business. Dublin, IE: SOLAS & AHEAD Ireland. 49, 55-57. Available at <https://www.solas.ie/f/70398/x/b1aa8a51b6/a-conceptual-framework-of-universal-design-for-learning-udl-for-the-ir.pdf>, and Centre for Excellence in Universal Design (CEUD). (2020). *Universal design in education and training—Policy landscape in Ireland*. Available at <https://bit.ly/32qMWLg>.

# UDL Principle



# Provide Multiple Means of Action & Expression

The third of the three UDL principles is to provide multiple means of action and expression. That can seem pretty abstract, until we look at it from the perspective of giving our learners voices, choices, and control wherever we can do so.

Just by reading up to this point, you have already experienced this principle in action. In all of the stories you've experienced in this guidance so far, each of the FET educators used this principle to bring his or her learners into the process of learning as co-creators and partners. In all of the thought exercises, getting-started suggestions, pause-and-reflect activities, and starting-small activities, you have had options for defining how you will take action with UDL and how you can express yourself as an instructor.

When we work with our FET learners, we can make the mistake of thinking that there is only one "best" way that learners should use to demonstrate the knowledge and skills acquired on our programmes. Beyond just presenting information *to* learners in multiple ways, let's start thinking about how we get ideas and information *from* them, too.

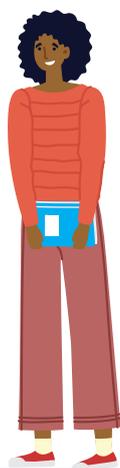
The goal of "multiple means of action & expression" is to design interactions, activities, and assessments so that learners can choose how to be part of our conversations and choose how they share their new learning with us and their classmates.



## Growing Your Practice

This section of the guidance will help you to answer questions like these in your own FET practice:

- What “counts” as evidence of skill or knowledge?
- How can we lower barriers that hinder learners from interacting in our programmes?
- What “being a learner” skills do our FET learners sometimes have little practice in, and how can we give them confidence that they belong?



# Meet Christine



Christine Carroll is the Scheme Manager at Ballymun Adult Read and Write Scheme (BARWS) which is funded by the City of Dublin Education and Training Board (CDETБ). She and her colleagues serve urban learners of various ages, some of whom have been away from education for a long time.

For many BARWS learners, their past experience of school has been negative. Those learners may have grown up speaking English but struggled with the basics of reading and writing, sometimes leading to issues of poor self-esteem or competence levels.

Some learners are learning English as a second language and it can be challenging to feel confident in other areas of life while learning a completely new—and completely necessary—component of everyday life.

The aim of the Adult Read and Write Scheme's basic education programmes is to improve learners' ability to read, write, deal with numbers, and use technology. Achieving qualifications may not be a motivator for all individuals returning to adult basic education, particularly those who are not ready to cope with challenging learning goals.

However, accredited courses at QQI Levels 2, 3, and 4 are offered, and learners are encouraged to progress to these programmes as they become relevant to their learning journey. Learning programmes start from where learners are, what is relevant to their everyday lives, their personal learning goals, and what they wish to achieve from the programme—whether that is to be able to read the newspaper or to apply for a job.

Christine's first task is to welcome learners to the Centre with an informal chat so that she can listen to them, get a sense of their literacy skills, their motivations, and their goals. Learners can choose to attend a fourteen-week part-time Intensive Tuition in Adult Basic Education (ITABE) literacy programme, one-on-one literacy tuition, or join a small-group literacy session once weekly with six or seven other learners.

This initial choice is crucial. It allows learners to fit programme activities in amongst their everyday life, family, and work commitments.

## Christine's Challenge

A group of Christine's adult-literacy learners might present collectively as an extreme example, reflecting the negative feelings toward school and learning that all of us see in some of our learners across various FET programmes, but her challenge is a real one. In order to address the diverse learning needs of her learners, Christine and her colleagues try to "take the classroom out of learning" by developing innovative and flexible teaching strategies that support learners to improve their reading and writing skills for their everyday lives.

Adults who are developing literacy skills need to feel that the resources they work with are appropriate for them as adult learners. Finding reading and writing content that is of interest, relevant, and that meets learners at their current skill levels is essential to progress in learning.

### Why This Was a Challenge

A number of Christine's learners come to her programme in an apprehensive frame of mind, trusting that she and her colleagues will respect them. Indeed, Christine and the BARWS adult-literacy tutors are highly trained professionals who help learners to understand and select options that respect their different goals, needs, schedules, and individual state of preparedness.

While it may be difficult to offer such a varied group of learners a standardised curriculum, a more flexible approach to programme delivery can address this issue. The BARWS service does offer one-on-one tuition provided by trained volunteer tutors; however, this option cannot be provided to everyone—there simply aren't enough people or hours in the day to work individually with everyone.



*Figure 13 - Christine's Challenge*

So, what to do? Following a programme review and reflection on good practice, Christine and two tutors recognised that a thematic conceptual-learning approach offered opportunities for learners to develop skills by building on their prior knowledge and experiences. This aligns with the “provide multiple means” approach of UDL and helped to address both parts of the challenge: finding a core programme to motivate and meet the diverse learning needs of a particular group, while also using appropriate resources to develop general literacy skills. We’ll check in with Christine again later in this section.



## Pause and Reflect

Take a moment to think and express your ideas around these questions as they relate to your own teaching:

- In your FET programme, what activities and assignments must be done in only one format (e.g., a word-processed essay, a passing score on a multiple-choice test)?
- Name a learning outcome for an activity or unit in your programme. How many different ways can you think of that learners could demonstrate mastery of the skills within that outcome?

If you like, you can use the **Pause and Reflect Tool** to record some notes on your responses to the Pause and Reflect exercises throughout this guidance for later reference. This tool and others developed to accompany this guidance can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://www.ahad.ie/UDLforFET).



# Multiple Means of Action & Expression— The Guidelines

CAST's guidelines include the principle of providing multiple means of action & expression.<sup>48</sup> Within this principle are three practices that help learners to feel able and comfortable interacting with materials, each other, and their instructors; to share their ideas, feelings, questions, and knowledge; and to plan for and stay on top of the processes, structures, and time frames in your course.

- Provide options for physical action.
- Provide options for expression and communication.
- Provide options for executive functioning.

The goal of providing learners with multiple means of action & expression is to give them agency in our FET programmes. Many of us work with learners who have seldom been allowed to determine their own paths.

This UDL principle can be the most challenging of the three to implement. Likewise, it can have the greatest positive impact on the mental health and academic performance of FET learners. By implementing it, we aim to create expert learners who know their

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<sup>48</sup> CAST. (2018). *Universal design for learning guidelines*. Version 2.2. <http://udlguidelines.cast.org/>.

strengths, who are able to manage their time and efforts well, and who feel that they have something valuable to contribute to our programmes.

We want to create action and activity choices that lower as many barriers as we can, by design, using the plus-one approach that you read about earlier.

## Provide Options for Physical Action

Think about the activities in which you ask your FET learners to take part on a regular basis. In addition to studying, working on homework, and undertaking assessments, you likely ask them to spend a lot of time interacting with you: asking them to attend your class, to work in labs or hands-on environments, and to share their experiences of the learning process.

Have you ever wondered why some learners seem to be “naturals” and take active roles right away, while other learners take a long time to take part in the class, and some never do? It’s not because some learners are naturally better (or even that they’re better prepared).

Give your learners a plus-one choice about the physical actions they take, and you will find more of them taking an active part in your programme. Even if you do not currently have learners who individually require such choices as reasonable accommodations, just having the choice frees up learners’ sense of control and agency.



Figure 14 - Options for Physical Action

## Add options that allow for different physical responses

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Do you ask everyone in class to take time to hand-write their ideas on paper? Especially on drafting or practice tasks, offer a plus-one option like writing their thoughts digitally or quietly recording them via the audio recorder on their mobile phones. In class conversations, must learners raise their hands to join the conversation? Allow all learners to signal in at least one other way, such as verbally saying “next, please.”

## Allow flexibility in the pace for learning

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Christine’s adult-literacy learners learn at different paces, but the programme cannot provide one-to-one tutoring for everyone. They do, however, choose from among a range of paces for their learning. In more traditional course environments, we cannot offer pacing choices on every activity or assignment, but offering different levels of intensity on, say, a course-long project gives learners more agency and control.

## **Support learners to use no-, low-, and high-tech options**

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The advent of mobile phones has really changed the landscape for many FET learners. Smartphones and tablet devices have tools like cameras and audio recording software built in. As you think about the physical actions that learners take as part of your activities, remember that not every learner will have a smartphone: plan for no-tech or low-tech options for class activities to supplement your tech interactions, and you will be able to put fantastic plus-one options in place.

## **Check for learner understanding regularly**

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In addition to explaining the meanings and context for the words, symbols, and visuals that we use in our fields, ask your learners to explain your assignment directions, for instance, in their own words. Provide them with physical options for doing so.

For example, ask them to define concepts or re-state processes in their own words, either verbally to a classmate, in writing individually (and then share with another writer-classmate) or by drawing the process in a mind-map. Where you find gaps, have the conversation with your learners and re-state, re-frame, or add context.

## Be intentional about what you're actually asking learners to do

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In test and assessment design, there is a concept called “construct relevance.” In plain language, when we ask our learners to demonstrate their skills, we should test only those skills that we wish to test.

This can seem obvious in the abstract, but think about a maths instructor who tests learners' ability to compose mathematical expressions using narrative scenarios—you know, the “two trains leave Galway and Dublin at the same time, traveling at 60 km/h and 90 km/h” sort of questions.

If these problems use words and concepts with which learners are unfamiliar, such questions are actually probing *both* learners' language-comprehension skills and their maths knowledge. This is a challenge for English-language learners, for learners whose life experiences don't include experiences with cross-country trains, and for people with disabilities which impact on reading skills.

The action to take here is to review your examples and samples, creating at least a plus-one alternative that gets at the tested idea, concept, or practice in the simplest possible expression. A final note: don't “dumb down” your content: keep the rigour high; lower the barriers for access to the skill itself.



## Get Started

Take a few minutes and think about the physical actions that you ask your learners to perform as part of one lesson or lecture session. Select one that is tied directly to a learning outcome.

For the action that you select, draft notes for how you will offer them plus-one ways to share their ideas and skills through the use of high-, low-, or no-tech methods.

When you are finished reading this guidance, the **Starting Small with UDL Tool** can help you to quickly get started implementing each UDL principle and can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).

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## Provide Options for Expression and Communication

This is the heart of the UDL principle of multiple means of action & expression. Call to mind those learners who seldom speak in class, and guess why that might be so. Are they shy, nervous, dealing with anxiety, afraid of looking stupid, unable to follow the conversation due to language barriers, or unable to speak because of a disability? Chances are you have a combination of these and many other factors at play in any class meeting you facilitate.

Learners will generally not feel confident enough to tell you about any of these things without prompting, and it would be an invasion of their privacy for us to ask explicitly. Fortunately, providing learners with options for expressing themselves and communicating with others lowers these kinds of barriers without calling out learners who may not wish to share their barriers with the rest of the class.

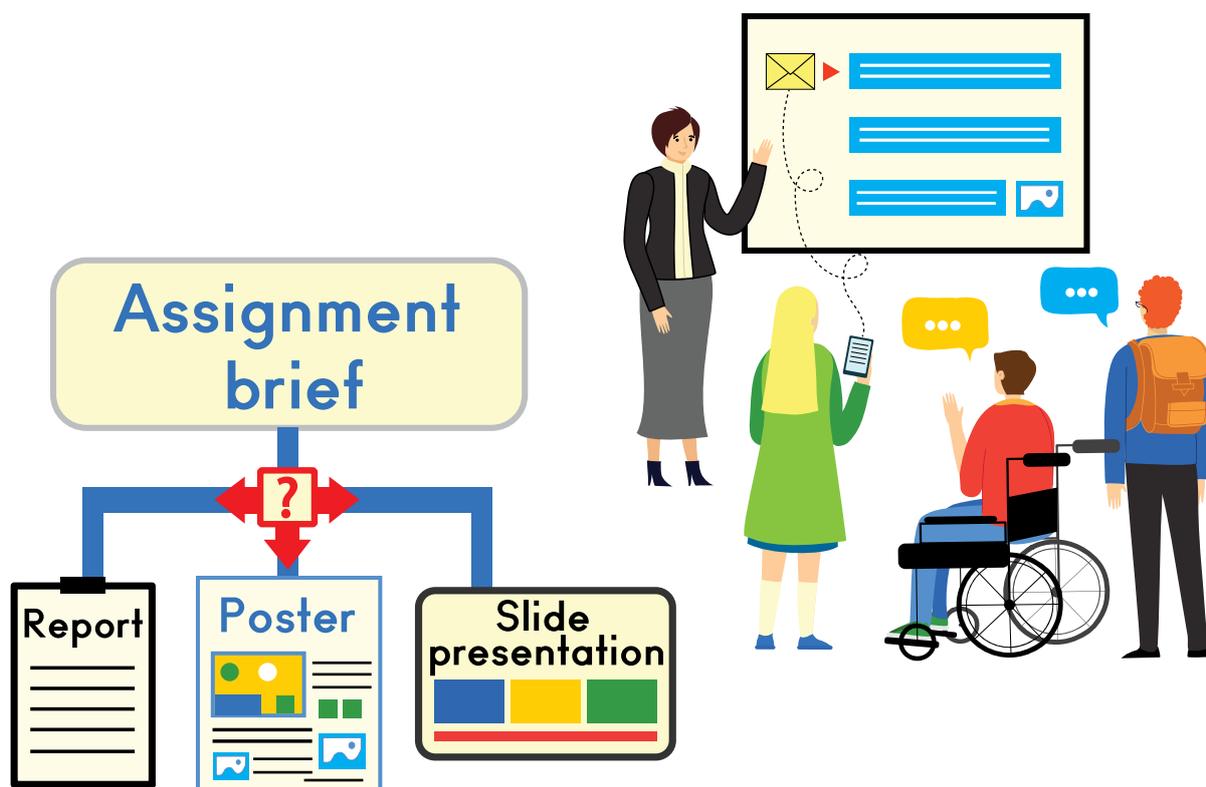


Figure 15 - Options for Expression & Communication

## Provide alternatives to pen, paper, and talking

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Traditionally, we ask our learners to tell us how they are doing in only three ways: writing, talking, and taking tests. If those are the only ways for learners to show their progress, ask questions, and get help, we have at least partly excluded everyone who is not a strong writer, expert test-taker, or confident speaker. Look beyond the assignments and think about the interactions that you have with learners in the classroom. Provide plus-one options for expressing ideas or asking questions, such as asking for either raised hands or responses to a quick anonymous poll—low-tech: paper slips and a box; high-tech, polling software and mobile phones.

## Allow and support learners to use tech-help when expressing themselves

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And not just your learners with disabilities, either. All of your learners will benefit from having the option to use things like

- spellcheckers, grammar checkers, and word-prediction software;
- speech to text (voice recognition), dictation, and recording tools;
- calculators, graphing calculators, and pre-formatted graph paper;
- outlining and mind-mapping tools; and
- music or mathematical notation software.

## Create multiple paths for learners to show their skills

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When it is time for learners to actually do the work and show their skills, provide them with at least two ways to take those actions—and design all options so learners demonstrate the same learning outcomes. For your tests, examinations, quizzes, written assignments—for anything that counts toward the course grade—allow learners choices in how they show what they know.<sup>49</sup> For example, if you now assign a written report, allow learners to write the report or present the same information in a live or recorded presentation to you. Where you ask learners to take a multiple-choice examination, provide a plus-one alternative like creating an audio project that addresses the same learning outcomes as covered in the exam.

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49 O'Neill, G. (2011). *A practitioner's guide to choice of assessment methods within a module*. Dublin, IE: University College Dublin Teaching and Learning. Available at [https://www.ucd.ie/teaching/t4media/choice\\_of\\_assessment.pdf](https://www.ucd.ie/teaching/t4media/choice_of_assessment.pdf).

This is where the concept of “construct relevance” that you experienced earlier comes to the fore. Design the alternatives for how learners express themselves in assessments so that you can grade or provide feedback on them using the same criteria. The idea is to ask all learners to show the same outcomes, using variable paths and methods.

There is one caveat to this advice: if the format is the thing being assessed, then do not offer such choices. In a car-maintenance course, installing a battery involves actually opening the bonnet of a car and physically lifting the battery into place and connecting the cables and safety apparatus. Learners cannot demonstrate that skill without actually doing it (such end-result demonstrations are called “summative assessments”).

However, when learners are practicing (doing “formative assessment”), give them those plus-one choices! Those car-maintenance learners could prepare by choosing to write the steps for battery installation or verbally walk through the process—and you can give feedback on that practice the same way, regardless of the mode they choose.

To ensure the validity and reliability of your summative assessment alternatives, test them first in a formative way, where they don’t yet “count” for grades. Get advice from your learners, your peers, and quality-assurance personnel before implementing assessment alternatives for summative purposes.



## Get Started

Think about how you accept learner ideas and feedback, not just in formal assignment and exams, but also in the everyday interactions you have in your classroom.

Ask a colleague outside your subject area to attend a class session and take notes about the formats and choices that learners are allowed for expression and communication (and then return the favour for your colleague).

Expand one of your tests, quizzes, examinations, or major projects to include one more way to accomplish the outcomes.

Test any changes you make by sharing the “before” and “after” versions with your learners and ask for their comments and input—in multiple ways, of course!

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## Provide Options for Executive Functioning

Executive functioning<sup>50</sup> is the term used to define the core skills that learners need in order to grow in their learning environments: problem solving, cooperation, working memory, reflection skills, goal setting, planning, time management, and self-monitoring. You know, all those things that we're all kind of bad at from time to time. And it's no wonder. Everything in this list is a learned skill, not something that we get naturally good at over time.

Furthermore, many of us learned these skills when we were young, some in adulthood, or—perhaps—never. Trauma in early life can prevent learners from having learned good executive functioning skills. Many learners come to us with current or previous experiences of violent or unsafe environments, poverty, homelessness, dysfunctional homes, and previous bad experiences in education.

The beauty of UDL is that we do not need to ask our learners who among them grew up under challenging circumstances, or any other intrusive questions. Explicitly designing for executive-function skills for everyone is a “does no harm” practice. Learners who are already skilled in the various aspects of executive function will not suffer from reading and hearing about them, and learners who do not yet have good models can use what you offer to start building good practices for taking action in a measured and well-planned way that fits their needs and preferences.

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50 Borkowski, J. G., & Burke, J. E. (1996). Theories, models, and measurements of executive functioning: An information processing perspective. In G. R. Lyon & N. A. Krasnegor (Eds.), *Attention, Memory, and Executive Function*. New York, NY: Brookes Publishing, 235–261.



Figure 16 - Options for Executive Functioning

## Guide learners to set and express goals

One of the goals of UDL is to create expert learners—learners who are motivated and have the skills to set goals and to monitor their own progress towards achieving their goals. Ask learners to predict the outcomes of their study and practice efforts, and ask them to express those outcomes in goal statements in some fixed format (e.g., a written document or a video comment).

## **Support planning and strategy development**

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Break learner tasks and processes into component parts. Ask learners to share how they are approaching their study and practice tasks over the coming days and weeks toward the more complex projects and activities in your programme.

## **Provide scaffolds for performance**

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Ensure that learners can visualise and understand the end results of activities. Give clear explanations of what is expected (e.g., the number of words, level of research expected, the layout and formatting). Provide templates for how to plan, carry out research, introduce ideas, make the argument, or perform the process. Provide more, and more explicit, scaffolding at the beginning of the course, and gradually lessen it as learners build more skills.

## **Show learners how to give and receive feedback**

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Encourage learners to reflect on their own work and the work of their peers. Develop simple, precise checklists for each learning task so that learners can monitor their own progress. Ask them to compare their self-assessment with that of the instructor, and ask them to restate the instructor's feedback in their own way.

Another side of this practice is to be explicit in showing learners how to assess and reflect on their own work and learning. Provide models of well-done work (ideally in more than one format) for learners to use as they practice—ask current learners for permission to share copies of their good work with future learners. Encourage learners to reflect on the parts of the course that worked well for them and how they enabled their learning, so that they can better understand and advocate for their own learning needs in future contexts.

## Give your learners rubrics, guides, and opportunities to perform peer- and self-assessment.

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As often as you can, share the steps of the processes that you employ to assess your learners' learning and performance. Many learners (and not just the ones who struggle) have never understood how the marks on their papers, projects, and exams came into being; help them to become self-graders. Rubrics are tools that articulate the expectations for an activity by listing criteria that learners are to attend to in completing the activity, markers of quality for each (typically rating scales), and scoring methods. Rubrics can define expectations, set the scope of learner work, assist in motivation, reduce procrastination, and aid learners to manage their time and effort.<sup>51</sup>

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<sup>51</sup> Jonsson, A. (2014). Rubrics as a way of providing transparency in assessment. *Assessment & Evaluation in Higher Education*, 39(7), 840-852. DOI: [10.1080/02602938.2013.875117](https://doi.org/10.1080/02602938.2013.875117).



## Get Started

Developing good executive functioning is a topic that we don't often explicitly mention in FET programmes, but it can have perhaps the greatest positive impact on the broadest range of our learners. Think about just one time you reacted to learner work or actions by thinking "I can't believe they don't know how to do that yet."

Create a "what they don't know" list and draft some ways that you could plainly and directly explain how to plan, study, allocate time, and so on. Share these responses with your learners and ask for their feedback—offering them more than one way to respond to you, of course.

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## Pause and Reflect

Take a moment to think and express your ideas around these questions as they relate to your own teaching:

- What physical actions do you expect your learners to undertake as part of your course, and where is there currently just one “right” way to take such actions?
- Where do you currently give learners choices about how they take action or express themselves, in both big and small ways?
- When you encounter new information or want to learn new things in your field, how do you prepare yourself and keep yourself on track?



## How Christine Addressed the Challenge with UDL

Remember Christine’s adult-literacy learners who needed a variety of levels of intensity in their studies, a variety of goals toward which to strive, and study materials that were pitched to them as adults?

In conversation among group tutors and learners, it emerged that some members of the group were already involved in taking care of a nearby local community garden. One BARWS tutor, Mary Archer, has a particular interest and expertise in horticulture, so, with Christine’s support, the BARWS team set up a horticulture class and created a flower and vegetable garden in an empty courtyard at the Ballymun Adult Education Centre.

How is this an example of UDL? Or even themed learning? The tutors saw that taking care of a garden is an adult-appropriate task that could integrate introductory-level reading, writing, numeracy, and technology learning. The course tutors, Mary and Dee Keating, used the learning outcomes from the QQI Level 2 Horticulture module<sup>52</sup> to structure a course of lessons, embedding the core literacy and numeracy skills into the various practical hands-on activities, and giving learners choices about how they would take action and express their skills.

Using the correct horticulture terminology, learners had to write or draw plans for planting schemes; plan what to grow; collaborate with each other to assign garden tasks; estimate quantities of seed, compost, tools, and pots; and organise items that could be upcycled.

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52 Quality and Qualifications Ireland (QQI). (2018). *Horticulture Programme M2S28*. <https://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=M2S28>.

The horticulture project included active learning while working with data through multiplication and division. Learners compared the growth of potatoes using traditional in-ground planting, grow bags, and recycled containers. Learners created notes about horticulture terminology, processes, and maths—choosing to employ pen and paper, phone apps, or classroom iPads.

The garden-literacy project created meaningful construct relevance, too. The real-world language and maths tasks of creating and caring for the garden did not require learners to have special skills beyond the ones being assessed by the course tutor. Everyone involved had the same frame of reference: everyone knew what a garden was and the basics of seeds, soil, water, sunlight, and care.

The tutor allocated tasks among learners according to literacy levels. Some used the iPad to create planting schemes and maintenance rules, repeating and reinforcing language skills for the whole group. This proved popular, as learners could take the instructions away to use elsewhere in their lives.

Learners were innovative in recycling and upcycling materials and resources in the courtyard garden. One learner made and painted recycled-timber planting boxes for growing courgettes and tomatoes. Containers for seedlings were made from old newspapers. Toilet-roll holders were used to sow broad beans and peas. An old dustbin was painted and used to plant beans and peas.

**“We made our own containers for the courgette seedlings from newspaper and chitted<sup>53</sup> early potatoes and planted them in builders’ buckets. We divided up and re-potted chives and mint.”**

—*Ballymun Adult Read and Write Scheme learner*

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53 Chitted: cut the buds from the sprouted potatoes and planted them as new stock.

At the end of the course, the group celebrated the term's work with a delicious lunch from their own container garden: new potatoes garnished with mint; broad beans; mangetout snow peas; salad with nasturtium leaves, chives, and parsley; cherry tomatoes; and baby courgettes.

This practical approach to learning was a huge success, with a zero drop-out rate. Learners even came in to the centre over the holidays to look after the plants with watering and feeding.

**“I enjoy this course and I am learning a lot about horticulture. I hope to grow my own vegetables and flowers in my garden. I liked planting seeds and watching the progress.”**

*— Ballymun Adult Read and Write Scheme learner*

The structure provided by the learning outcomes allowed for sufficient flexibility to allow learners to complete modules at different levels. The tutor built awareness of the process of learning as being a personal journey on which the learners had embarked, listening to their goals and helping them realise that while they weren't there yet, they were on their way. Learners personally owned their own goals, choosing how they took action and expressed their learning, and seeing value in the tasks allocated to them.

Along with the development of literacy, technology, and gardening skills, collaboration with their peers enabled the development of teamwork, communication and organisational skills. Social interaction was increased as other learners asked questions and sought advice from participants about planting and growing which led to a huge boost in confidence and self-esteem.

Christine applied the action and expression principle by...



Figure 17 - How Christine Applied UDL

The learners created a wonderful display of potted flowers, plants, herbs, and vegetables that encouraged broader discussion and positive commentary. The uplifting sight of the new courtyard garden was much appreciated by all those working, attending classes, or visiting CDET Ballymun Adult Education Centre, and it engendered a source of great pride for the programme participants.

Some learners went on to complete further in-field study, such as the QQI Level 3 Container Gardening module or the QQI Level 3 Communications module.

Christine's story illustrates how teamwork between herself and the course tutor implemented the principle of providing multiple means for learner action and expression by encouraging the learners to become collaborators in their own learning journey.



## Pause and Reflect

Take a moment to think and express your ideas around these questions as they relate to your own teaching:

- Christine's horticulture programme arose from listening to what her learners were involved in beyond the classroom. How do you think your learners would respond if you were to ask them about their interests?
- Who are the quiet or non-responsive learners in your courses?
- How do you ask your learners to respond to you and to each other, and how could you expand those options?
- Christine's literacy/numeracy horticulture programme put the course concepts into real-world activities and challenges. While we can't all eat the results of our courses for lunch, what sorts of real-world scenarios lend themselves to an understanding of your programme outcomes?

## Simplifying the Principle

Christine's UDL success story applies the three aspects of the UDL principle of multiple means of action & expression (provide options for physical action, for expression & communication, and for executive functioning). They, in turn, can be simplified to a single approach:

.....

**Learners who have choices, context, and a sense of control are more engaged and learn better.**

.....

Whenever you observe learners who are not engaged or taking an active part in the interactions that the class is having together, investigate whether the structure of the interaction might be preventing them from taking action or expressing themselves.

Apply multiple means of action & expression to lower anxiety and pressure barriers for your learners. They will feel more welcomed and at ease when they have options for how they communicate and demonstrate their skills.

You also don't have to apply plus-one design to every interaction in your programme in order to begin experiencing positive results. Focus first on the places where you know that learners hold back or where you are puzzled about a basic skill that learners don't seem to know how to do yet.

This approach to expanding the ways in which learners can take action and express their learning also supports the building of fluencies in various media and formats. UDL does not ask learners to learn how to take action in all of the various formats that we offer,

but just having choices allows learners to begin in areas of strength and then branch out to challenge themselves in areas where they are not yet skilled.

Media literacy is a core element of FET programmes across the entire curriculum, and we are preparing our learners to have meaningful interactions in their work, families, and the wider world when we offer them choices and control when they express themselves in written, audio, verbal, recorded, live, and time-shifted ways.

Christine started her UDL journey by listening to her learners about their goals and needs, and then she asked what other interests were present among her learners. Having the UDL framework as a guide helped Christine. She used it to create activities that met the learning outcomes for her programme while offering options for action, demonstrating skills, and expressing ideas—all within a real-world context to which everyone in the programme could relate, regardless of their level of literacy or numeracy on entry.

## Summary

The UDL principle of providing multiple means of action & expression allows us to offer our learners agency—a voice in, and control over, how they learn. This agency might be new to many FET learners who have had poor experiences of education previously.

By adopting the plus-one approach, we don't have to try to turn every class activity into a choice opportunity. We can focus on the places in our conversations where we perceive silent or disengaged learners, and ask for their help in figuring out how to connect to their everyday lives and give them a sense that they have a role to play in the learning process.



# Remember Jennifer?



We met Jennifer Lynch in the Introduction section of this guidance. Jennifer teaches dental and healthcare modules in Marino College of Further Education in Dublin City Centre. One of her projects is a wonderful example of the UDL principle of multiple means of action & expression.

One of the goals in Jennifer's programme is to prepare learners to work with people from all walks of life. Jennifer teaches a module that involves the provision of health care services to people with disabilities. She usually asks her learners to keep a written learning journal throughout the module, and, as a final demonstration of skill, to create a 12-15-page essay that summarises five case studies and provides the learners' own ideas for service activities that they design.

Both the journaling and the essay were required activities, and Jennifer noticed that many learners struggled, turning in poor work or sometimes skipping parts all together. When she surveyed her learners, she found that they knew the concepts, methods, and skills, but they often didn't know where to start in creating their written responses.

Jennifer took two actions to make the activity more meaningful and to provide her learners with greater choice in taking action and expressing their skills. First, she reached out to her former colleagues at National Learning Network's Roslyn Park College,<sup>54</sup> where people with disabilities receive free help in returning to the workforce. Jennifer asked if some Roslyn Park learners would be interested in collaborating on a project with her Marino College learners.

Jennifer's health care learners travelled to Roslyn Park College to work with learners who were studying a QQI team-working module.<sup>55</sup> This collaboration allowed Jennifer's learners to move beyond just studying, and into actually practicing outreach to people with disabilities and injuries. The two teams of learners collaboratively came up with the idea of creating a bake sale in order to raise funds for Pieta House's suicide and self-harm prevention programmes.<sup>56</sup>

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54 Rehab Group Ireland. (2020). *National Learning Network—Roslyn Park College*. <https://www.rehab.ie/national-learning-network/our-centres/national-learning-network-roslyn-park-college.html>.

55 Quality and Qualifications Ireland (QQI). (2018). *Team Working, Level 4*. Available at <https://qsearch.qqi.ie/WebPart/AwardDetails?awardCode=4N1169>.

56 Pieta. (2020). *Pieta: Preventing suicide and self harm*. <https://www.pieta.ie/>.

Jennifer's second action expanded her learners' range of actions and expression. She asked her learners to take action by bringing blank journal books to their conversations with their Roslyn Park peers. When they engaged in peer learning by talking through their activities, they would then write about them in their journals—or learners could use interactive collaboration tools to journal their notes and collaboration experiences in a non-written fashion.

Likewise, learners had choices about how they expressed their learning. They could write the traditional essay or create a multimedia "press kit" for their bake sale event, consisting of a poster, photo/video documentation of their process, and a 15-minute video to summarise and share their organising efforts around the bake sale.

Although some of Jennifer's healthcare learners identify as having literacy and print disabilities, these options for action & expression were open to all of her learners. Some learners chose to stay with writing tasks from the journaling all the way through to the formal essay, while others worked in images and audio, and some shifted among the various options based on their collaborations, preferences, and desired outcomes.

Having the choice of how to preserve their conversations and then transform those notes into summations of their skills helped all of Jennifer's healthcare learners to retain information from the day-to-day aspects of their projects, as well as to be more detailed and engaged when they created their journal entries and final project materials.

Jennifer summed up the project by saying that “using the concept of UDL principles has taught me how easy it is to incorporate fresh ideas and thinking into my teaching practice. The collaboration with Roslyn Park College made the learning very real and helped to generate interesting and creative ideas.”

Notice how Jennifer’s project benefited from collaboration with her peers at Roslyn Park College, with others in the FET system, and beyond? As you have been experiencing the ideas and stories in this guidance, we hope that you are starting to form your own ideas about how you will put UDL into practice.

You will benefit from sharing your ideas with colleagues, learning from and with them, and continuing the conversation about what works and where there are still gaps to address.

We started and ended the three principles of UDL with Jennifer Lynch’s story in order to show how interconnected inclusive practices are. The next section of this guidance examines ways to create your own community of practice around UDL.

## Reflection and Practice

Providing multiple means of action & expression is the third principle of UDL. The barrier that we aim to lower by applying this principle is being able to take an active part in one's own learning. Not only our FET learners, but all of us struggle with systems that accept our ideas in only one format (think about the last time you argued with a piece of software or a bank machine).

We are also, if we're being totally honest, not the best or most consistent planners and schedulers in the world (when was the last time you missed a deadline of any kind?).

Reflect on how you yourself have options and flexibility for how you take actions throughout your day and how you express your sentiments and ideas. Then, think about how to share that flexibility with your learners.



## Starting Small: A Call to Action

Review your responses to the thought and reflection exercises throughout this section of the guidance.

Put together a list of all of the interactions from just one of the learning activities that you have with learners, whether it's for an individual activity, a module, or an entire course.

Then, brainstorm ways to create plus-one alternatives for how learners can take action, communicate with you and the class, and be good planners about their actions in and beyond the classroom.

The goal is to lower the barriers that learners experience when they do not have choices or options in how they express their knowledge and skills.

Then, take action: share your list with a colleague and commit to implementing one alternative from the list—and share the results with each other.



## Growing Your Practice

Options for action & expression are powerful motivators that support learners' sense of belonging and trust with your college or centre. When you wish to expand your UDL practices in this area, examine the interactions that happen when learners are first introduced to various people in your team. Pay special attention to the first messages or interactions that new learners have when they join one of your programmes, the first conversations that learners have with counsellors, tutors—anyone who plays a support role.

Examine those first-with-a-new-person conversations and apply your plus-one design knowledge to these starting points. Give learners choices about how they follow various paths through interactions with materials, staff members, and one another. Choices that provide a sense of agency, control, or self-efficacy lead directly to better learner persistence, retention, and satisfaction.<sup>57</sup> Learners create their impressions about the overall climate of support (or lack of one) during their first interactions, all of which happen beyond the classroom and the first day of class.

Once you are finished reading this guidance, the **Starting Small with UDL** and **Grow Your UDL Practice Tools** can help you to quickly get started with UDL and/or further develop your UDL practice. These tools can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).

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<sup>57</sup> Krumrei-Mancuso, E. J., Newton, F. B., Kim, E., & Wilcox, D. (2013). Psychosocial factors predicting first-year college learner success. *Journal of College Learner Development*, 54(3), 247-266. DOI: [10.1353/csd.2013.0034](https://doi.org/10.1353/csd.2013.0034).



## No Tech, Low Tech, High Tech

When we provide learners with options for how they take action and express their learning, we can easily think about the big, high-tech solutions. Indeed, it's easy to limit our plus-one thinking to just "add an option to record a video version" and think that we are done with this part of UDL.

The no- and low-tech options for action and expression are equally powerful, and help to create more equitable situations for your learners. For example, a low-tech way to offer action & expression options is to help learners to set their own goals and pace for learning by placing schedule documents and fillable planning files in places where learners can get to them regularly, such as in your virtual learning environment (VLE) or on a class web site or blog.

A no-tech way to increase action & expression options is to design alternatives for physical actions. If everyone in your classroom traditionally writes an activity with pen and paper, options can include interviewing each other and taking notes in various formats, building an argument in small groups verbally, or checking to make sure that the tools and software commonly used in your activities are accessible using different input methods. You can find more no-tech, low-tech, and high-tech UDL ideas, examples and resources in [the online Resource Hub at ahead.ie/UDLforFET](http://ahead.ie/UDLforFET).

.....

The big take-away about providing multiple means of action & expression is that while learning can take many forms, if we ask learners to show what they know in only a narrowly-prescribed range of ways, we will miss expertise and ideas that don't match well with learners' skill-sets in the moment. Equality—giving everyone the same tools and the same directions for using them—is less effective than equity—helping learners to meet the same standards using different tools, methods, paths, and ways of showing their skills.

Remember, too, that there are a host of national, European, and international policies, laws, and practices that support inclusive education approaches like UDL. To learn more about UDL in these contexts, see the *Conceptual Framework of UDL for FET* and CEUD's *Universal Design in Education and Training* publications.<sup>58</sup>

Fortunately, you need not do any of the things you've experienced in this guidance by yourself. The final section of this guidance shows you how to gather and nourish a community of FET UDL practitioners.

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58 Quirke, M., & McCarthy, P. (2020). A conceptual framework of universal design for learning (UDL) for the Irish further education and training sector: Where inclusion is everybody's business. Dublin, IE: SOLAS & AHEAD Ireland. 49, 55-57. Available at <https://www.solas.ie/f/70398/x/b1aa8a51b6/a-conceptual-framework-of-universal-design-for-learning-udl-for-the-ir.pdf>, and Centre for Excellence in Universal Design (CEUD). (2020). *Universal design in education and training—Policy landscape in Ireland*. Available at <https://bit.ly/32qMWLg>.

# Creating Your UDL Community in FET



## UDL is a Team Effort

Throughout all of the stories in this guidance, you have likely noticed something that all of the FET instructors, staff members, and leaders have in common: they weren't working alone.

While many of the stories in this guidance arose from the need to address specific challenges, every person you have met has continued the conversation about UDL in a purposeful way with his or her colleagues within and beyond the FET sector. What often started as outreach to individual colleagues for coffee and a chat grew into collaborative projects and communities where FET practitioners discovered that they weren't alone in wanting to respond positively to common issues and challenges among their learners.

The most successful UDL efforts are those in which FET practitioners like you reach out to your learners, your peers, and the wider community to create connections, discover options, inspire creative learning methods, and learn best practices from—and with—one another. This type of collaboration often starts from a place of shared needs or values.

.....

**UDL lowers barriers for a wide range of FET learners, is worth time and effort to implement, and can be enacted most effectively when we come together to create collaborative responses that address common barriers for the learners whom we serve.**

.....

Once your individual conversations with colleagues identify a larger need, the most effective way to foster that sense of creative collaboration and support is to create or join a professional learning network (PLN). A PLN is a “group of people who share a concern or a passion for something they do, and who learn how to do it better by interacting regularly.”<sup>59</sup>

You may have already encountered groups that are intended to support individual members who are focused on a single topic, with names like “personal learning networks”, “communities of learning”, “mastermind groups”, or “communities of practice”. These are all different names for PLNs.

SOLAS and Education Training Boards Ireland (ETBI) highlight “engaging with learners with diverse needs”<sup>60</sup> as one of the key areas in which all FET learning practitioners, managers, and support and administration staff should strengthen our skills. Fortunately, the FET sector is already strong in addressing learner diversity along other various dimensions.<sup>61</sup>

Establishing and sustaining PLNs is an important concept highlighted in the conceptual framework for implementing UDL across the FET sector in Ireland.<sup>62</sup> PLNs offer an alternative continuing professional development (CPD) approach that draws on, and shares, the insights and expertise of staff to ensure and foster inclusive practices.

59 Wenger-Trayner, E. (2011). What is a community of practice? *Wenger-Trayner Consulting*. <https://wenger-trayner.com/resources/what-is-a-community-of-practice/>.

60 SOLAS & Education Training Boards Ireland (ETBI). (2016). *Further education and training professional development strategy, 2017-2019*, 24-26. Available at <https://www.etbi.ie/wp-content/uploads/2016/12/FET-Professional-Development-Strategy-2017-2019.pdf>.

61 SOLAS. (2018). New report on further education and training highlights diversity of learners. *News and Media*. Available at <https://www.solas.ie/news-media/diversity-fet-learners/>.

62 Quirke, M., & McCarthy, P. (2020). A conceptual framework of universal design for learning (UDL) for the Irish further education and training sector: Where inclusion is everybody’s business. Dublin, IE: SOLAS & AHEAD Ireland. 49, 55-57. Available at <https://www.solas.ie/f/70398/x/b1aa8a51b6/a-conceptual-framework-of-universal-design-for-learning-udl-for-the-ir.pdf>.

In this section of the guidance, you will encounter two PLNs that provide their FET participants with the opportunity to reflect on how best to respond to the needs of all their learners, to share their existing experiments and good practices, and to collaborate across programmes and levels in finding solutions and making a difference for their learners.

This section of the guidance will help you to answer questions like these in your own FET practices:

- Why is it important for me to strengthen my inclusive-design and inclusive-teaching practices?
- Now that I have started thinking about and implementing UDL, how can I sustain and build on my successful practices?
- What resources, conversations, and support about UDL already exist, and how can I help to create more such things by working with others in and beyond FET?

A Community of Practice:

# Meet Carrie



Carrie Archer is the Professional Development Coordinator for the City of Dublin Education and Training Board (CDETb), where she encourages, facilitates, and promotes a strong culture of professional development across and among all of the centres and staff that are part of the ETB. Carrie also served Marino College as their Learner Support for Learning Coordinator for many years and recently became their Back to Education Initiative (BTEI) Coordinator. Carrie's work is all about creating opportunities for strengthening knowledge and practice around various professional-skill topics.

## Carrie's Challenge

Carrie supports and collaborates with experienced, creative teachers who are experts in their own subjects. Over the years, their FET learners have become increasingly diverse in several ways. In addition to an increase in adult learners who are returning to education, Carrie's colleagues are teaching learners who experience mental-health challenges, learning difficulties, language-learning misconceptions, disabilities, and homelessness.

This increased diversity is actually a good sign—we are reaching more people, more broadly than ever. It also, however, presents its own particular challenges.

### **Why This Was a Challenge**

Like all of us in FET, Carrie's colleagues want to help their learners. They want to be open and welcoming to learners from all sorts of circumstances, but often don't know what to do specifically when they teach learners, say, who are autistic.

It is challenging to see learners struggling with the effects of racism, the stigma that accompanies mental-health issues, the instability of fleeing war zones as refugees—and we want to support and help them.



*Figure 18 - Carrie's Challenge*

Individually, FET staff working in support roles may lack confidence, information, and training about how to respond to the variability among the learners who come into their classrooms. Bringing everyone together through the PLN to learn from one another by researching, talking, planning, and doing things together on a regular basis benefits PLN members, their colleges/centres, and—most importantly—their learners.



## Pause and Reflect

Take a moment to think and express your ideas around these questions as they relate to your own teaching:

- What are the challenges that your learners face today that are different from the ones that you experienced when you were a learner?
- With whom do you connect regularly to talk about your FET practices? Perhaps your partner, a colleague, or a friend in a different field is your go-to source for support and thinking.
- Right now, how do you keep current in your field (e.g., reading, course work, research)?
- How do you keep current with teaching practices, as well?

If you like, you can use the **Pause and Reflect Tool** to record some notes on your responses to the Pause and Reflect exercises throughout this guidance for later reference. This tool and others developed to accompany this guide can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET).

## How Can You Create FET Professional Learning Networks?

There are a number of formal approaches to creating and sustaining PLNs. You will encounter two FET examples of them in this section of the guidance. They can be open-ended explorations of evolving issues, targeted conversations that attempt to address a pressing problem in full, or supportive spaces for sharing and addressing challenges together with colleagues—among many different configurations.

At their core, PLNs all share two characteristics. They are focused on a single issue, concern, or idea; and they are conversations that take place regularly.



## Get Started

Dr Etienne Wenger-Traynor is a scholar and researcher best known for bringing various group methods together into a single PLN model. He has highlighted key success factors for UDL-specific PLNs, including:

### Your Network - Success Factors

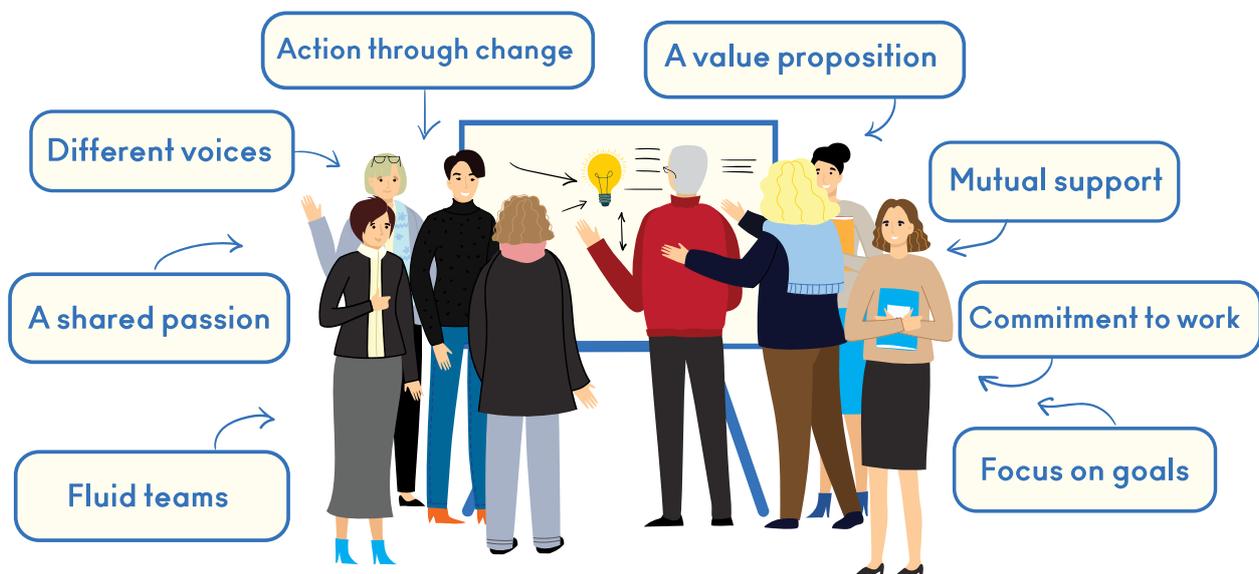


Figure 19 - Success Factors for Learning Networks

- **A value proposition:** brainstorm a statement of goals and values—what do you want to get out of the conversation.
- **A shared passion:** invite colleagues who want to improve their learners' learning experiences and who recognise and value learner variability as a strength.

- **Different voices:** bring together colleagues who share a context (such as work in the FET sector) but who have different roles and occupations, especially if those areas don't often talk to one another.
- **Action through change:** establish the community of practice with a goal of putting incremental and iterative change in to effect. Put plainly, invite participants to create and then try out small positive UDL changes, to experiment and then share the results, and to keep evolving their approach based on the outcomes of prior actions and decisions.
- **Mutual support:** be explicit that the community of practice is a place for participants to get honest feedback in a supportive way. Trying new things—and being ok with failure—are characteristics of supporting one another in a community of practice.
- **Commitment to work:** each member of the community of practice must be willing to put in real effort in order to address problems they are experiencing in their everyday work and find ways to make their learners' experiences more welcoming and supportive, too.
- **Focus on goals:** commit to hold regular meetings with a semi-structured agenda. Develop a shared repository of resources and tools to share with the broader FET community.
- **Fluid teams:** be flexible about attendance. Participants may come and go, but sustain the network of your community of practice through shared, continuous leadership.<sup>63</sup>

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63 Wenger-Traynor, E. (2020). Come together: An exploration, with you, on how campus learning networks can support inclusion. Keynote speech to the AHEAD Online Conference, *Through the Looking Glass*. Dublin, IE: AHEAD Ireland. Available at [https://www.ahead.ie/userfiles/files/Conference/2020/Etienne-Keynote PPT 27 03 2020\(1\).pptx](https://www.ahead.ie/userfiles/files/Conference/2020/Etienne-Keynote PPT 27 03 2020(1).pptx).

PLNs provide a formal space for a mix of voices to be heard and to explore topics in an open spirit of enquiry. Many of the UDL strategies in this guidance are shared at the level of what individual FET instructors, staff, and leaders can do to offer plus-one choices for learners—what you can do, individually, right now.

Lasting positive benefits come about when we move outward beyond those individual efforts into regular collaboration and mutual support. PLNs play a key role in shifting our collective idea of what FET means, for whom it is intended, and how it looks, feels, and works. Through the conversations of our PLNs, we can collectively change our mindset and build a more inclusive FET culture together.

Continue with this section of the guidance to learn how Carrie Archer addressed her professional-development goals through a learning-network approach, and meet the FET colleagues who created another UDL-focused PLN: The Active Inclusion Network community.

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## Pause and Reflect

Take a moment to think and express your ideas around these questions as they relate to your own teaching:

- When was the last time you talked with a colleague about your teaching or design practices? What form did that sharing take?
- Who observes and gives you feedback on your teaching or design work?
- If you could get help and feedback about one challenging aspect of your class or curriculum, how would you phrase the question?



## How Carrie Addressed the Challenge using UDL

Carrie's work as a professional-development coordinator led her to the challenge of teaching learners effectively and compassionately who are coming to FET programmes from increasingly diverse circumstances.

In the CDETB, the psychological service run a number of PLNs to support staff. Carrie facilitates the PLN for support teachers in FET colleges, applying the Experiential Learning Cycle model already in use by the psychological service with special-education needs (SEN) teachers and guidance counsellors in post-primary and FET colleges and centres. Carrie endeavours to support her staff colleagues' up-skilling conveniently and in real time, using a framework<sup>64</sup> of in-person meetings, coupled with technology-mediated between-meeting resources and collaboration spaces.

As a trained facilitator, Carrie knew that creating a social-learning space would allow colleagues to engage positively and collaboratively with questions, to talk and listen to each other, to understand each other's challenges, to share their own stories, to gain the confidence for getting started, and to try out plus-one UDL approaches in a shared and supportive setting.

Support staff, leaders, and instructors from across different occupational areas and colleges/centres in the City of Dublin ETB were invited to a series of meetings. Carrie used a reflective-cycle model to give structure to participants' experiences in the meetings and to create a continuous cycle of improvement:

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64 Whitby, T. (2013). How do I get a PLN? *Edutopia*. George Lucas Educational Foundation. Available at <https://www.edutopia.org/blog/how-do-i-get-a-pln-tom-whitby>.

# The Experiential Learning Cycle

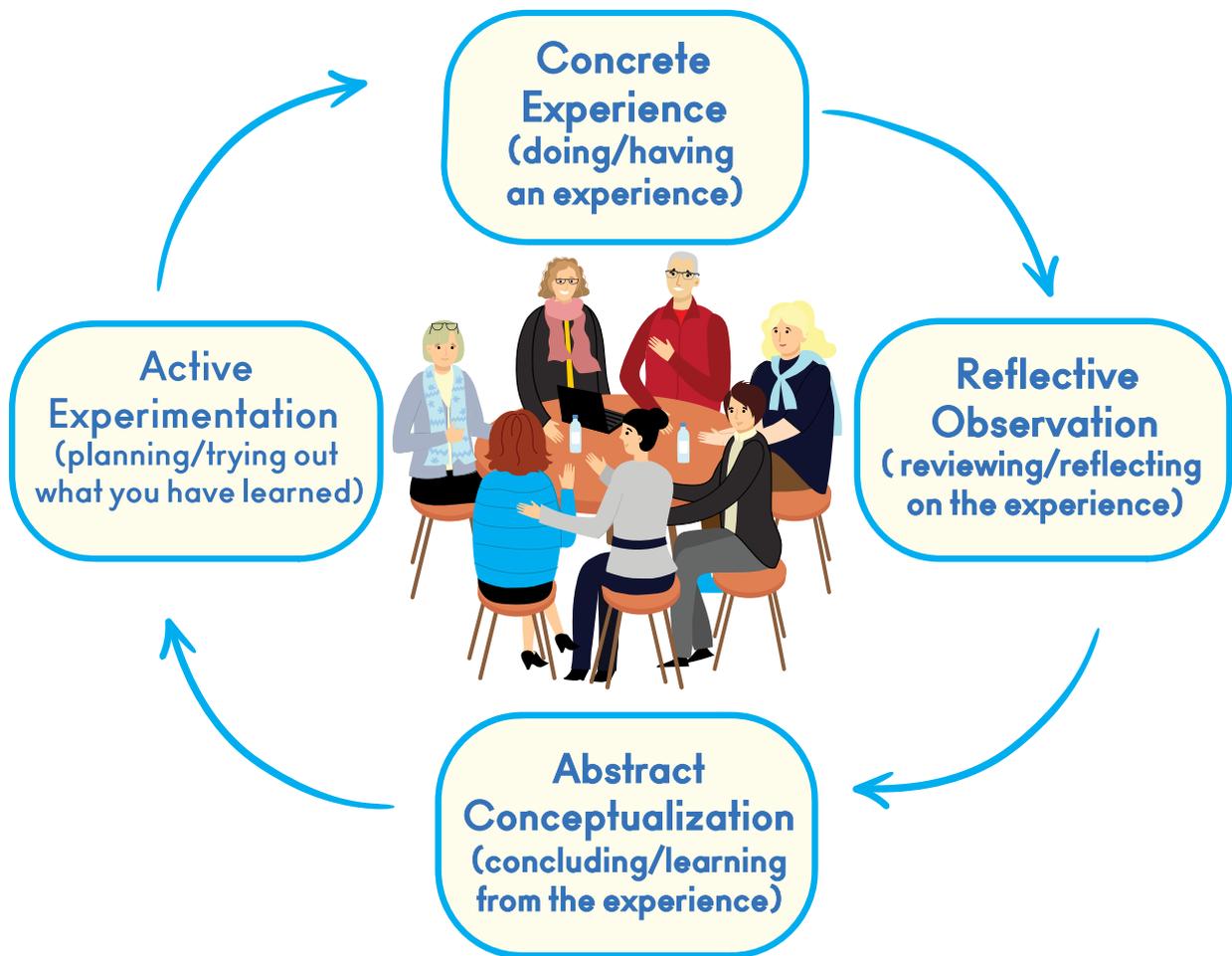


Figure 20 - Kolb's Cycle of Experiential Learning

- **Concrete experience:** a new experience or situation is encountered, or a reinterpretation of existing experience.
- **Reflective observation of the new experience:** of particular importance are any inconsistencies between experience and understanding.
- **Abstract conceptualisation:** reflection gives rise to a new idea, or a modification of an existing abstract concept (the person has learned from the experience).

- **Active experimentation:** learners apply their ideas to the world around them to see what happens.<sup>65</sup>

PLN participants could take away ideas, try them out, and bring them back into the group to discuss further, sharing what worked and did not work.

Carrie facilitated a monthly two-hour semi structured PLN meeting that rotated among the different CDETB colleges and centres. The focus of each meeting was determined by the expressed concerns of the group and addressed such topics as organisational changes in FET, supporting staff across disciplines to include learners with additional learning needs, formally adopting UDL, supporting learners through multi-format assignments, working with learners who are autistic, and inclusive teaching methodologies and pedagogy.

**“It is important to have a network to tap into in terms of getting advice, support, and being able to discuss issues that I may have thought only affected me—but can now openly discuss them and come up with new ideas on how to solve them.”**

**“I feel much more informed after the meetings and more confident in delivering to my learners. It is also nice to be part of a group working toward change for the good.”**

—City of Dublin ETB PLN participants

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<sup>65</sup> Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Englewood Cliffs, NJ: Prentice Hall. Available at <https://www.researchgate.net/publication/235701029>.

The continuity of holding regular PLN meetings enabled relationships to grow and collective learning to take place, generating new ideas about inclusive practice that enriched the whole group. The staff felt supported in trying out new things and bringing them back to share with the group. They enjoyed the collegiality of solving problems together in a safe place and felt ownership of the collective learning and doing within the group.



## Pause and Reflect

Take a moment to think and express your ideas around these questions as they relate to your own professional development:

- Who in your centre, college, or discipline encounter the same group of learners from different roles or perspectives?
- Whom would you invite to your own PLNs to explore UDL together?



Another Professional Learning Network:

# Meet Liz and John



Liz Moynihan is the Director of Kinsale College, and John Fitzgibbons is the Director of Further Education & Training for the Cork Education Training Board (CETB).

Liz and John wanted to achieve a goal for CETB staff and instructors: to include learners with disabilities in their everyday practices.

With support from AHEAD, Liz and John set up a PLN that they named the Active Inclusion Network (AIN),<sup>66</sup> with the explicitly stated purpose of implementing UDL as a gateway to broader inclusive practices.

The AIN group designed promotional literature outlining the purpose of the network and distributed it across the CETB to invite staff to take part in the learning-network kick-off meeting. In that first conversation, participants explored the impact of learner variability on their practices, identified some of the high-level strengths and challenges of managing a diverse learner population, and agreed amongst themselves on a structured schedule of events and bi-monthly meetings throughout the year. This events plan was endorsed by senior management, and the AIN was formally launched.

Based on their areas of interest, the AIN team arranged an event series with external speakers to explore several topics:

- Inclusion and UDL
- What is executive functioning, and how can I embed it in my teaching?
- Assistive technology to enhance learning
- Supporting learners with mental-health concerns
- Reasonable accommodations and needs assessments

AIN participants also requested more formal professional development, and completed a 25-hour training programme from AHEAD and the University College Dublin Access and Lifelong Learning Centre entitled “The Digital Badge for Universal Design in Teaching and Learning.”<sup>67</sup>

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66 AHEAD Ireland. (2018). *Active inclusion network—A model for the further education sector*. Available at <https://www.ahead.ie/ain>.

67 AHEAD Ireland. (2017). *C[ontinuing] P[rofessional] D[evelopment]—The digital badge for universal design in teaching & learning*. Available at <https://www.ahead.ie/udl-digitalbadge>.

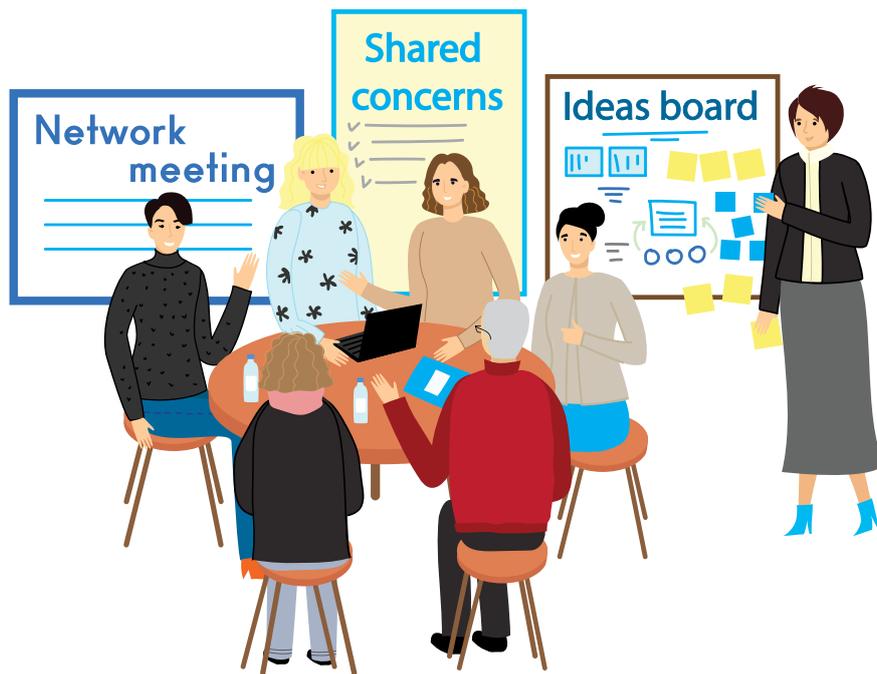
**“I enjoyed the way UDL challenged me to be more creative and to think of ways of presenting materials, engaging with learners, and varying assessment styles.”**

**“The most rewarding aspect of implementing UDL was the impact it had on the learners. I not only improved the learning outcomes of my learners with disabilities, but it had a marked impact on all of the learners.”**

*—Active Inclusion Network digital-badge earners*

AIN participants brought challenges and ideas to the group, who then collectively provided insight and learning for everyone, creating a continuous learning loop. For example, one tutor shared how she had made a short step-by-step video to explain a difficult computerised book-keeping procedure as a plus-one option in addition to the text-based content she already used.

The tutor talked about her initial fear of not creating the video to professional standards—she shot it on her smartphone—but she did it anyway. It was a resounding success with her learners, who could watch it repeatedly whenever they wanted to. Her story encouraged others in the group to get started with similar experiments.



*Figure 21 - Active Inclusion Network model in action*

The bi-monthly meetings produced real results. AIN members crafted a survey to gather data on the participation rates and circumstances of learners with disabilities across the ETB. CETB senior management thanked the AIN and used their findings and recommendations to create and update policies toward achieving active inclusion goals.

## Simplifying Professional Learning Networks

The professional learning networks that were spearheaded by Carrie Archer and by Liz Moynihan and John Fitzgibbons shared some common elements: they arose in response to perceived gaps and need, came together in an organised way, and operated in response to the issues, challenges, and ideas brought to them by their FET participants. While both PLNs were put together using specific theoretical approaches, all PLNs can be simplified to a single approach:

.....

**Identify a common concern and meet regularly to define and respond to it as a group.**

.....

That's it.

As you think about how you want to apply UDL in your own FET practices, know that it benefits from outreach, collaboration, and shared effort. Include your peers at your centre or college, your leadership team, your staff colleagues—and especially *your learners* in your conversations. Examine how to increase access, lower barriers, and give your learners voices, choices, and control over how they experience the education that you provide for them.

## Build Community Beyond the Classroom

Notice in both of the PLN examples above, the UDL groups included college or centre professionals beyond just instructors—managers, teachers, support teachers, administrators, librarians, guidance services, and others. UDL can support any staff members who are designing learning interactions of any kind with learners. For example, the National Centre for Guidance in Education (NCGE) advocate the plus-one approach when professional FET guidance staff or services are designing impartial, personal, social, career, and educational guidance interactions that they have with learners and clients. In a comment provided for this guidance, they highlighted that “FET Guidance Service staff provide support services to the general public and to learners engaging the FET sector, and incorporate UDL principles in their service set up, planning, and delivery.”

The model of the Adult Education Guidance Initiative (AEGI),<sup>68</sup> aligns with the principles of UDL by offering learners choices and agency about how they learn, study, and explore career options available to them (multiple means of representation), how they interact with guidance counsellors (multiple means of engagement), and how they express their goals and questions (multiple means of action & expression).

Bringing professional practitioners such as guidance counsellors into the conversation about how we can give our learners options, voices, and choices broadens our focus beyond just instruction and study. Too often, learners come to us feeling “apart from” the systems and structures within which we operate. Applying UDL thinking in all of our operational areas where learners interact with our colleges and centres helps them to feel that they are “a part of” our programmes even before they come into our classrooms.

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68 National Centre for Guidance in Education (NCGE). (2020). *Principles of adult education guidance initiative (AEGI) Delivery in ETB adult education guidance services (AEGS)*. 9. [https://www.ncge.ie/sites/default/files/resources/NCGE-FET\\_Principles-AEGI-Service-Delivery-EN.pdf](https://www.ncge.ie/sites/default/files/resources/NCGE-FET_Principles-AEGI-Service-Delivery-EN.pdf).

## Bringing Leaders on Board for UDL

All of our FET colleagues who created PLNs or brought UDL to their colleges and centres worked collaboratively with their leadership teams. Knowing how to frame UDL in language that leaders are already using is key to ensuring they are on board.

SOLAS and ETBI have both made bold, strategic commitments to inclusion. Leaders across the FET sector are invested, but they are also concerned about keeping learners from dropping out, bringing learners back for more study, and learner satisfaction. Likewise, all FET leaders are keen to achieve strategic goals such as fostering inclusion. Discover, too, what other areas of concern your leadership team is addressing right now—perhaps an area of professional interest, political conversations, funding needs, or reputation building.

Colleagues who have not studied the principles of UDL can sometimes mistake it for a general-accessibility framework, and ascribe only narrow impact to its implementation. Help your leaders to understand that by adopting UDL principles in the design and ongoing review of curriculum and programmes, there are advantages for all learners,<sup>69</sup> including:

- Learners become more interested and engaged with their programmes.
- Learners feel that they have better relationships with their teaching practitioners.
- Fewer dropouts. Better learner retention rates.
- Reduced need for costly individual reasonable accommodations.

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<sup>69</sup> AHEAD. (2018). *The Active inclusion network: Cork Education and Training Board pilot project for staff development*. Dublin, IE: AHEAD. Available at <https://www.ahead.ie/userfiles/files/shop/free/AIN-interactive-single.pdf>.

Additionally, within the periodic strategic performance agreements made with SOLAS, ETBs must outline how they are going to contribute to the various FET sector priorities,<sup>70</sup> such as the new high level strategic priority of fostering inclusion, and there are funding streams available to embed inclusive practices, including UDL, under this priority. By adopting UDL and facilitating staff to engage with it, ETB leaders can evidence their commitment to fostering inclusion and addressing FET sector priorities in their conversations with SOLAS during the strategic dialogue process.

By speaking the language with which our college and centre leaders are familiar, we can advocate for adopting practices that have positive impacts for all learners (not just for learners with disabilities), and we can frame the advocacy that we request from our leaders in terms of meeting goals for the entire FET sector.

**“[FET must] ensure all learners are supported in a consistent manner, with a universal design approach underpinning learning development and delivery.”<sup>71</sup>**

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70 SOLAS. (2018). *Future ready learning: Strategic performance agreements: Developing the further education and training system 2018-2020*. 7. Available at <https://www.solas.ie/f/70398/x/590c6a575c/final-system-report.pdf>.

71 SOLAS. (2020). *Future FET: Transforming learning: The national further education and training (FET) strategy*. 38. Available at [https://www.solas.ie/f/70398/x/64d0718c9e/solas\\_fet\\_strategy\\_web.pdf](https://www.solas.ie/f/70398/x/64d0718c9e/solas_fet_strategy_web.pdf).

## Summary

UDL is all about lowering barriers to engagement, access, and action. We FET practitioners, especially, will benefit from adopting the UDL principles and approach. This benefit is multiplied when you share your ideas, challenges, and solutions with colleagues in goal-oriented conversations as part of a community of practice.

PLNs are a compelling method to support the implementation of both the Further Education and Training Professional Development Strategy<sup>72</sup>, the Conceptual Framework of Universal Design for Learning (UDL) for the Irish Further Education and Training Sector<sup>73</sup>, and this guidance. As a result of experiencing this guidance, you should now have the mindset, skills, and details to continue your UDL journey of serving your FET learners in an informed, professional, and collaborative way.

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- 72 SOLAS & Education Training Boards Ireland (ETBI). (2016). *Further education and training professional development strategy, 2017-2019*, 24-26. Available at <https://www.etbi.ie/wp-content/uploads/2016/12/FET-Professional-Development-Strategy-2017-2019.pdf>.
- 73 Quirke, M., & McCarthy, P. (2020). *A conceptual framework of universal design for learning (UDL) for the Irish further education and training sector: Where inclusion is everybody's business*. Dublin, IE: SOLAS & AHEAD Ireland. 49, 55-57. Available at <https://www.solas.ie/f/70398/x/b1aa8a51b6/a-conceptual-framework-of-universal-design-for-learning-udl-for-the-ir.pdf>.



## Starting Small: A Call to Action

Review your responses to the thought and reflection exercises throughout this section of the guidance. Put together a list of the people whom you would invite to a kick-off or exploratory meeting to create a PLN.

PLNs can be any size. There are many well-established international communities around universal design for learning and inclusive learning design: search for the hashtag *#UDL* on Twitter, for example, or look at the model of the Technology Enhanced Learning Mentoring Support (TELMS) Project.<sup>74</sup>

If you are having regular conversations around inclusive learning practices with your immediate colleagues, reach out across your school, centre, FET field, or geographic region to find like-minded people and consider establishing a new PLN or joining one that already exists. Brainstorm topics, ground rules for regular meetings, possible conversations to explore, and how to keep the momentum going as you explore aspects of UDL together.

The goal is to create a group of people who are all committed to strengthening their UDL skills and knowledge by supporting one another in creating policy, experimenting with good practices, and implementing an inclusive mindset for all of the interactions we have with learners.

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74 TELMS Project. (2016). *Meet the team—partners*. Available at <http://telms.eu/partners/>.

Then, take action: work with your leadership team. Join an existing PLN like the ones you have encountered in this section of the guidance, or set up an event or meeting and invite your colleagues to join you in a first step toward positive action.



## Growing Your Practice

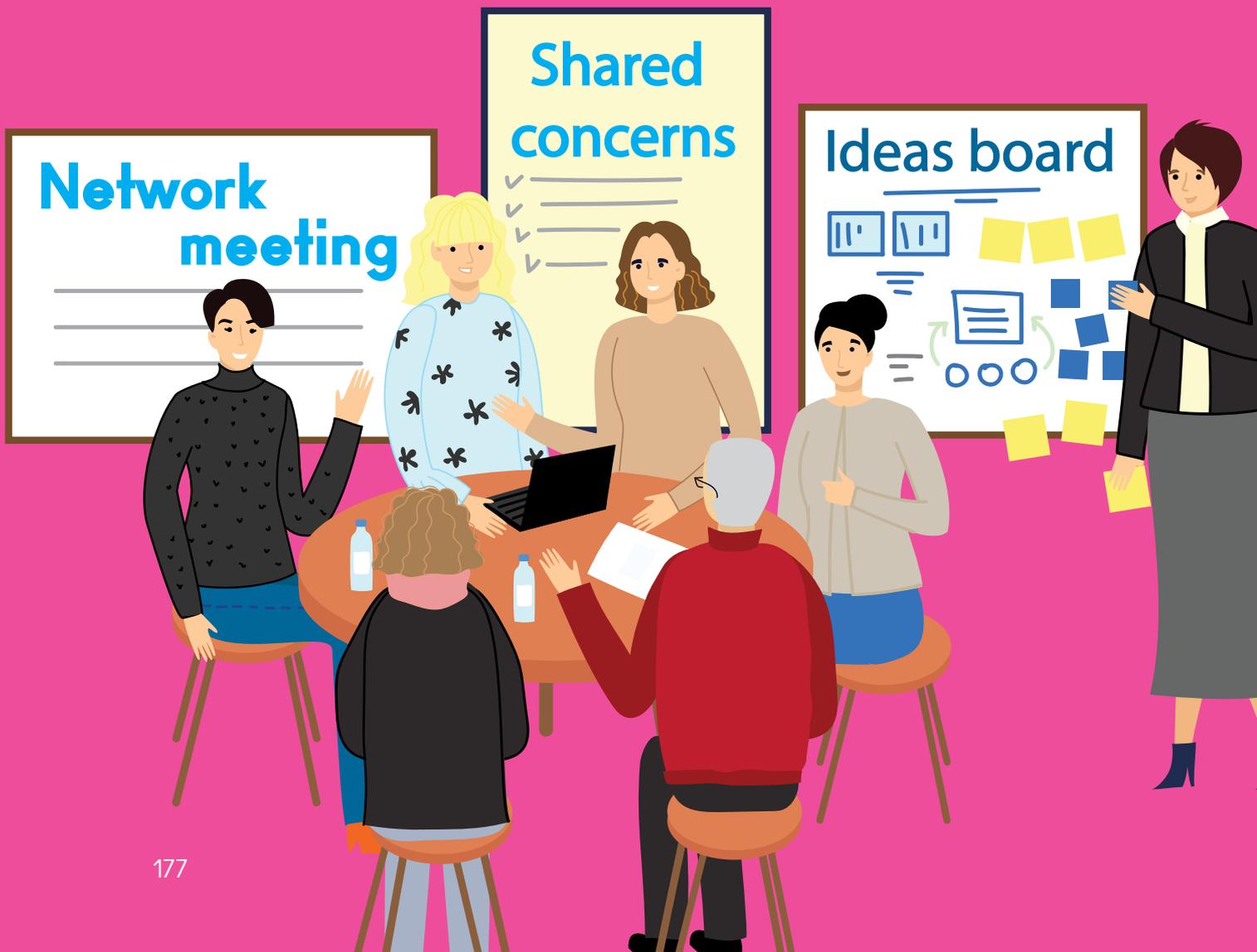
Once your PLN gets started, document the group's lessons learned and escalate them for consideration by quality assurance and governance bodies, as well. It is important for them to hear and consider your feedback as part of ongoing programme review and the continuous improvement of teaching and assessment practices.

Remember, too, that there are a host of national, European, and international policies, laws, and practices that support inclusive education approaches like UDL. To learn more about UDL in these contexts, see the *Conceptual Framework of UDL* and *Universal Design in Education and Training* publications.<sup>75</sup>

Once you are finished reading this guidance, the **Starting Small with UDL** and **Grow Your UDL Practice Tools** can help you to quickly get started with UDL and/or further develop your UDL practice. These tools can be downloaded from [the online Resource Hub that accompanies this guidance at ahead.ie/UDLforFET](https://www.ahead.ie/UDLforFET).

75 Quirke, M., & McCarthy, P. (2020). A conceptual framework of universal design for learning (UDL) for the Irish further education and training sector: Where inclusion is everybody's business. Dublin, IE: SOLAS & AHEAD Ireland. 49, 55-57. Available at <https://www.solas.ie/f/70398/x/b1aa8a51b6/a-conceptual-framework-of-universal-design-for-learning-udl-for-the-ir.pdf>, and Centre for Excellence in Universal Design (CEUD). (2020). *Universal design in education and training—Policy landscape in Ireland*. Available at <https://bit.ly/32qMWLg>.

# Conclusion: There is No UDL without You



This guidance is framed around the stories of how many of your FET colleagues are implementing the UDL principles dynamically, experimenting with and shaping what UDL looks like in the specific context of their programmes. As individual as their stories are, they all have a few elements in common.

By providing **multiple means of engagement** for their learners, your colleagues gave their learners voices and real choices in their learning activities, leading to a deeper understanding and motivation for learning itself. Some learners who were previously antagonistic or tuned out responded positively when their instructors and FET centre support staff reached out to them in ways that gave them agency and respect.

All learners learn differently. Making course materials available through **multiple means of representation** addresses the access needs of a wide variety of learners. The result is that all learners have greater options in how they take in and process the course. Your FET colleagues did not start by trying to make alternatives for every single file or resource in the class, either. By observing learner difficulties, we can design just one other way of delivering content in areas of our courses where learners always struggle—the plus-one approach—in order to lower barriers and give learners the best chance of understanding the subjects we teach.

Perhaps the most powerful UDL principle is to provide **multiple means of action & expression**. In every story in this guidance, when the FET practitioners gave their learners options for how they express themselves and demonstrate what they know, the learners flourished. This works because giving your learners an active role in their own learning produces agency: a sense of ownership and a stake in the learning process itself.

# Meet Mike



Now that you have a good understanding of all three of the principles of UDL and ways to sharpen your practices, build on your existing strengths, and innovate with your colleagues, here is one final story of an FET practitioner who brings it all together.

For 21 years, Mike Downes has been an instructor for the Galway and Roscommon Education and Training Board (GRETB) Training Centre. In his Carpentry & Joinery course, Mike teaches apprentices from all over the country. His learners bring wide educational experiences into the Training Centre, from junior certificate qualifications to college degrees.

A few years ago, Mike anticipated that technology-enhanced learning (TEL) would help his apprentices to become digitally competent, both in training and in the workplace. His Carpentry & Joinery course lends itself to using technology to speed up the learning process and make materials more accessible. Mike went beyond textbook resources to focus on engagement, representation, action & expression, and community learning.

He started with multiple means of representation, from a learner-centric perspective. Mike saw the benefits of animation in his prior role as an AutoCAD instructor, so he created animated PowerPoint presentations with voice-overs and screen images from the software that showed how to perform key carpentry techniques. Early on, he sent apprentices these videos via e-mail, and now he hosts them in a Moodle virtual learning environment (VLE).

Mike taught his learners how to access Moodle on their smartphones, so that they could refer to the videos or text descriptions any time—in the training centre, at home, on the bus. This also solved another access challenge: many apprentices had no laptop, desktop computer, or internet access at home, but nearly all of them had smartphones, so Mike began designing his content and interactions to be accessible via the Moodle mobile app.

This led Mike to think about multiple means of action & expression for his learners. Activity directions are always in text as well as audio or video formats, and Mike asks his learners to communicate with him in ways that they are comfortable with (or have access to at the time), such as email, text message, or audio/video sharing. Mike uses online quizzes to flip his classroom practices, so that learners learn new things outside of class, and then practice and ask questions during class time.

To keep learners engaged, when resources became available, Mike added extra maths and drawing-technique support for learners who needed it. Targeted at those who needed warm-up maths and who had no prior experience of drawing, these add-on skill exercises feel more like just-in-time-help rather than “remediation” to Mike’s learners. Mike also created exit tickets for each activity, where he asked learners to share their experience about the process of doing the activity; he shifts his course practices in response to these exit tickets.

**“I am able to interact with the apprentices in a wide variety of different ways and with different approaches. The exit tickets showed that my learners were happy with the online learning options and they liked the visual way of learning. This confirmed to me that the time spent producing my animations was well worth it.”**

**—Mike Downes**

Because Mike had his materials in the Moodle VLE, he asked a fellow instructor from another centre to review the content, with a view to getting peer-to-peer feedback and sharing ideas. This was the beginning of a larger PLN among the trades instructors across many centres.

## Be Like Mike (and Jennifer, Helena, Dave, Christine, Carrie, Liz, and John)

Mike's story is a good example of how the principles of UDL work together in concert. Indeed, it is nearly impossible to separate them. As this guidance was being written, we realised that most of the examples could have gone into many different sections because each of our colleagues was applying all of the UDL principles in an interconnected way to lower barriers for the largest number of learners possible.

Speaking of lowering barriers, UDL is not a solution for all access concerns. There will always be some learners who require individual adaptations, accommodations, and supports—some barriers are complex enough to warrant assistive technology, learning supports, or other reasonable accommodations identified through an individual needs-assessment process. But making one change, one time, for one learner—over and over—is not a scalable model. That's where UDL comes in, and where you play a vital role. By implementing UDL practices, you reduce the overall need for individual adaptations and accommodations.

Your focus in applying UDL to your FET work is to make intentional decisions now—before your programmes even start—about how your learners will interact with your materials, with each other, with you, and with the wider world. Design those interactions in ways that are as accessible as possible, so that most learners will be able to take an active part without having to ask for special or individual treatment.<sup>76</sup>

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76 McKernan, C. (2016). *Teaching and learning: Making learning accessible for learners in further education and training*. Dublin, IE: AHEAD Educational Press. Available at [https://www.ahead.ie/userfiles/files/shop/free/Teaching%20and%20Learning\\_2016\\_online.pdf](https://www.ahead.ie/userfiles/files/shop/free/Teaching%20and%20Learning_2016_online.pdf).

And you need not address universal design for learning alone. The stories in this guidance about “Creating Your UDL Community in FET” show the power of the shared learning experience to transform thinking. The most successful UDL efforts are those in which FET practitioners have conversations with each other, learn about new practices, share ideas, and discover creative ways to implement UDL. We can push UDL thinking and practice forward by bringing people together who care about inclusion and are prepared to create and try out new UDL techniques.

This guidance supports you as part of an FET community that can use the UDL framework to build on your current good practices and create a culture of access and inclusion for the benefit of every learner. We hope you are inspired and encouraged to find lessons in the stories, to engage with the reflection prompts, to try out the activities, and to have conversations with your colleagues about your UDL experiences.

It’s up to all of us to come together and take action to create a dynamic culture of UDL in FET, to make it a place where inclusion is everybody’s business.



# Glossary

This glossary outlines how the authors define key terminology contained within this guidance.

**Accessibility** is an umbrella term for all aspects of environments and materials which influence people's ability to interact with or function within it. Put another way, accessibility is a measure of how easily people can participate in activities.

**AHEAD** is an independent non-profit organisation working to create inclusive environments in education and employment for people with disabilities. The main focus of their work is further education and training, higher education, and graduate employment.

**Alternative formats** provide learners with access to print or digital based materials through different methods of presentation. Among many options, alternative-format options include large-print materials, braille documents, tactile images, electronic text, and video captioning.

The **Back to Education Initiative (BTEI)** provides part-time further education courses mainly for individuals who have not completed the Leaving Certificate or an equivalent qualification. It gives individuals the opportunity to combine learning with family, work, and other responsibilities.

**Captioning** is a process that involves dividing video transcript text into chunks, known as caption frames, and time-coding each frame to synchronise with the audio of a video. The outputs of captioning are captions, which are typically displayed at the bottom of a video screen. Closed captions allow the viewer to turn these captions on or off.

**Case narratives** are processes or records of research in which detailed consideration is given to the development of a particular person, group, or situation over a period of time.

**CAST (previously Center for Applied Special Technology)** is the organisation of researchers who created the universal design for learning principles and guidelines.

**CEUD (Centre for Excellence in Universal Design)** is part of the National Disability Authority in Ireland. The CEUD is a statutory design centre dedicated to promoting the design of environments that can be accessed, understood, and used by all individuals, regardless of the person's age, size, ability, or disability.

**Cognitive psychology** is the scientific study of mental processes such as attention, language use, memory, perception, problem solving, creativity, and thinking.

**Competencies** are the measurable forms of a combination of practical knowledge, theoretical understanding, cognitive skills, behaviours, and values used to improve, master, or demonstrate performance.

**Construct relevance** refers to the factors (e.g., mode of presentation or response) that are related to the construct (the concept or the characteristics) that an assessment is intended to measure.

**ETBI (Education and Training Boards Ireland)** is the national representative body for Ireland's sixteen Education and Training Boards.

A **FET practitioner** is anyone working in the FET sector who is involved in working directly with learners or in supporting or influencing the learner experience in FET.

**Formative feedback** activities are typically ungraded or low-stakes opportunities to promote and measure learner knowledge and skills. Formative feedback is ongoing and helps practitioners to focus on achieving learning objectives and to help learners to better understand the limits of their own knowledge and how to improve.

**Inclusive practice** in teaching is an approach to teaching that recognises the diversity and variability of learners, enabling all learners to access course content, fully participate in learning activities, and demonstrate their knowledge and strengths at assessment.

**Learners** are individuals who engage in interactions with content, peers, experts, and/or the wider world in order to acquire new knowledge, skills, or practices. Throughout this guidance, we use the term “learners” rather than “students.” In practice, the terms “learner” and “student” are often used interchangeably in FET. In this guidance, we focus on the “learner” role across all FET interactions, but we use this term inclusively to include all individuals engaging as participants in FET programmes of any kind.

**Learning outcomes** are measurable and observable statements of what learners should be able to do at the end of a course or learning interaction that they could not do at the beginning.

**Mental models** are explanations of people’s thought process about how something works in the real world. They are representations of the surrounding world, the relationships among its various parts, and people’s intuitive perception about their own acts and their consequences.

**Neuroscience** is the scientific study of the nervous system. It combines physiology, anatomy, molecular biology, developmental biology, cytology, mathematical modelling, and psychology to understand the fundamental and emergent properties of neurons and neural circuits.

**Plus-one design** is a simplification of the principles of Universal Design for Learning. If there is one way in which interactions happen now, a plus-one approach seeks to create one more way for them to occur.

**QQI (Quality and Qualifications Ireland)** is a state agency responsible for promoting quality and accountability in education and training services in Ireland.

**Scaffolding** is the practice of supporting learners' development by providing support structures that assist them in getting to the next stage or level in the progression of more complex or advanced learning topics.

**SOLAS (An tSeirbhís Oideachais Leanúnaigh agus Scileanna)** is the state agency tasked with building a world class Further Education and Training (FET) sector.

**Summative assessments** are used to evaluate learner learning, skill acquisition, and academic achievement at the conclusion of a defined instructional period—typically at the end of a project, unit, course, semester, program, or academic year.

**UDL (Universal Design for Learning)** is a framework to improve and optimise teaching and learning for all individuals, based on scientific insights into how humans learn.

**A Virtual Learning Environment (VLE)** is an internet-based platform for the digital aspects of courses of study. VLEs present resources, activities, and interactions within a course structure and provide for various types of assessment.

**Youthreach** is an education, training, and work programme for early school leavers aged 15 to 20 years of age. It offers support to young people to help them identify what they would like to do in adult life and allows them to gain a certificate.

# About the UDL for FET Resource Hub



This guidance is supported by an online Resource Hub that contains links to further reading, reference resources, video ideas for UDL practices, and downloadable word-based reflective tools (see below) to get you started implementing UDL in your FET context. Explore the [online Resource Hub at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET), and continue your UDL journey.

## Tools for Planning Your UDL Implementation

Developed to accompany this guidance, the [online Resource Hub at ahead.ie/UDLforFET](https://ahead.ie/UDLforFET) contains three reflective tools which can help you to reflect on the guidance and begin planning your UDL implementations.



### 1. The UDL Pause and Reflect Tool

This reflection focused Microsoft Word template document is designed to get you thinking about how your learners engage with, understand, and demonstrate their learning in different ways.

#### **Approx. Time to Complete:**

60 to 90 minutes.

This tool, the first in the series, gathers together all of the Pause and Reflect exercises contained in this UDL for FET Practitioners guidance, and provides space for you to respond and make notes on the outcomes of your reflections. The 25 reflective questions are grouped together to align with the chapters in the guidance so you can either use this template as you read through each chapter of the guidance, or complete it when you've read the whole thing.



## 2. The Starting Small with UDL Tool

This action/planning focused Microsoft Word template document is designed to get practitioners started with UDL implementation by selecting and planning easy-to-implement UDL options for their learners.

### **Approx. Time to Complete:**

30 minutes to 1 hour (plus implementation time).

While UDL is not a set of specific practices, it is useful to have models for where to start one's practice of designing more inclusive interactions and implementing the UDL principles. Each of the plus-one strategies in this reflective tool (the second in the series) can be accomplished in less than 3 hours—most in about 20 minutes – and will provide one more way for your learners to engage with, understand or express their learning. Use these plus-one prompts to generate ideas that match well with your subject matter, learner population, and role at your college or centre.



## 3. The Grow Your UDL Practice Tool

This action/planning focused Microsoft Word template document is designed for deeper practitioner reflection and planning on intentionally implementing each UDL guideline—individually or in collaboration with your colleagues.

### **Approx. Time to Complete:**

90 minutes to 2 hours (plus implementation time).

The aim of this tool, the third and final one in the series, is to provide you with space to reflect more deeply on each individual UDL guideline and to provide practice prompts to help you to intentionally plan and deliver a more comprehensive UDL implementation which addresses all/most of the guidelines. To use this tool, go through each UDL principle and the connecting nine guidelines within and read the associated plus-one UDL practice prompts. Then, develop your own ideas about how to apply the UDL guideline to your own practice and make notes to plan how to implement them in the space provided.

# Appendix

## NAC-UDL and Sub-committee Members

## National Advisory Committee on UDL for FET (NAC-UDL)

Acknowledgement must be given to the huge contribution to the development of this guidance of the National Advisory Committee for Universal Design for Learning (NAC UDL) for the Further Education and Training Sector and its Sub-committee, whose commitment to collaboratively improving this guidance through rigorous feedback, dialogue and engagement with the authors, immensely strengthened the work produced. A full list of organisations and individuals represented on these committees can be found below.

### Co-Chairs

Name	Organisation
Roisin Doherty	SOLAS, Learner Support Unit (formerly Active Inclusion Unit)
Siobhan McEntee	Education and Training Boards Ireland (ETBI)

### Secretariat

Name	Organisation
Jenny O'Connor	SOLAS, Learner Support Unit (formerly Active Inclusion Unit)

## Representatives

Name	Organisation
Ann Heelan	AHEAD
Dr Anna Kelly	University College Dublin (UCD)
Catherine O'Sullivan	Joint Managerial Body Secretariat of Secondary Schools (JMB)
Colm Manley	National Council for Special Education (NCSE)
Dara Ryder	AHEAD
Dr Ger Craddock	National Disability Authority (NDA) and Centre for Excellence in Universal Design (CEUD)
James E. Hubbard	National Disability Authority (NDA) and Centre for Excellence in Universal Design (CEUD)
Liz Moynihan	Kinsale College, Cork Education and Training Board (CETB)
Mary Stokes	National Centre for Guidance in Education (NCGE)
Maureen Conway	National Association for Principals and Deputy Principals (NAPD)
Michael Phillips	Crumlin College, City of Dublin Education and Training Board (CDETb)
Michael Shevlin	AHEAD

Name	Organisation
Neil McDermott	Higher Education Authority (HEA)
Ríona Morris	Disability Federation of Ireland (DFI)
Róisín Morris-Drennan	Quality and Qualifications Ireland (QQI)
Stacey Cannon	Department of Further and Higher Education, Research Innovation and Science (formerly Department of Education and Skills)

## Past Contributors

Former Co-Chairs

Name	Organisation
Andrew Brownlee	SOLAS
Fiona Maloney	Education and Training Boards Ireland (ETBI)

## Former Representatives

Name	Organisation
Derek Chambers	Health Service Executive (HSE)
Fleachta Phelan	Disability Federation of Ireland (DFI)
Jennifer Van Aswegen	Disability Federation of Ireland (DFI)
Liam Coen	National Council for Special Education (NCSE)
Mary Quirke	AHEAD
Patricia McCarthy	AHEAD
Dr. Ross Woods	Quality and Qualifications Ireland (QQI)

## Sub-Committee to the NAC-UDL Co-Chairs

Name	Organisation
Roisin Doherty	SOLAS, Learner Support Unit (formerly Active Inclusion Unit)
Siobhan McEntee	Education and Training Boards Ireland (ETBI)

## Representatives

Name	Organisation
Alison Jones	Galway Roscommon Education Training Board (GRETB)
Dr Anna Kelly	University College Dublin (UCD)
Ann Heelan	AHEAD
Carol Neenan	Cork Education Training Board (CETB)
Carrie Archer	City of Dublin Education Training Board (CDETb)
Dara Ryder	AHEAD
Ivica Milicevic	SOLAS, Learner Support Unit (formerly Active Inclusion Unit)
James E. Hubbard	National Disability Authority (NDA) and Centre for Excellence in Universal Design (CEUD)
Jenny O'Connor	SOLAS, Learner Support Unit (formerly Active Inclusion Unit)
Michael Shevlin	AHEAD
Pauline Egan	Secondary Schools, Kilkenny and Carlow Education and Training Board (KCETB)
Roisín Morris-Drennan	Quality and Qualifications Ireland (QQI)
Rosemarie McGill	Dublin Dun Laoghaire Education Training Board (DDLETB)

# Thank you

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