PRIMAE

Participation and Recreation through Inclusive Martial Arts Education and E-Learning

INCLUSIVE CURRICULUM DESIGN

SPECIFICATION DOCUMENT

Contents

Project Full Name:

Participation and Recreation through Inclusive Martial Arts Education and E-Learning

Programme: Erasmus+ Acronym Title: PRIMAE

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Project Partners

Areadne Lifelong Learning

Areadne Lifelong Learning Centre is an accredited Lifelong Learning Centre offering European Qualification Framework level 5 and 7 online and face-to-face teacher training courses in Europe and beyond. Areadne also offer general education courses in ICT, languages, hospitality services, beauty and crafts courses. Areadne employs ten learning consultants, holding advanced postgraduate degrees and over ten years of experience, training around 100 teachers and 400 other learners from Greece per year. Areadne works with schools, universities, national and international training companies and organisations, Non-Governmental Organisations, Chambers of Commerce, Employer and Employee organisations, local, national and international corporations, designing and implementing transformational learning interventions. Areadne currently leads a KA2 Innovation partnership on refugees and art.

Futuro Digitale

Futuro Digitale is a nonprofit organisation that was founded onthe 20th ofFebruary 2013 on the ideals of the Policoro project of the Italian Bishops Conference. Futuro Digitale works to strengthen the skills of young people through ICT and youth participation projects in small towns. Their mission is supported by enthusiastic volunteers and local youth community groups. Futuro Digitale believes that by being consistent and professional, you can really create development opportunities for young people. Futuro Digitale cooperates with institutions, schools and other social organisations. They are accredited as an employment agency, a computer centre and a centre for teaching the Italian language. Futuro Digitale has a varied expertise that is expressed in entrepreneurial projects, Erasmus mobility projects and social research.

University of Cyprus

The Software Engineering and Internet Technologies (SEIT) Laboratory focuses its research activities on Cloud Computing, Service-Oriented Architectures, Context-Aware Middleware Platforms and Smart and Mobile Computing. The Laboratory concentrates on the development of ICT-enabled Creativity and Enhanced Learning Environments, platforms and tools for implementing health monitoring and support services, Smart and Personalised services for Elders and Assistive Technologies for people with disabilities. The lab also pursues activities related to Technology Enhanced Learning, E-Business, E-Government and developing environments for elders' social inclusion, active ageing and independent living. SEIT was actively involved in 30 EU funded projects and attracted more than €5M in funding. The Laboratory currently has 10 personnel, including 4 post-doctoral scientists and 4 PhD researchers, and has access to extensive hardware and software facilities.

Euro-Net

EURO-NET is a not-for-profit association that is a member or associated member of 57 international
networks. It has realised more than 340 European projects. EURO-NET was chosen twice by the European Commission in the Pan-European Working Groups for its competencies and 3 times published for its best practices in the field of media and communications.

Ikkaido Ltd

Ikkaido is an NGO with Special Consultative Status to the United Nations, a Registered Charity, a signature to the Marseilles Declaration and a member of UN Women. Ikkaido sits on the Diversity and Inclusion Working Group of the United Nations Global Compact for the Sustainable Development Goals. Ikkaido uses a Systems Thinking approach to disrupt social exclusion and non-participation and create innovative inclusive biopsychosocial methodologies for the emotional, physical, behavioural and cognitive development of persons with fewer opportunities. Ikkaido promotes martial arts inclusion as "The Way" – a journey of self-discovery.

Institute for Studies in Social Inclusion, Diversity and Engagement (INSIDE EU)

INSIDE EU was set up in Ireland by Dirk van der Merwe, a paraplegic wheelchair user, to provide empowering physical activity, education and employment for persons with fewer opportunities, especially persons with a disability. The Institute provides expertise in empowerment and inclusion for persons with fewer opportunities, especially persons with a disability, and provides training for youth workers, coaches, teaching assistants and teachers throughout the island of Ireland and Europe. INSIDE EU has vast experience in the development of inclusion tools and inclusive adapted and transferable gamification that can be used to develop persons with feweropportunities, and to engage people with any ability or disability so that everyone can participate together in the same activity.

Aux Couleurs du DEBA

Aux Couleurs du DEBA is an association with 15 years of expertise in European projects, non-formal education, intercultural dialogue, active citizenship, and young people with fewer opportunities (NEETs), working in the fields of youth, training and education, employment and social entrepreneurship, and European mobility.

Introduction

PRIMAE is an Innovation Erasmus+ project which aims to create accessible e-learning and qualifications for disabled and non-disabled people to become inclusive martial arts coaches, tutors, assessors, quality assurers (IQA) and teachers from Level 2 and up.

An important part of PRIMAE is the development of an Inclusive Curriculum, producing accessible education for persons with and without a disability who want to be involved in inclusion in sports coaching, coach education, assessing, IQA, and teaching.

Guiding Assumptions

A number of principles underly the PRIMAE concept, as presented in the Erasmus+ proposal. These principles, if properly applied, will help create a distinctive character to the PRIMAE resources and programmes. They include:

• Engagement – all developed materials should aim to be as attractive, accessible, and relevant as possible for potential participants.
• Inclusive – PRIMAE is a programme committed to the promotion of inclusion; therefore it should also embody inclusion in every aspect.
• Competency-based – To be effective PRIMAE will support the development of a wide range of knowledge, skills, attitudes, and values.
• Learner-centred - the emphasis of the programme is on learning, not teaching and on learning, not assessment.
• Empowerment - PRIMAE should help encourage inclusive awareness, behaviours and attitudes to help participants become better inclusive martial arts activators, leaders, coaches and better inclusive tutors, assessors and quality assurers.

In line with the PRIMAE Best Practice Report, PRIMAE's curriculum has put inclusion and accessibility at the forefront of the design of educational materials. PRIMAE focuses on how to best educate the learner and provide a tailor-made and flexible e-learning solution which is adapted to learner needs and not didactical or based upon aspects of technology alone. PRIMAE promotes the social inclusion of persons with a disability and aims to reduce barriers and discrimination through the use of adaptations and accessible technology.

Inclusive Curriculum

Human Rights

The Convention on the Rights of Persons with Disabilities (CRPD), signed by 175 countries, states that signatories shall ensure an inclusive education system at all levels and lifelong learning to facilitate:

a. The full development of human potential and sense of dignity and self-worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity;
b. The development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical abilities, to their fullest potential;
c. Enabling persons with disabilities to participate effectively in a free society.
and ensure that:

a) Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability;
b) Persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live;
c) Reasonable accommodation of the individual's requirements is provided;
d) Persons with disabilities receive the support required, within the general education system, to facilitate their effective education;
e) Effective individualised support measures are provided in environments that maximise academic and social development, consistent with the goal of full inclusion.

by taking appropriate measures, including:

a) Facilitating the learning of Braille, alternative script, augmentative and alternative modes, means and formats of communication and orientation and mobility skills, and facilitating peer support and mentoring;

b) Facilitating the learning of sign language and the promotion of the linguistic identity of the deaf community;

c) Ensuring that the education of persons, and in particular children, who are blind, deaf or deafblind, is delivered in the most appropriate languages and modes and means of communication for the individual, and in environments which maximise academic and social development.

d) Employing teachers, including teachers with disabilities, who are qualified in sign language and/or Braille, and to train professionals and staff who work at all levels of education. Such training shall incorporate disability awareness and the use of appropriate augmentative and alternative modes, means and formats of communication, educational techniques and materials to support persons with disabilities.

Organisations have a responsibility to remove the barriers in education for persons with a disability or health condition and take reasonable steps to avoid substantial disadvantages caused by a provision, criterion or practice, by the physical accessibility features of an environment, or by the absence of auxiliary aids or services.

Educational organisations have a responsibility to take positive steps to ensure that disabled pupils can fully participate in the education provided by the school and that they can enjoy the other benefits, facilities and services that the school provides for pupils. Organisations can meet this responsibility through "Alternative Arrangements", Reasonable Adjustments", or "Special Considerations".

Traditional Curriculum Design

- Values
- Aims
- Concepts
- Goals
- Learning objectives

- Subject selection
- Subject matter
- Expected outcomes
- Standards

Goals

Content

Methods

Management

- Delivery process
- Delivery approach

- Learning environment
- Teaching facilities
- Teaching resources
- Assessment

Fig. 1: Dimensions of a curriculum (cf. Maňák, Janík & Švec 2008)

Inclusive and Accessible Design

The two primary ways to solve problems of inclusion in the design of education are accessible curriculum design and inclusive curriculum design.

Inclusive design and accessible design recognise that disability occurs at the interface where people and education interact.

Accessibility is one of the primary outcomes of an effective inclusive curriculum design.

Accessibility on its own could exclude large numbers of people who don't have a disability, but might have issues accessing education based on the particular circumstances of their background. Inclusive curriculum design meets these diverse needs, including disability, and aims to address them.

Accessible design might provide information in a way that assists persons who are deaf or hard of hearing. However, accessible design would not take the setting into account where a person cannot hear due to noise in their environment or a temporary disability such as an ear infection. and would likely never consider the commuter in their design process.

Accessible design focuses on the outcome or end result of a design project. On the internet, for example, accessible design is based on the following recommendations:

Web Content Accessibility Guidelines
Authoring Tool Accessibility Guidelines
User Agent Accessibility Guidelines
Accessible Rich Internet Applications

These recommendations ensure that people with disabilities can access websites and other digital products effectively.

Inclusive design looks at the diversity of experiences that may exclude a person from using an interface effectively. The process might start with persons who

are excluded by one issue, and then consider the other types of people who could benefit from the same solutions.

Inclusive design recognises that what works for people with a disability is also likely to improve learning for people from diverse backgrounds who face diverse barriers to their learning. A key element in inclusive design methodology recognises that exclusion can happen to anyone depending on their particular circumstance.

An inclusive curriculum is defined as "involving the design, planning and evaluation of programmes, courses and modules not only in terms of their learning outcomes, content, pedagogy and assessment but also in ways in which they engage and include the needs, interests and aspirations of *all* students" (Hockings 2010a). Inclusive curriculum design is aligned with accessibility and enabled the development of a curriculum that could be used by a diverse range of people.

Together, accessible curriculum design and inclusive curriculum design can remove some of the barriers to education effectively. By using a methodology of inclusive curriculum design and systems-thinking approaches, a team of neuro-diverse PRIMAE designers created an inclusive curriculum that is as accessible as possible to as many people as possible.

The PRIMAE designers were a team of people who had found ways to adapt to the issues that they faced in their own education.

The development of the PRIMAE Inclusive Curriculum began by identifying situations where people were excluded

Factors which may create barriers to education

Economic
- low income
- long-term unemployment
- homelessness

Social
- gender
- ethnicity
- religion
- sexual orientation
- ex-offenders
- single parents
- disability

Disability
- physical
- sensory
- cognitive/learning

Health
- physical
- mental

Cultural
- migrants or refugees
- travellers
- non-native speakers

Educational
- truants or drop-outs
- early school leavers
- school failures
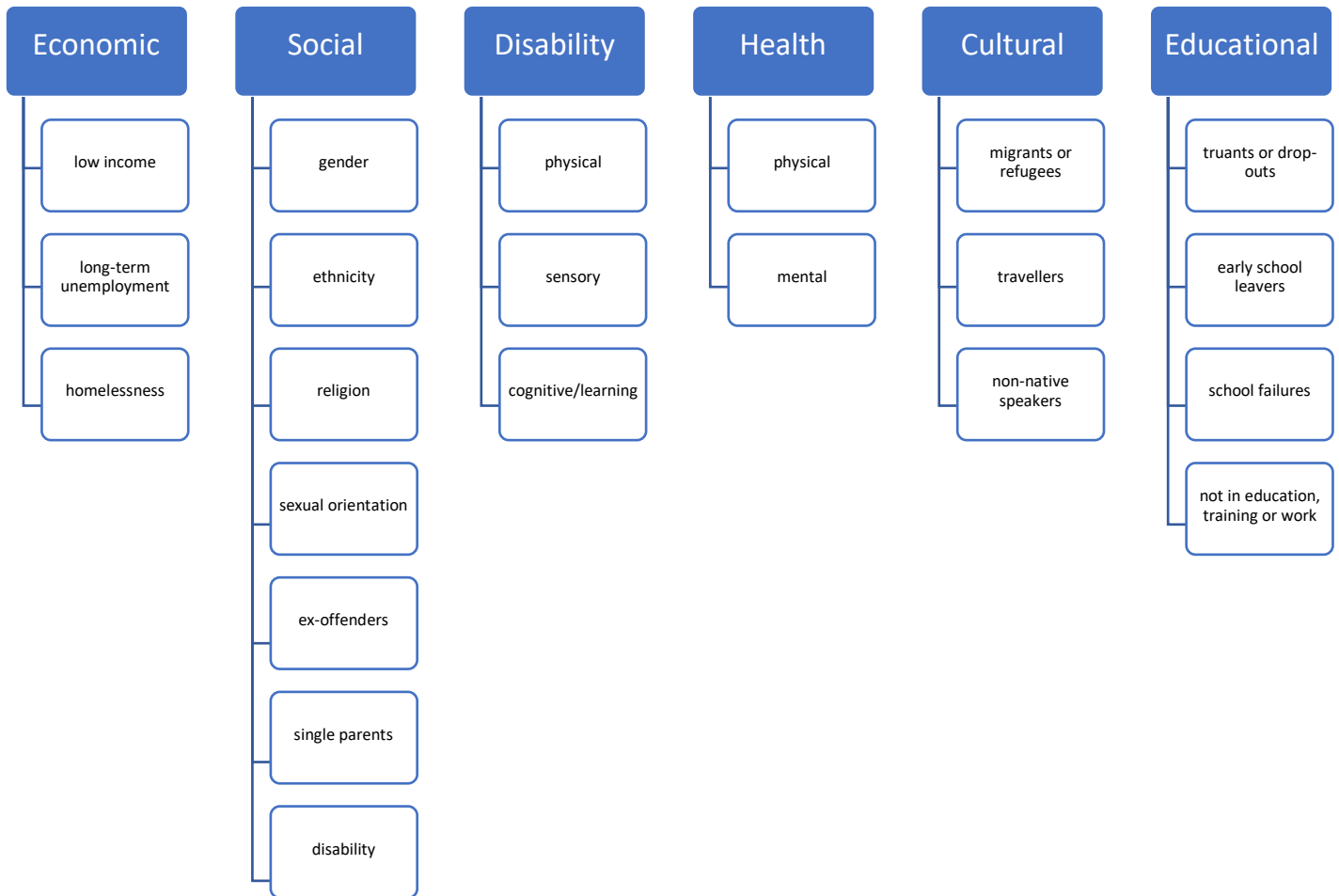- not in education, training or work

Fig .2: Barriers to Education
R.Bailey and R. Sweeney 2022

PRIMAE Inclusive Curriculum Design

PRIMAE was created in collaboration with education and inclusion experts with a disability. The goal was to further develop inclusive curriculum design using the principles of inclusive design, accessible design and the recommendations of the CRPD for the lifelong learning of people who may have struggled with education, or been excluded from education, including persons with a disability. The PRIMAE inclusive curriculum was designed to make learning easier for everyone.

Development

Clear accessible and inclusive enrolment requirements, clarified before enrolment

All materials made accessible

All materials in widely spoken plain languages

Regular accessibility evaluations and modifications

Delivery

Teaching staff trained with flexible/inclusive attitude to "Alternative Arrangements" and "Reasonable Adjustments"

Flexible timelines

Regular accessibility evaluations and modifications

Problem-based learning

Spiral curriculum

Blended learning

Flipped Learning

Peer Learning

INCLUSIVE CURRICULUM

Assessment

Flexible timelines

Flexible assessment tasks

Flexible course requirements

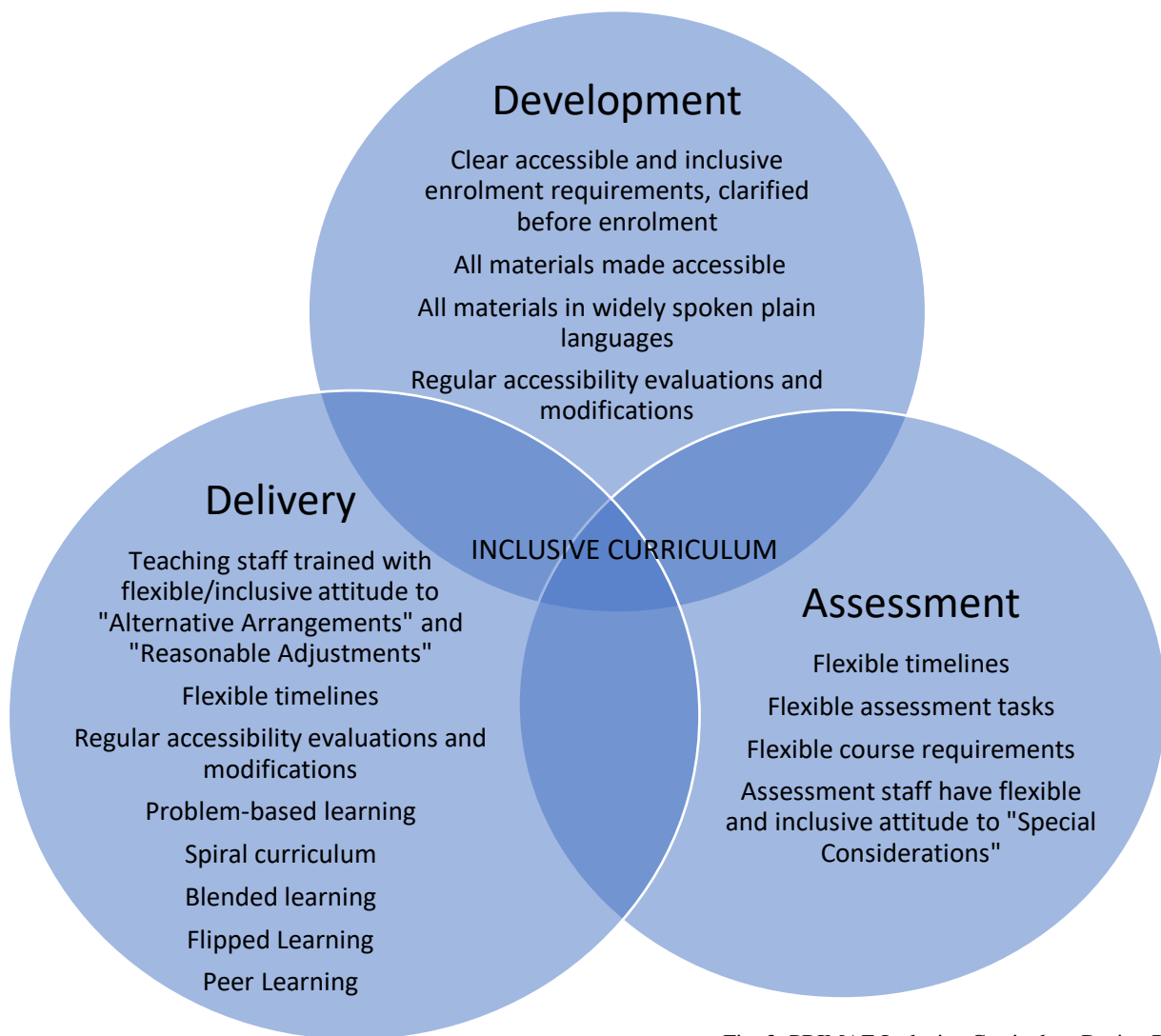Assessment staff have flexible and inclusive attitude to "Special Considerations"

Fig .3: PRIMAE Inclusive Curriculum Design R Bailey and R Sweeney 2022
Drawn partly from Six Practical Principles for Inclusive Curriculum Design (Tynan, Willems and James 2013)

The PRIMAE Inclusive Curriculum originated from the PRIMAE Inclusive Pedagogy which proposed autonomous learning with asynchronous communication a discussion forum, blog and webinars. Questions are posed which check understanding and challenge the learners through problem-based learning.

PRIMAE is based on a spiral curriculum with three key principles:
1. Cyclical: Students should return to the same topic several times throughout their educational journey. Courses should be linked beginning with Inclusive Activator, then Leader, Coach, Tutor, Assessor and finally IQA.
2. Increasing Depth: Each time a student returns to the topic it should be learned at a deeper level and explored in more complexity
3. Prior Knowledge: A student's prior knowledge should be utilised when a topic is returned to so that they build from their foundations rather than starting anew.

The flipped curriculum in PRIMAE has two important principles:
1. Learners are introduced to content at home.
2. Learners develop ideas in taught sessions.

With this blended learning approach, face-to-face interaction is mixed with independent study via an accessible platform, Chat and a Learner Forum. In a common Flipped Classroom scenario, learners might watch pre-recorded videos at home, and then participate in taught sessions with questions and at least some background knowledge.

The PRIMAE Inclusive Curriculum incorporates blended learning using two key principles:
1. Learners who can share information and work with other students directly in a collaborative setting have a more enriched learning experience. The Chat to Other Learners function on the platform is an essential part of the learning in the inclusive curriculum.
2. Collaboration between learners and tutors can be improved upon if group activities rely on information gathered from online resources or lessons. Research on the curriculum materials is carried out online and through the Learner Forum.

PRIMAE Inclusive Course Curriculum

The PRIMAE Course Curriculum meets the requirements of the European Qualification Framework at Levels 2 to 5 with the following courses:

Inclusive Activator – to engage people with a disability or fewer opportunities to begin learning;
Inclusive Leader - to lead activities for people with a disability or fewer opportunities;
Inclusive Coach - to coach people with a disability or fewer opportunities;
Inclusive Tutor - to educate people with a disability or fewer opportunities;
Assessor - to assess learning in an inclusive way;
Quality Assurance - to ensure the quality of inclusive education.

Courses are divided into five Modules with an educational goal of a minimum of 30 minutes per section:

Module 1: The Way of the Martial Arts provides learning about the history and philosophy behind the martial arts and how they may be used to engage and empower people with fewer opportunities.

Module 2: Roles explores the professional and personal limits in inclusive education.

Module 3: Responsibilities encourages reflection upon professional and personal responsibilities in inclusive education and coaching as well as human rights.

Module 4: Health and Well-being enables learners to explore the meaning of healthy lifestyles and how to support people to achieve them.

Module 5: Inclusive Martial Arts provides deep learning on the meaning of inclusion, how inclusion can be achieved and the impact of inclusive coaching on the lives of persons with fewer opportunities.

The learning in each module is provided in two Tiers:

Tier 1 of the learning materials is based upon flipped and autonomous, self-directed learning.

Tier 2 uses enriched, flipped and blended learning.

Both Tiers reverse the traditional way of learning to make PRIMAE truly learner-led.   The Forum and Chat modules in the Tiers enable collaborative learning in line with e-learning 2.0 so that, in PRIMAE, the learner becomes the centre of focus.

Inclusive Technology

An inclusive custom user interface has been created on the Microsoft Azure Platform containing all of the learning materials including Slides, PDFs and a Moodle. The platform allows users to access information using screen readers and other technology designed to improve accessibility.

Both the PRIMAE website and accessible inclusive e-learning platform allow accessibility adjustments to be made to the screen including size and type of text, colour and contrast. Text can be viewed with a visual guide or a highlighter that allows the text to be more easily read. Videos can be stopped, links can be highlighted and dyslexia-friendly text can be used to assist the learner, all at the press of a button. and ensure accessibility for persons with visual impairment and hearing impairment.

Learning is presented in the form of text, sound, video and cartoons to meet the needs of a wide range of learners and ensure accessibility for persons with visual impairment and hearing impairment, whilst also making learning easier by providing the same information in different formats.

Synchronous tools are used to create a participatory environment and include a live Chat option for peer learning groups, video conferencing and live support from tutors and assessors. Learners can jot down ideas in an embedded Notes app, and answer questions which can then be reviewed by peers, tutors and assessors.

Inclusive Language

The inclusive materials have been written in Plain English and translated into the other four partner languages; Italian, French, Swedish and Greek. To ensure a broader reach and cover the 5 most widely spoken languages in the EU, German and Spanish have been added.

All videos and cartoons have Closed Captions over high contrast text boxes, which are automatically translated by Artificial Intelligence based on the learner's IP address so, language can be changed to suit the learner's needs. Closed Captions and all other learning materials have been adapted to be read by a screen reader for persons with visual impairment or hearing impairment.

Inclusive by Design

Learning Modules used PowerPoint to create simplified and made to be inclusive. The Modules utilised five bold colours that could be easily seen by some people with some visual impairments but also took into consideration persons with autism.

Each of the five Learning Modules used one of the five bold colours throughout the Tiers and the spiral curriculum of the learning to create a themed pathway, and make the learning easier to follow.

Do, Dao, Tao; or "The Way" is the lifelong learning journey of a martial artist. The Way was used to highlight a visual map of each course using the five colours to enable learners to identify where they were in the course, whilst other learners could use a text map that could be read by a screen reader.

To replicate the process of physical activity, cartoons and videos of people with a disability and fewer opportunities were embedded into the modules as a Warmup at the beginning of each Module and a Cooldown at the end. Warmups were designed to prepare people to learn, and Cooldowns were developed to encourage reflection and review.

Tier 1 materials promoted research and critical thinking which enabled people

to check and challenge their own knowledge. Tier 2 materials encouraged deeper learning and further research and The Knowledge provided in-depth knowledge about each of the Modules.

Chat and a moderated Forum allowed learners to communicate directly with other learners, or to communicate with groups of learners to discuss a topic in more depth. Tutors and Assessors could be contacted directly or enter into professional discussions in the Forum.

All Tutors and Assessors had to go through the whole of the PRIMAE learning process from Activator to Tutor, Assessor and IQA to fully understand the learning and assessment process.

Conclusion

Together, accessible curriculum design and inclusive curriculum design can remove some of the barriers to education effectively. By using a methodology of inclusive curriculum design and systems-thinking approaches, a team of neuro-diverse designers can create an inclusive curriculum that is as accessible as possible to as many people as possible.

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