## 6.4 Evaluation and Continuous Improvement of Flipped Classroom Practices

## Free Man Wearing Blue Dress Shirt Stock Photo

## Introduction

The Flipped Classroom is a new approach from a methodological perspective. Even if educators have been using elements of Flipped Learning in the past, it has only been recently in **meta-pedagogy** that educators started consciously using this approach as we know it today.

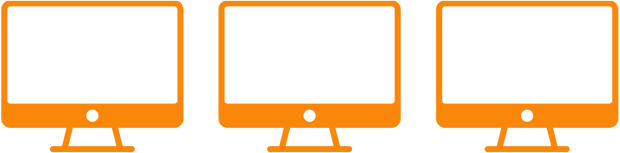
Moreover, despite meta-pedagogy **being transferable** from other educational fields, such as Adult Education and Higher Education, as well as Secondary Education, the **limits of this transferability** to the Vocational Education and Training are yet to be fully comprehended. To rephrase it in a different way, Vocational Education and Training has unique characteristics, which **must be meticulously studied** in isolation, potentially offering benefits to other sectors and types of education as well.

Moreover, technology is rapidly changing, at this rate faster than our methodological frameworks. However, as technological elements are incorporated in **Blended Learning**, they are inevitably **part of this current methodology**. The situation above describes the need to actually continuously evaluate and improve Flipped Classroom Practices.

### The Increased Need in the Labor Market

It must be noted, additionally, that technology has a dual role as well. Not only is it important for both the educator and the student to **possess digital and technical competences for teaching and learning**. They are also important for the job market, requiring more and more digital skills.

## Is More Better?



One fallacy, which could potentially hinder the improvement of learning and development of educators’ competences, is the idea that **more formats and more density of technology use has absolute benefits**. So is it a fallacy?

More is certainly better in the sense that VET educators can often be reluctant to explore new technologies and approaches. The mentality itself is beneficial for exploration and genuine **cultivation of curiosity** and **critical thinking**. This is the prerequisite for any improvement in the first place.

It has already been mentioned that the Flipped Classroom approach inherently gathers a myriad of formats, if one tries to explore its depth even a little bit. What is counterproductive is **using technologies for the sake of using them**. While certainly a good starting point for adaptability, when **overextending with a large amount of content types, the quality could inevitably lower down**.

**Hence, to properly adapt a format, the following must be answered.**

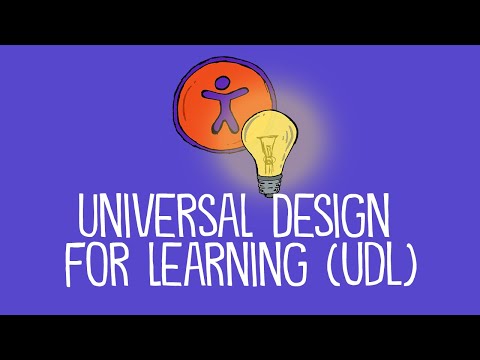
1. Whether a certain format is **inherently better** regardless of the subject, e.g. interactive SCORM
2. Whether a certain type of content or modality is a **better fit** for a particular subject or level of thinking, e.g self guided interactive tutorials with interpreters may be better for a programmer than videos
3. Whether there is a **variation of content**, which boosts engagement and thus the quality of the learning experience. For example, using only the video format could potentially prove weaker to combining it with reading material, as reading is slower and fit for difficult subjects.
4. Whether the **assessment is compatible** with the way the content has been delivered and studied and whether the assessment can be completed in a different format.

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## Inclusion and Diversity

**Universal Design for Learning or UDL** (Center for Teacher Innovation, n.d.), is an **effective and inclusive process** in design greatly benefiting populations of learners coming from vulnerable groups. It also teaches **non-vulnerable groups** two important lessons. On the one hand, it teaches to always **consider options for greater accessibility**, an important part of assessment design as well as mentioned above. On the other hand, it creates a mindset that **what is considered common design should be accessible by default**, if it is possible, instead of making a different version.

Check this video below if you want to find out more about Universal Design for Learning!

[](https://www.youtube.com/watch?v=NL2xPwDrGqQ)

Source: <https://www.youtube.com/watch?v=NL2xPwDrGqQ>

### Self Reflection

**One of the main points of UDL is to allow multiple formats of instruction and assessment, as some formats may be more accessible to certain individuals. Based on the segment before, would you view the multitude of formats differently for the purposes of accessibility?**

### The Perception of Inclusion and Diversity can change

Technology is not the only thing that is changing. It is important to note that the perception and meaning of **Diversity and Inclusion also changes** (In Diverse Company, n.d.), meaning that the Flipped Classroom may also need to adapt to it. The reason why it is easy to believe that diversity and inclusion stay the same is because **knowledge and perception of identities change at a slower pace** than technology, the most rapid component of change in education.



## Assessments as a Tools for Overall Improvement

As we have already mentioned before, summative assessments provide feedback to the teacher; specifically if their **teaching methods** correspond to learning outcomes. Because the Flipped Classroom is such a versatile tool, it differs depending on the **trainer**, the **subject** and the main participants – the dynamics of the **students**.

This situation also highlights why the VET teacher should **keep track of the methods they have used during the year**, since the multitude of formats and content produced can make it hard to map out without cohesive, incremental recording and mapping. This goes along with collecting large amount of beneficial **student data**, which is the other side of the coin of the **teaching effectiveness data**.

**Let’s view the following diagram to see exactly how formative assessments can cooperate summative to generate improvement of the Flipped Classroom!**

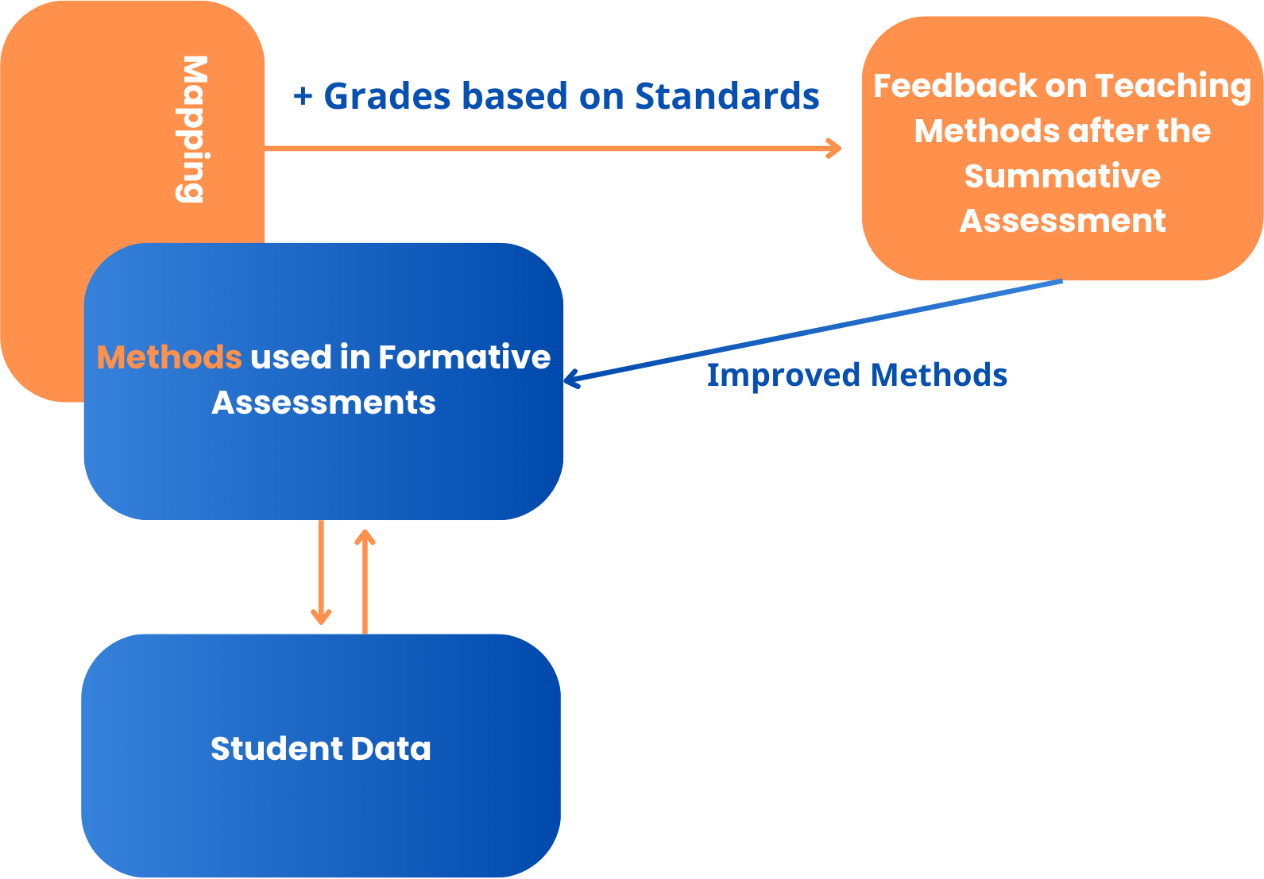


Chart created by the author\*

Firstly, we are beginning with the **smaller loops** of feedback generated by the **formative assessments**. The VET trainer implements certain techniques, which have proved themselves best practices. This collects them the **student performance data** used to validate the efficiency of their teaching methods during that period.

As time passes, **the methods and performance is mapped**, creating variables displaying the relationship between format and performance, while other **factors are being isolated too**.

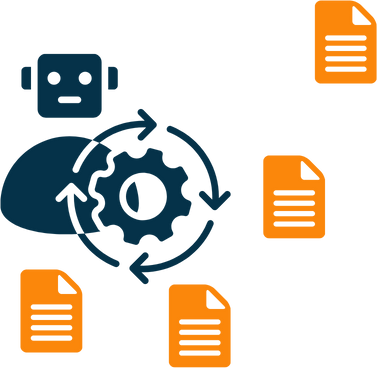
Then a **summative assessment** is set at the **end of the learning journey**. Whether students succeed at the standardized exams will determine **the success of the methods implemented in formative assessments as teaching methods**.

Depending on the outcome, you as an educator may either **keep using the same recipe** or **adjust and improve** it next year to **address some mistakes**. Keep a note that while the student is not expected to receive feedback and learn from the process of the summative assessment itself (meaning during the test), it should still **inspire further learning and development.**

Afterwards, the big loop of the summative assessment repeats itself next year, with the educator reflecting on the results. The expected result is for the educator **to improve their methods** used in **formative assessments**, leading up to the next **success in summative assessments**.

This relationship between formative and summative assessments for reflective practice and improvement is a splendid example of what one would call a **balanced assessment** (Burke, 2010). A thorough view equips the VET teacher with the methodological tools to truly improve themselves.

## Improving with Digital Technologies and Competences



### Consulting DigCompEdu

One of the greatest resources you may use to further improve your **understanding of assessment related competences** is the DigCompEdu framework. It is a learning outcome-based classification system, which identifies digital and soft and pedagogical skills. Check the DigCompEdu competence framework in the link [**here!**](https://joint-research-centre.ec.europa.eu/digcompedu_en#:~:text=The%20European%20Framework%20for%20the,specific%20digital%20competences%20in%20Europe)

In particular, the assessment competence area contains three competences:

1. **Assessment Strategies**, which includes the use of digital technologies for formative and summative assessments as well as enhancing diversity and suitability of format
2. **Analyzing evidence**, which includes generation, analysis and interpretation of data an
3. **Feedback and Planning**, concerning the use of digital technologies, providing targeted and timely feedback to learners and adapting teaching strategies.

### AI use in Digital Tools

One of the trends in the space of EdTech is the use of **Artificial Intelligence**. Assessments are not an exception to this rule. **AI adapts to the logic of formative assessments** and particularly to the aspect of flexibility. Some digital tools, such as Formative, offer the ability **create questions** and make **interventions with AI**, saving the educator’s time and even exploring potential blind spots left in the design of assessments.

Check [**this resource**](https://www.formative.com/ai-powered) to learn more about AI in Formative!

While AI is far from perfect, both its help and the reflection on its mistakes and weaknesses can help you build a stronger basis for future assessments.

### Useful Resources

Accessibility options, principles and features in the Moodle Platform: <https://docs.moodle.org/403/en/Accessibility>

Digital Competence Framework for Educators (DigCompEdu): <https://joint-research-centre.ec.europa.eu/digcompedu_en#:~:text=The%20European%20Framework%20for%20the,specific%20digital%20competences%20in%20Europe>

In case you are using your website to provide material and see what your students spend most of their time with, you may use [**Hotjar for heatmaps**](https://www.hotjar.com/try-hotjar-today3/?utm_campaign=HJ-Search-EMEA-Brand&utm_source=google&utm_medium=cpc&ads_adid=158614701816&ads_targetid=kwd-301757736238&utm_term=hotjar&keyword=hotjar&matchtype=e&geo=9061582&ads_creative=689000653611&ads_network=g&device=c&adpos=&utm_squad=leap&utm_layout=LP4&gad_source=1&gclid=Cj0KCQiAoeGuBhCBARIsAGfKY7zLN3PS8FmAYZ0BQ8zWCNY2AnBXAeHfkC037aCURYzamjKxPjaE3bAaAgXREALw_wcB).

Formative digital tool for assessments: <https://www.formative.com/>

What is Universal Design for Learning (UDL)? - <https://www.youtube.com/watch?v=NL2xPwDrGqQ>

### References

Burke, K. (2010). Balanced assessment: From formative to summative. Solution Tree Press.

Center for Teaching Innovation (n.d). Universal Design for Learning. Cornell University. Retrieved from: <https://teaching.cornell.edu/teaching-resources/designing-your-course/universal-design-learning>

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