Blended Learning Adaptation Guide

ISCED 2

Content

Introduction

Blended learning bridges the gap between a physical and virtual classroom environment. In order that educators are fully informed when planning to either adapt a curriculum to a blended learning model or create a blended learning program, it is important that every aspect of the ISCED 2 requirements are considered.

What is ISCED?

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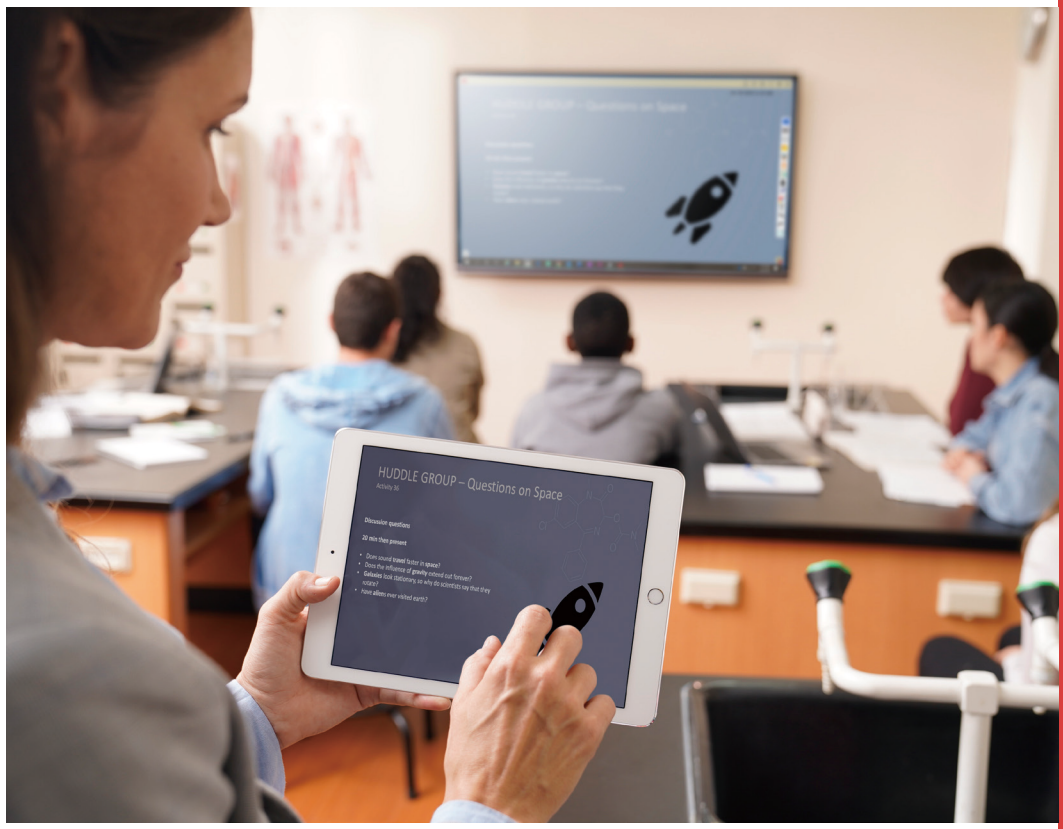
ISCED (International Standard Classification of Education) provides a detailed outline of how different categories of educational activities can be classified. A truly global institution, it organizes learning objectives and required outcomes into internationally acknowledged levels. Whether developing an entire curriculum or just creating singular lesson plans, educators should have an awareness of the relevant ISCED classifications and what the expectations should be in terms of learning outcomes and expected achievement levels.

In 2011, UNESCO released their revised ISCED. A framework for organizing education programs according to achievement benchmarks and learning objective expectations, the concepts were conceived with the intention of being recognized internationally, and the development of the classifications involved extensive consultation with experts from around the world.



What is ISCED 2?

Since 2011, ISCED 2 has been the classification UNESCO has used for what it terms as 'lower secondary education'. In most of Europe, this will mean children who attend secondary schools from the age of about 11 through to 14 or 15. In the United States, ISCED 2 level education corresponds with junior high school. Within the various contexts of the different educational programs around the world, however, the main commonality is that ISCED 2 is offered to children who have completed their basic or elementary schooling and who are transitioning towards sitting their first set of important public examinations at the end of the ISCED 3 education. The development of children's education will shift somewhat after ISCED 1 has been completed. Whereas elementary schooling is often conducted by a single teacher with the occasional assistance of other professionals, ISCED 2 level education will be delivered by multiple teachers who offer expertise in their individual fields.

Learning Objectives of ISCED 2

Lower secondary education picks up on the learning objectives attained at ISCED 1 level and aims to improve development to the extent that students will want to specialize in particular subjects. So, although most international curricula have an emphasis on certain core topics, such as math, science, humanities, reading, and writing, there will also be additional subjects learned, such as IT, technology, domestic science, art, and foreign languages. A broad educational achievement is expected before some subjects are dropped when entering ISCED 3 programs.

Learning Objectives of ISCED 2

Reading

By the end of their lower secondary education, students are expected to have achieved a solid foundation in reading. They will be expected to read and interpret more complex texts, often taking on a variety of literary forms, such as the difference between romantic literature and Gothic literature, for example. Numerous education tools are available online to support such reading education. Furthermore, rather than reading their own chosen books as might happen in elementary education, students will be expected to read core texts. These texts will be studied together as a class, with each student expected to keep up with the reading progress of their peers.

Learning Objectives of ISCED 2

Writing

Students writing at the ISCED 2 level of education will be expected to form their words by hand clearly using cursive lettering, although a shift in emphasis to more and more computer usage will also mean lower secondary education writing assessments are typed out rather than hand-written. Either way, sentence and paragraph structures will need to be adhered to, and students will be expected to maintain an argument or thought process throughout their written work. Writing skills will be in use in every subject, especially history, geography, and religious education, to present educational understanding. Both spelling and punctuation are expected to improve at this level and, again, there are online tools to help with this in most educational settings.

Learning Objectives of ISCED 2

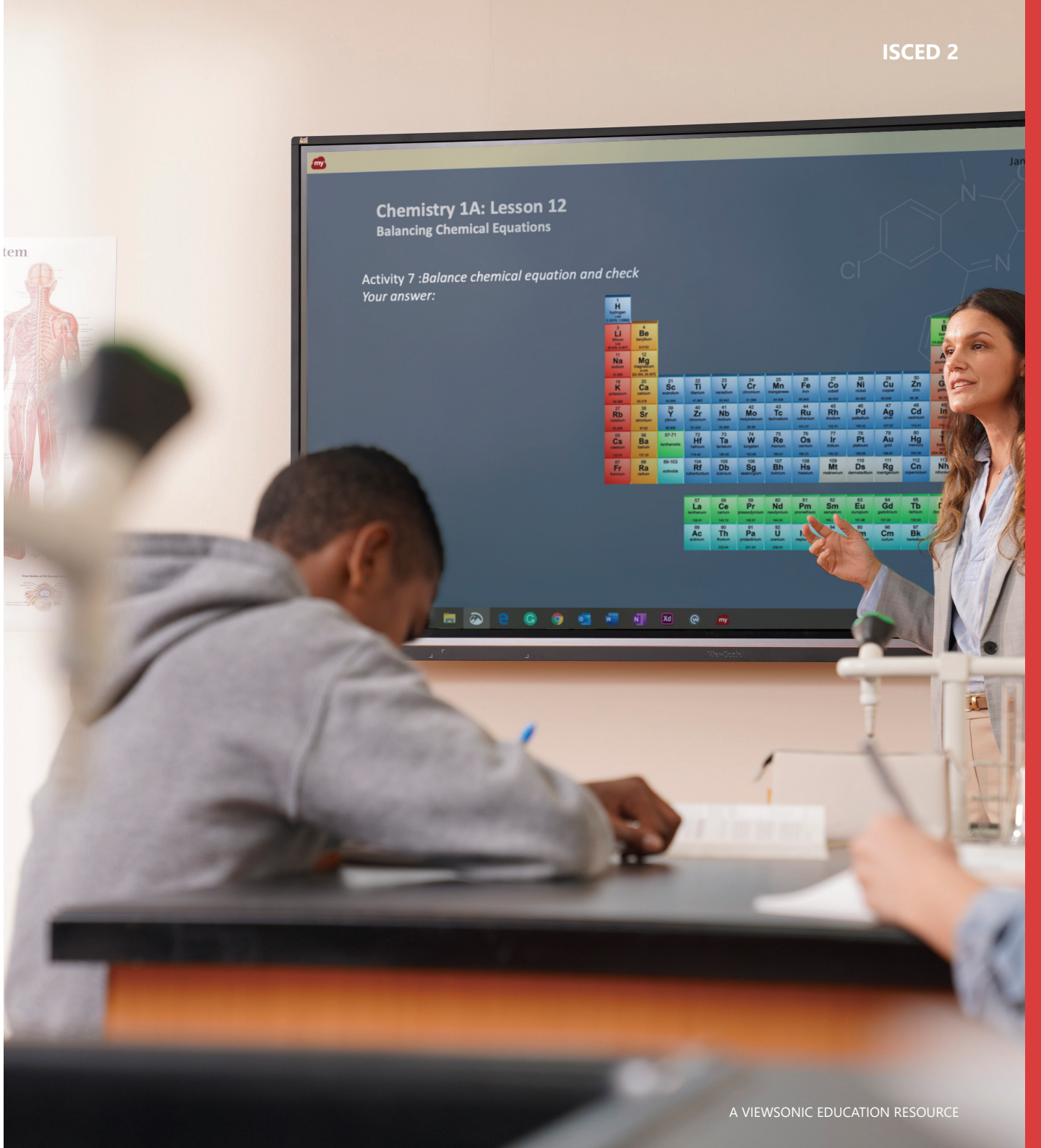
Math

Educational attainments in math will likely be varied at ISCED 2 level as some students push on with complex learning, while others are more focused on achieving their core competencies. In many programs, this will mean putting children into different groups so that they are taught according to their abilities – often for the first time. Although some curricula call for formal assessments to be made of math learning at the ISCED 2 level, many students simply proceed with their learning into their upper secondary education before exams are conducted. Prodigy Math Game is a well-known online resource for students and educators that is often utilized to supplement or, sometimes, replace classroom-based learning.

Blended Learning Model for the ISCED 2 Level

Blended learning makes extensive use of technology both inside and outside of the classroom at the ISCED 2 level. Sometimes, students will be sent homework which they will need to complete without an educator being physically present to guide them. However, video tutorials may be made available for them to watch; this will either refresh or re-contextualize their classroom-based learning.

Equally, educators will often make use of interactive equipment in the classroom to help them convey their lessons. This often includes interactive whiteboards and wall-mounted touchscreens. Because ISCED 2 education is often still wide in its scope, the use of such technologies helps educators to cover more ground in the short windows of teaching time they have available. Depending on the ISCED 2 program in question, there are three blended learning models to choose from.



Blended Learning Model for the ISCED 2 Level

Hybrid Learning

When educators make use of a hybrid learning model, they are able to synchronously educate students who are physically present in the classroom while also addressing the needs of those who are not. Essentially, it comes down to broadcasting a lesson over a local network or the internet such that all students can be engaged as one – either in-person or virtually. At the ISCED 2 level of education, this may allow specialist educators to teach more than one class or even entire year groups without overfilling classrooms. Equally, it will mean those students who are home-based can continue with their education as though they are in school alongside their usual classmates. Within lower secondary education, hybrid learning can be used for catching up on lessons during holiday periods or for delivering the standard curriculum to a larger group than would otherwise be possible.

Blended Learning Model for the ISCED 2 Level

Distance Learning

Many of the same remote educational tools used in a hybrid learning setting are also applied when distance learning is preferred. The major difference between hybrid and distance learning is that no in-classroom teaching is conducted. In other words, this is solely a remote learning approach to education. One of the key benefits of this model of blended learning is that it allows educators to support students at weekends and evenings when a school itself might be shut. As an interim measure, it proved to be very popular in much of the developed world when schools were shut due to the coronavirus pandemic. However, its ability to address the wide learning objectives within the ISCED 2 level of education meant that numerous educators continued to use it long after schools reopened. For instance, distance learning is now in widespread use for setting and assessing homework without the need to shift resources (i.e. exercise books) back and forth between students and educators.

Blended Learning Model for the ISCED 2 Level

Flipped Classroom

Also utilized by educational professionals delivering ISCED 2 level curricula, the flipped classroom model of blended learning takes the conventional, historic model of teaching and reverses it. In the past, before modern communications technologies made it possible to do otherwise, students at the lower secondary educational level would often attend a classroom to gain knowledge and be taught in-person. They would then use what they had learned and apply it to work conducted away from the class, either solo or in small groups. A flipped classroom approach alters this so that students learn for themselves, commonly by accessing online resources suggested by their educator, and then bring their knowledge to the classroom to share. This approach can be useful at the ISCED 2 level because it prepares students for the sort of individualized thinking, they will need to succeed at ISCED 3 level and beyond.

The Benefits of Blended Learning for ISCED 2 Programs

The advantages of blended learning programs are not limited to the ISCED 2 level. They can benefit students of all levels, including nursery children at the ISCED 0 level. That being said, by the time students enter lower secondary education, they should have the necessary basic IT skills to overcome the minor technical issues that sometimes come about when using apps and online educational resources. Moreover, ISCED 2 level students will commonly find that their education improves where blended learning is more fully utilized. This is because, in part, blended learning helps to deliver a superior reinforcement of learning objectives as well as:

- Being more fun or engaging to take part in
- Offering greater opportunities to interact with other students even when working from home
- The chance to work at any time of the day that suits
- The need to travel to and from school less frequently
- The chance to access educational experts from multiple online resources

Given that ISCED 2 is often viewed as a period of transition in which students learn to adapt from elementary education to something that is much more 'adult', the use of technology at this stage is only likely to grow. This is because it affords older students the chance to explore more complex notions at their own pace while still allowing them to improve on their basics. In short, carefully deployed technologies will help students to bridge the gap between primary education and the much more specialized upper secondary level with greater ease than is otherwise possible.

How to Assess Learning Achievements for ISCED 2 Students

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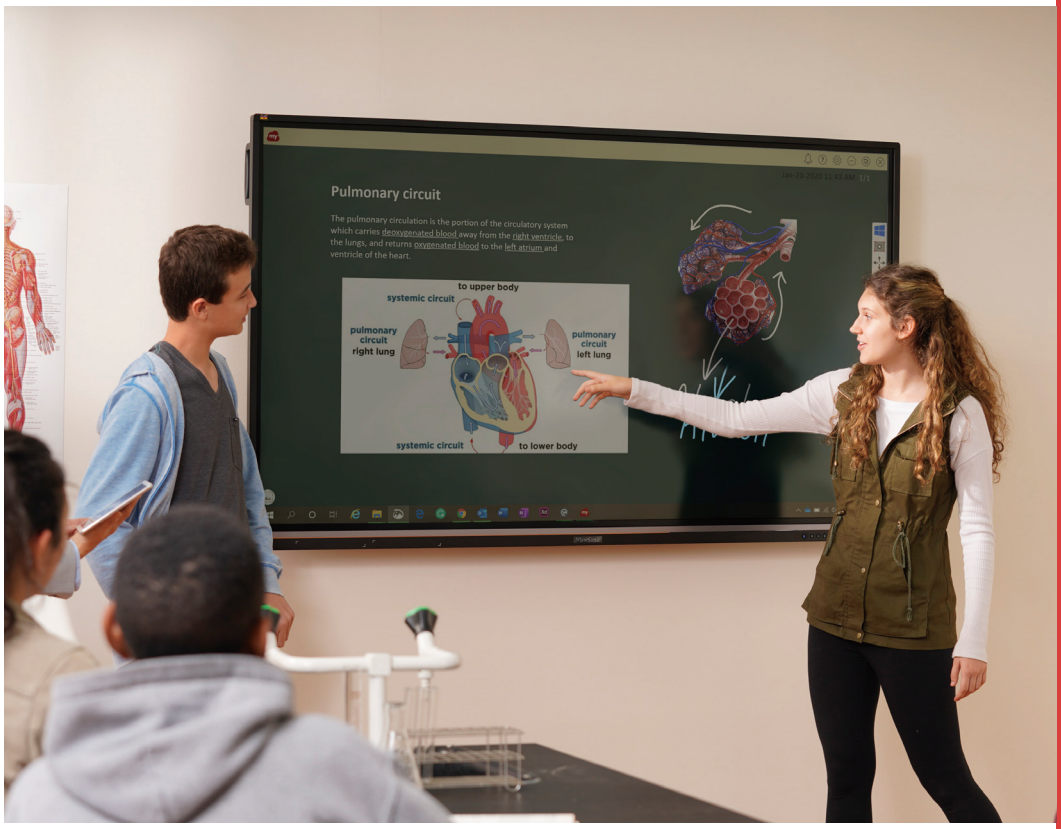
In the main, educators will directly assess ISCED 2 students, just as they might at the elementary level of schooling. This will involve making observations about students and reflecting on their academic progress. Although individual assignments will be assessed as coursework, few formal examinations are to be found at the ISCED 2 level in which the learning achievements of students are 'officially' assessed. Instead, in most educational programs, ISCED 2 level students will sit an informal test of their learning towards the end of the academic year. This will allow educator – as well as student – performances to be assessed and for the next year's educational program to be adapted accordingly. From a student's point of view, such informal assessments will also afford an opportunity to consider which subjects they are excelling at and which ones they may consider dropping as they move forward to the ISCED 3 level educational programs that await them.

Adapting Curriculum to a Blended Learning Model

Adapting Curriculum to a Blended Learning Model

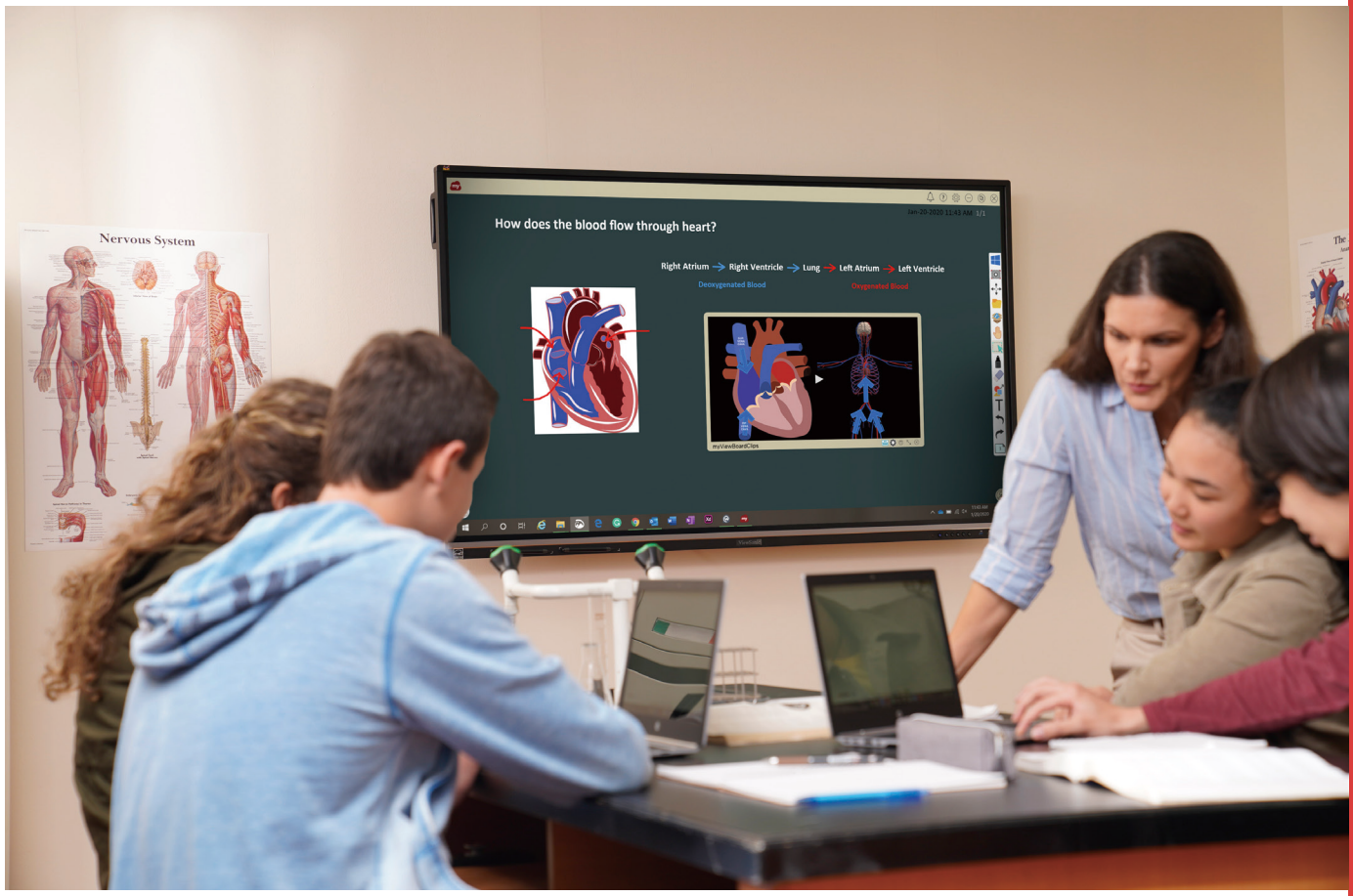
There are hardly any instances of curricula that do not immediately lend themselves towards blended learning models. Nearly all educational systems have some reliance on blended learning at the ISCED 2 level, even if this is limited to the occasional in-classroom use of computers to assist learning. In fact, with so many technologies and online tools available to help educators in multiple languages deliver their given curricula, not much adaptation is required. In short, the tools are often tailored to the relevant educational programs, not vice versa.



Adapting Curriculum to a Blended Learning Model

Introduction of Learning Objectives

The learning objectives at the ISCED 2 level remain wide, with many different subjects still included in most educational systems' standard curricula. Although learning objectives will be prioritized in literacy, math, and science, the principal aim is to still provide students with a well-balanced and fully rounded education before they begin to specialize at ISCED 3. For this reason, progress in non-core subjects, such as foreign language learning, may be slow simply because there are not enough hours in the standard school day to allow for a significant focus on them. However, there are plenty of learning resources that can be accessed outside of the classroom that can either help push learning onward or aid revision. For example, sites like French Games offer students the chance to improve their vocabulary at a level that is appropriate to ISCED 2 learning.



Adapting Curriculum to a Blended Learning Model

Activity Engagement

One of the keys to making blended learning work at the ISCED 2 level is to utilize apps and online learning resources that actively engage students. Because of the transitory nature of lower secondary education, concept delivery needs to strike a careful balance between being too advanced and too basic. What works will often depend on the character of the individual student concerned, but apps that offer a greater level of interactivity among students of the same age group will often encourage engagement. There are many useful online resources that will help to guide an educator in delivery. NRICH, for example, deals with math education. It directs ISCED 2 educators to the games and apps that will support the content of a given curriculum rather than veering off by introducing students to learning that is inappropriate at their level. With so much to cover, students must always be encouraged to take part in activities that inspire them to learn without in-built distractions.

Adapting Curriculum to a Blended Learning Model

Competency Assessment

A benefit of blended learning tools is that in-built competency assessments allow time-saving automation. In both the online and offline world of education delivery, educators will typically set multiple-choice questions that students are expected to complete to prove they have understood what they have seen. Educators can create their own tests following a video presentation of a subject. Traditionally, physical marking then needs to take place. If software is used to collate the results of such quizzes, however, educators will be automatically notified of any student who has failed or not completed their assignment, based on preset conditions. As no physical marking or review needs to take place, assessment – and class-wide comparison – is undertaken almost simultaneously. An additional time-saving measure is the availability of standard quizzes. If an educator chooses to use an existing history quiz, for example, they can benefit from tested and educationally proven assessments that are suitable for the ISCED 2 level.

Adapting Curriculum to a Blended Learning Model

Physical vs Virtual Delivery

At the lower secondary level of education, the emotional needs of students are not always as demanding as they can be at the elementary level. In a virtual learning environment, this means that more can be delivered through online resources as an educator does not need to be physically present. In many educational programs, an appropriate adult will still be assigned for pastoral or emotional safeguarding considerations, but students will often require no active educational delivery from this individual as their subject matter will be delivered by subject specialists. Outside of a safeguarding requirement – and the need to come together for certain religious practices in some faith schools – nearly all of the traditional classroom-based education ISCED 2 level students need can be offered through a virtual delivery platform.

Accommodating Additional Needs Through Blended Learning

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Blended learning can deliver strong educational outcomes for all students, including those who may have additional needs. This is possible because so many of the online and classroom-based resources can be tailored to meet individual circumstances. From physical issues – such as hearing loss, visual impairment, or accessibility – to incorporating students who have entered an educational program later than their peers, blended learning offers the flexibility needed to accommodate all additional educational needs.

Accommodating Additional Needs Through Blended Learning

Students with Special Needs

Both hybrid and distance learning models are suited to students with special needs because they will often receive the results of their work instantaneously. For example, students with a conceptual difficulty that makes exercising their numeracy skills harder will often find that solving math problems via an app is beneficial to their learning compared with working with pen and paper. Likewise, specialist educators who work in the field of special needs will be able to set work in tandem with a generalized teaching professional, thereby allowing them to be supported more fully in a mainstream educational environment.

Accommodating Additional Needs Through Blended Learning

Students with a Lack of Resources

The scarcity of educational resources is known to play a big part in the progress – or lack of it – among ISCED 2 level students. Those without access to a library or books at home will often find they are inhabiting a more level playing field with fellow students if educational resources are shared online. Of course, blended learning does need students to have access to IT equipment at home as well as at school in most cases. However, a simple tablet or inexpensive laptop is all that will be required for most online tools to function.

Accommodating Additional Needs Through Blended Learning

Students who Have Fallen Behind

Blended learning is particularly effective at the lower secondary level of education when students have fallen behind for some reason. There is usually enough time within this ISCED level of education to set students extra work that they can do alongside their current coursework so that gaps in their learning are back-filled. Educators can assess this work without needing to be present while students are afforded a greater degree of flexibility with their time management. This means that remedial work should not get in the way of the current assignments the rest of the class has to complete.

Technologies to Support ISCED 2 Blended Learning Programs

Educators will need access to a reliable network if they are to utilize blended learning methods to their maximum potential. For some, this will be the LAN (local area network) inside a school that needs to be reasonably fast and reliable; for others, it will be the connectivity in their host environment. No matter the location of the educator, blended learning comes into its own is when connectivity is predictable and dependable, allowing both educator and student to access each other's work from anywhere, at any time. It is important to note that privacy should always be maintained by the technologies that are deployed. The possible methods of online lesson delivery for ISCED 2 programs could include, but are not limited to:

- Software-based virtual learning or e-learning environments
- Audio books and podcasts
- Webinars
- Online quizzes, games, and assessments
- Video streaming services
- VLE or LMS course modules

The method of delivery requires some, if not all, of the following equipment:

- Videoconferencing equipment
- Webcams or video recording equipment for virtual lesson delivery
- Interactive classroom equipment, such as large touchscreens
- Personal computers, tablets, or smartphones
- Wireless networking functionality in schools
- Reliable internet connections outside of schools

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