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INCLUSIVE DIGITAL ENVIRONMENTS TO ENABLE HIGH-QUALITY EDUCATION FOR DISADVANTAGED AND DISABLED LEARNERS

621547-EPP-1-2020-1-RO-EPPA3-IPI-SOC-IN

Social inclusion and common values: the contribution in the field of education and training

EACEA/34/2019

D8.1. Transferability and Exploitation Strategy

Due date	15.01.2022
Actual date	07.04.2022
Deliverable author(s)	Neil Judd
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Contributors	-
Version	2.0
Status	Draft
Dissemination level	Public

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Co-funded by the Erasmus+ Programme of the European Union

Version control				
Version	**Date**	**Author**	**Institution**	**Change and where applicable reason for change**
1.0	11.01.2022	Neil Judd	HFC	First draft
1.1	12.02.2022	Ancuta Gheorghe	ATS	Internal review
1.1	19.02.2022	Filippos Loizou	PAC	Internal review
2.0	05.04.2022	Neil Judd	HFC	Changes based on reviews – formatting, citations, references and updated content

Quality control				
QA Version	**Date**	**QA Responsible**	**Institution**	**Change and where applicable reason for change**
2.0	06.04.2022	Ioana Andreea Ștefan	ATS	Minor revision to the content

Release approval				
Version	**Date**	**Name**	**Institution**	**Role**
2.0	07.04.2022	INCLUDEME_D8.1 Transferability and Exploitation Plan	ATS	CO

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EXECUTIVE SUMMARY

The INCLUDEME project aims to create an accessible digital learning environment for disadvantaged and impaired children and students from age 4 – 24.

This digital platform serves as a collaborative environment between teacher, parent and student where gamified lesson plans can be created from the pool of online game resources in the platform, assigned to students and then played through at the user's pace whilst learning valuable skills and knowledge.

The INCLUDEME platform serves to give access to mainstream learning concepts and information otherwise denied to impaired individuals by making the whole platform fully accessible with cutting edge accessibility tools and built-in accessible gaming elements. Furthermore, a resource centre for best practices in teaching students with Neurodiversity's, creating accessible content and coaching support on the platform elements themselves is available.

The overall objective of the project is to nurture and implement inclusive education practices across educational, economic, social, and cultural contexts. Based on our prior expertise in Educational Technology we aim to create customizable, user-centred learning environments. Our aim is to employ the capabilities and facilities provided through accessible information technologies and gaming approaches to construct unique experiences that engage, motivate, and increase the performance of both disadvantaged and disabled learners.

At an individual level, the INCLUDEME project aims to contribute by improving the lives disadvantaged and disabled learners and provide them inclusive educational opportunities through accessing digital learning environments. Our goal is 'accessibility and inclusivity for all'. On the same line we also appreciate the need for improving the teaching staff skills in relation to supporting technologies in inclusive education.

At a community level, this research project aims to increase awareness around equality issues to support inclusive education.

In light of the individual and community-based objectives of the project this document is an initial attempt at describing the INCLUDEME preliminary exploitation and transferability strategy, including an exploitation framework, definition of exploitable products, possible exploitation and dissemination intentions of the consortium partners and an initial description of the marketing channels and types of business for the project and their business models.

As the project is only 12 months into its 3-year lifetime, it is premature to build a full business plan and model for commercial purposes or a new company. This will be outlined and finalized in D8.2 Transferability and exploitation report. This document instead takes a strategic approach and outlines (a) the options for the types of business that could emerge from the work, (b) considers the market environment that the business would operate in and (c) the products that could be offered.

The main findings of the of this preliminary context analysis are:

- A brief technology watch and market survey has been conducted which demonstrates that there is a good opening for inclusive based gamified platforms and scope for improvements in the approach to pervasive and accessibile gamified platforms.
- There are a number of possible types of business that the INCLUDEME platform could be marketed to, which are outlined further in this document
- Possible business and exploitation strategies have been put forward to continue INCLUDEME after the project lifespan, outlined further throughout the deliverable
- The next stage will be to focus attention on the proposed strategies to form a robust business model making use of Value Proposition Canvas and Busines Model Canvas (see Annex 1) as well as to align the outcomes of this deliverable with the KPI's set in task 8.1 to evaluate transferability and form the final exploitation plan for D8.2

There is an overall aim within INCLUDEME to create a community of learners and teachers who share their knowledge, skills and content created within the platform. Subsequently INCLUDEME will eventually produce a roadmap for stakeholders (content developers, teachers, parents, schools, learners, and disadvantaged students) to assist in the transferability approach to share methods, piloting, and research findings, together with platform specifications, the use cases and all recommendations.

The final part of this report looks ahead to the key aspects that should be considered by the consortium for the sustainability of the project outcomes and the plans for commercial development.

1. INCLUDEME EXPLOITATION

1.1 PROPOSED APPROACH

One of the key challenges faced by the INCLUDEME project is to ensure the sustainability beyond the existing funding of the project. Dealing with this requires an actionable exploitation plan underpinned by a robust business model.

To maximise the efforts of the INCLUDEME consortium and valorise the accessibility features and gaming components of the platform, the business plan is structured in two stages. The first stage comprises an initial exploitation discussion amongst partners, the outline of exploitable results and the description of the strategy at project level (described in this document). The second stage consists in the elaboration and creation of a detailed exploitation and business plan, based on piloting outcomes, first phase decisions and discussions, and this will be described in deliverable D8.2.

By pursuing this approach, it allows the project to build from existing exploitable resources and further benefit from pilot evaluation results, enhancing and verifying the business plan feasibility and solidity. The preferred outcome is a comprehensive business plan that will be fully exploitable by all partners for technology transfer and INCLUDEME valorisation will be developed based on all the results from technical working groups and workshops.

This document (D8.1) sets out the options for the types of business that could emerge from the INCLUDEME project, to consider the products that could be offered and the market environment in that the business would operate in. Its purpose is to inform and assist the INCLUDEME consortium in making decisions about the commercial exploitation of the project results beyond the project lifetime. The plan is based on the knowledge, experience, and expectations of the INCLUDEME project participants, on INCLUDEME technology solutions and on related project activities. The document also determines the nearest steps that the project should take to best prepare for commercialisation.

1.2 ROLE OF THIS DELIVERABLE

This deliverable sets the ground for the exploitation and transferability plan of the INCLUDEME project, being related to project task 8.1 “Transferability definition and plan”. This task will comprise of defining the methodology to be followed in order to transfer the platform to other locations, thus ensuring the future sustainability of the project outcomes (namely the platform and its constituencies).

Additionally, this task will define the KPIs for the evaluation of the transferability approach in Task 8.2 “Transferability procedures, practices and evaluation. The pilots will allow the validation of the methodology in close collaboration with WP6, resulting in a final plan for exploitation in D8.2 “Transferability and Exploitation Report” at month 36.

Synergic and coherent action among WP6, Tasks 8.1 and 8.2 will ensure take up of the innovative results developed by the consortium, building upon the essence of collective business models

that concur with the size of participation and dissemination scale targeted in the project and enables the exploitation of the tools, methods and components of the project.

That being said, initially this deliverable will try to outline the INCLUDEME exploitation framework, showing exploitable results and initial product definitions, strategy, types of business, approach to potential investors as well as initial market positioning, market barriers and business model formats for exploitation intentions.

The final exploitation plan in D8.2 can then detail the key objectives, the anticipated project outcomes, the strategy, the implementation, responsibilities, transferability approach as well as report on the exploitation and dissemination activities carried out so far and benchmarked against the KPIs defined in task 8.1.

2. TECHNOLOGY WATCH

The technology watch is essential to remain relevant to the global trends in game-based education and to make sure that the INCLUDEME project has the best possible chance of commercial success.

The INCLUDEME project has several different stakeholder groups and targeted users. Disadvantaged students from age 4 onwards are a key target group but special attention is devoted to inclusive education as provisioned by the project scope. This means students of age 4 onwards with disabilities, nuerodiversity's or impairments are focussed on, allowing them to access gamified content, games and information that may not normally be easily accessible to them via mainstream teaching methods.

The approach here is not only to provide better accessibility or some additional functions, but to also build into the system an adaptivity feature that would embrace special needs students within the same game flow as the others, who might also have their own needs and demands.

On top of this INCLUDEME adds accessible gaming standards and elements directly into the mini games themselves so they can be played equally by all and enjoyed to their full potential.

More teachers are using games in the classroom, and more adults who grew up playing games

are becoming parents (or teachers). Combined with increasing global sales of mobile games and a growing body of supporting research, game-based learning is already becoming a part of the national curriculum.

There are examples of game-based learning techniques already being utilised in the classroom, which we will briefly touch upon in the next section. However, when it comes to a platform with accessibility and collaboration at the forefront of every element then concrete working examples become less available. This is where INCLUDEME can have a real Unique Selling Proposition (USP) and leverage itself above its competitors in a very competitive and challenging market.

2.1 MARKET ANALYSIS

In the 1980s and 1990s multimedia and digital presentation tools were embraced enthusiastically by parents, instructional designers, and software development companies since they made the course content more attractive. Yet it could never be proven that these tools yield deeper learning beyond their engaging quality. Students who were engaged by some other way could learn just as much. The learner still had a "third person" relationship with the subject, with the content creator actually being the first and the teacher the second personas. Since the mid-2000s, however, we have witnessed the development and spread of increasingly sophisticated computer games and digital content, as well as mobile computing devices that enabled access to the content anywhere, anytime. Content became an ambient resource forcing traditional pedagogical approaches to change. Social constructivism in the form of "Connected Learning" is embraced, starting in adult training market, then penetrated to higher education and high schools. Learning Management Systems (LMS) as used by online course platforms such

as Coursera, Udacity, and EdX enabled self-paced, self-regulated learning and institutional LMS products gained social networking functions, first as an add-on, but then as a foundation.

These advances have led to an abundance of digital games pressed into the service of education and used as a part of the active learning toolset. Encouraged by this foothold, educational games research is established as a new discipline of instructional design that formalizes the study of game design and development to be placed in formal education, to be integrated into curricula and into life in school. The INCLUDEME project is set-up as an “Integrated Action” to carry the outcomes of this discipline to multiple countries in Europe at national level. The European market for educational games is not only smaller than the US and Asian markets, but also used to grow at a slower rate than the others. Interestingly, that trend seems to change after 2015 (Insight, 2016).

A brief market analysis can revealthat software that has made that transition into the education market successfully fall into 3 different categories. Those that include a mix of mini game gamified learning content incorporated into a wider meta game environment with a running narrative, environmental problem-solving games and those that include gamified elements into education interactive learning courses that are assigned to students.

Examples of expansive environments following a story where players have to complete challenges and mini games are Atlantis Remixed and Refraction from Gates Foundation. These games follow a storyline yet engage the players with challenges that demand competencies and knowledge to tackle successfully.

Figure 1: Atlantis Remixed & Refraction

There are platforms such as Gamilab which aim to provide sets of mini games that challenge the learner in different subjects and difficulty but at the same time encouraging gamification techniques and collaboration.

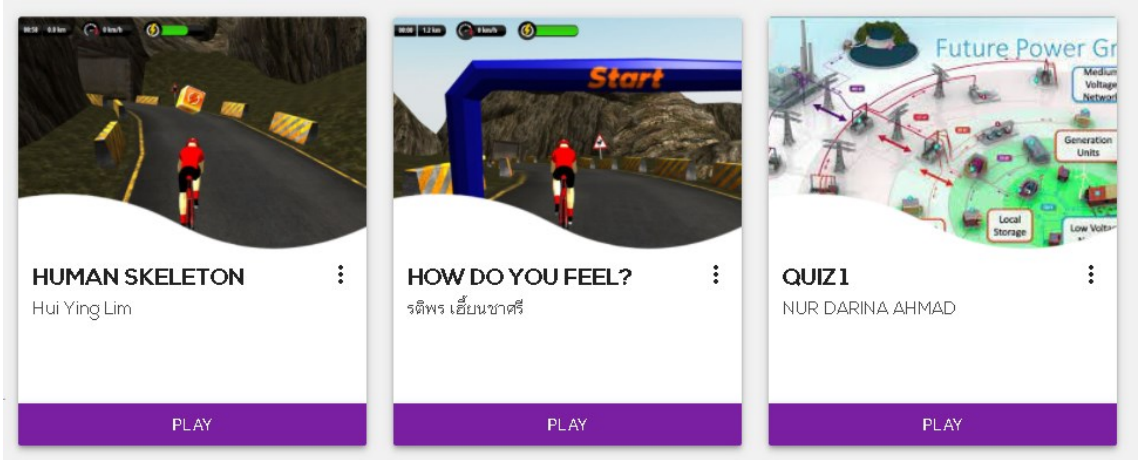

Figure 2: Gamilab Quiz Game Examples

Gamilab is an online platform where you can find and create easy, fun and educational games. Gamilab uses game elements to motivate and engage players to learn faster and better, and to be more involved in their learning. By using elements like points, stars, high scores and badges learning is made to feel like a game and motivate the player to learn while playing.

These edugames products utilise "game play" as an educational value, where there is an explicit pedagogical (or remediation such as with dyslexia) goal, some form of competition and a reward/penalty system that essentially functions as an assessment method. A user "wins" an edugame when they achieve the learning objectives of the gameplay.

All educational games are designed for behaviour modification (learning), pedagogical intervention, or cognitive remediation. Remediation address not only cognitive challenges (such as dyslexia), but also behaviour in areas of health and wellness, diversity, conflict management, team building, and leadership.

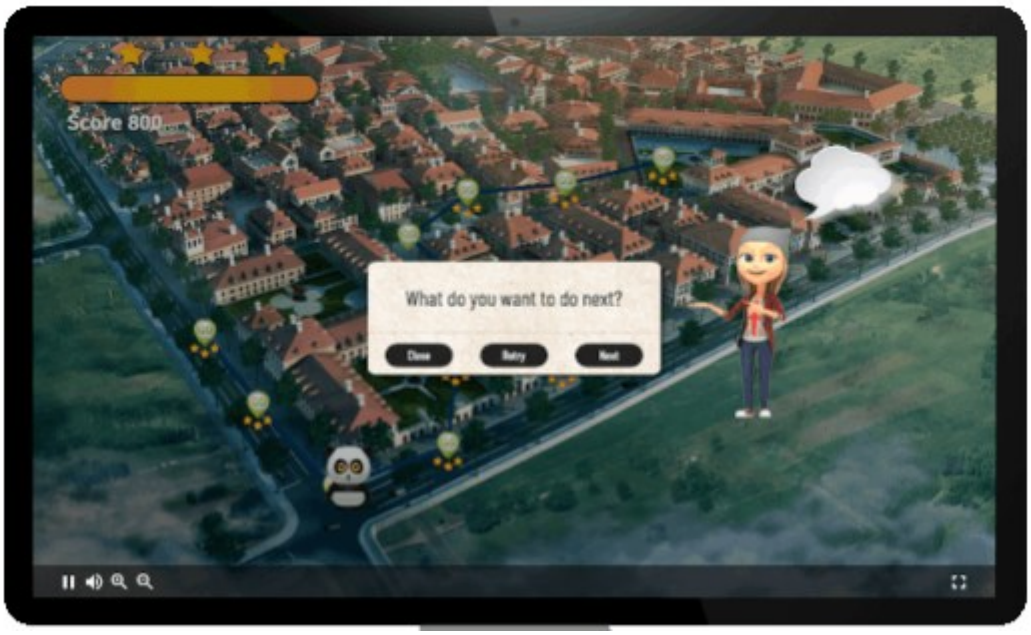

Figure 3: Gamilab Example Mini Game

This type of gamified learning can be very effective to bring into the classroom to enhance current teaching material.

Among European countries, the United Kingdom is the top edugame buying country, followed by Germany. France and Spain also have a large developer base, but both France and Spain combined, is not as big as UK or Germany in terms of turnover or the number of game companies/studios. Like almost all countries in the world, the edugame market in the UK is being driven by consumer demand for mobile edugames (Koops, 2017).

Another technique that is proving popular are environment-based problem-solving games such as GlassLab's CivilizationEDU, SimCity or eCity and Hera Project offered by The University of Thessaly.

Players have to build a sustainable environment and face economic and environmental challenges, assessing problem solving and critical thinking and analytical skills. This type of educational game also promotes effective communication and collaboration.

Hera project is a standalone 3D environment in which students have to build and manage a city according to varying challenges that are put their way to do with ustainable growth, quality in education, sustainable natural resource management, mitigating climate change, addressing natural risks, fighting poverty, informing global health, pollution, inhabitant contentment, electricity usage and more.

The **HERA project** aims to build problem solving skills among higher education students through a game-based educational approach that challenges students to combine skills from diverse subjects towards solving complex, multidisciplinary problems inspired by real life in the areas of engineering and economics.

Students are assigned roles and scenarios and manage the city throughout the game lifecycle.

Figure 4. HERA Project

The **HERA** game challenges students to solve realistic, non-trivial problems inspired by real-life. It livens up the classroom, promotes learner engagement, enriches interaction, and encourages experimentation.

Educational Software such as WAND! gives assignable gamified course content in a lesson path. This type of gamified learning content is by far the easiest to incorporate in existing curricula and could be argued that it fully compliments traditional teaching methods. Students are assigned course content which appears in their own student dashboard which they play, learn and interact at their own pace. The student's progress is tracked throughout the learning cycle.

Wand Education is a technology platform that supports primary and secondary school teachers by providing access to high-class online content and learning support materials, automated marking and one-click reporting.

This improves learning in line with curriculum guidelines, engages students in an interactive way and makes their processes more efficient.

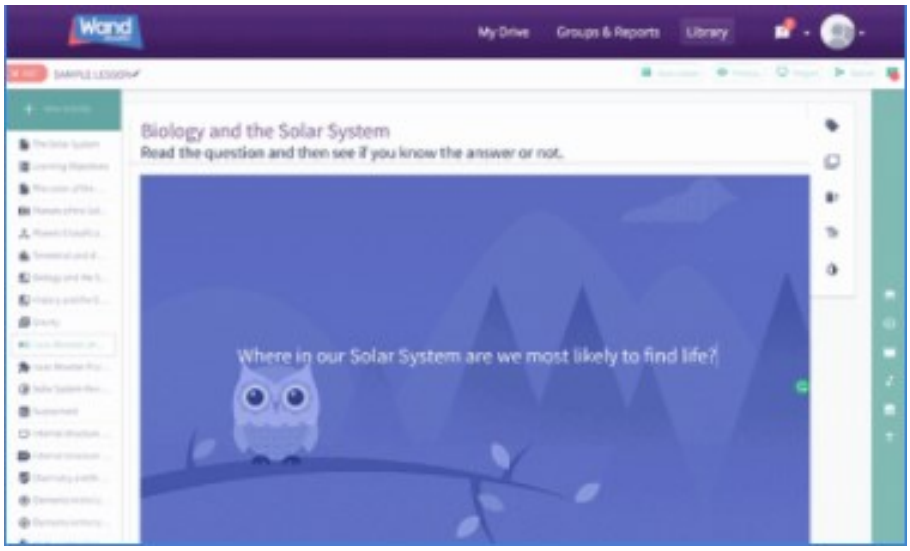

Figure 5: WAND! Example Lesson Activity

The platform gives access to a growing marketplace of teaching resources. Customise, create and deliver ready-made lessons anytime, anywhere on any device. Assess, and intervene through worksheets complete with automated marking and reporting to track student progress.

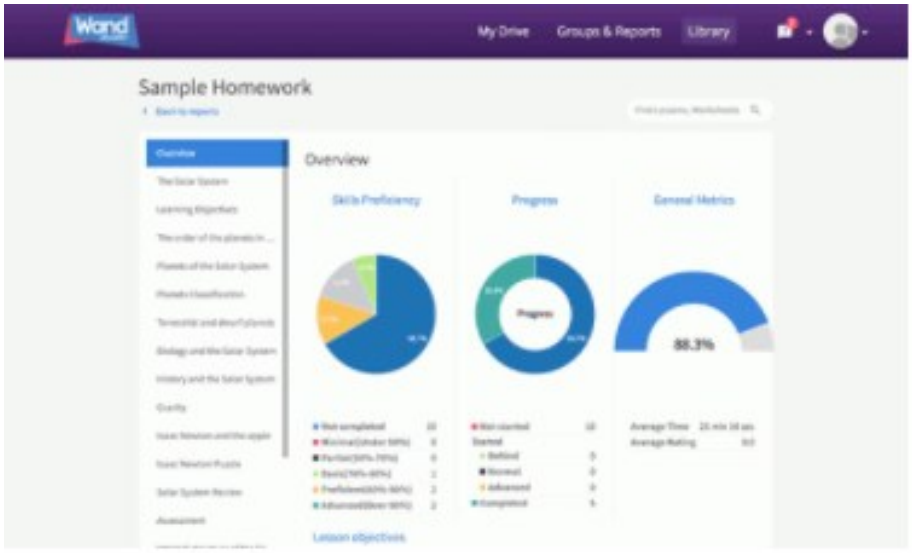

Figure 6: WAND! Student Analytics Dashboard

There is a shift towards incorporating this type of learning into curriculum-based activities which is a worthwhile natural progression. However, what is striking in the majority of these applications is the lack of focus on accessibility features both within the games and interactive

course content and the dashboards themselves to allow individual customisation if the screen for those that need it.

To find this sort of feature set in educational learning software platforms we have to look at examples which have been specifically developed for the younger generation with learning and physical disabilities or are targeted at a preschool teacher and student audience.

Such services come in the form of **Ginger Tiger**, the largest online activity resource for special needs learners, **Shiny Learning**, special needs games educational software and **Skoltlavan (The School Board)**, a complete assignable activity and lesson planner for preschool and children with learning impairments. Let's look at those in more detail.

Skoltlavan, The school board is a platform with interactive teaching materials that can be used on SMART Board, iPad, Chromebook, PC and Mac. Skoltavlan Plus is primarily aimed at students in special schools and Skoltavlan Junior for children in preschool.

The platform has more than 500 teaching materials and you can also adapt and create your own material.

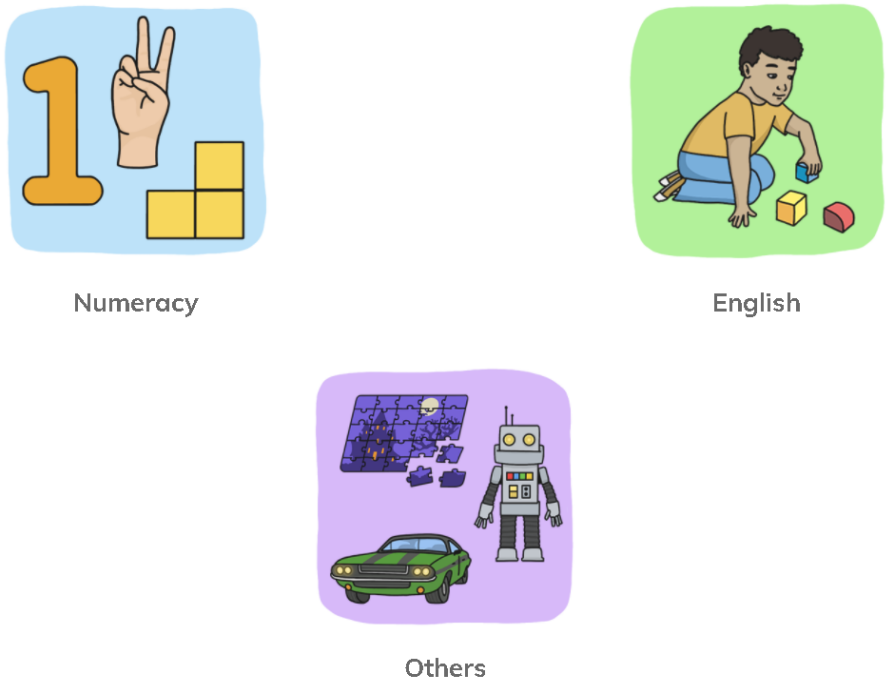

Figure 7: Skoltlavan Exercise Categories

The library is the heart of Skoltavlan where you will find content created by Skoltavlan and by teachers from all over the country. The library has a large selection of interactive teaching material in a number of different subjects and new material is added continuously. You can

either use material from the library directly or quickly modify it according to your students' needs.

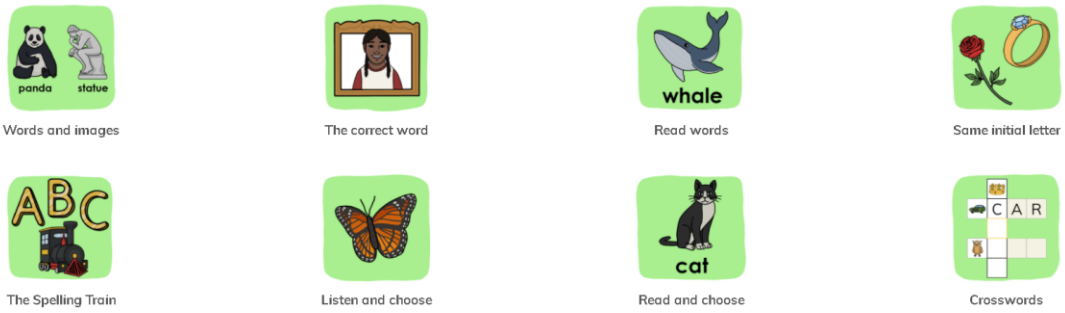

Figure 8: English Library Activities

In Skoltavlan you can easily create interactive teaching material or adapt existing teaching material from the library. You can use the bank of pictures, sounds and films that are in the School Board or use your own pictures, audio and video clips.

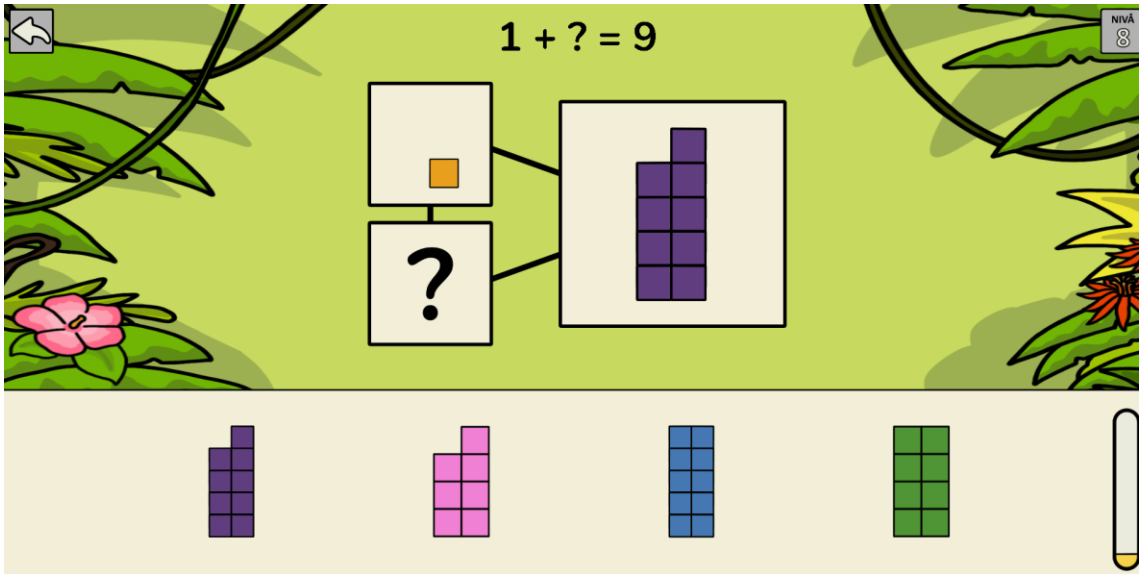

Figure 9: Math's Game Play Screen

With Skoltavlan, you can easily share teaching materials with your students, regardless of whether they use the app or the web version of Skoltavlan. You can then easily follow each student's activity.

Skoltlavan comes into its own though with the host of accessibility features it has built into the games, control methods and customisation.

Being specifically targeted for impaired and young users there are options to simplify the screen, change difficulty of the game and have different control methods such as keyboard, mouse or 1 or 2 switch access for those with physical impairment.

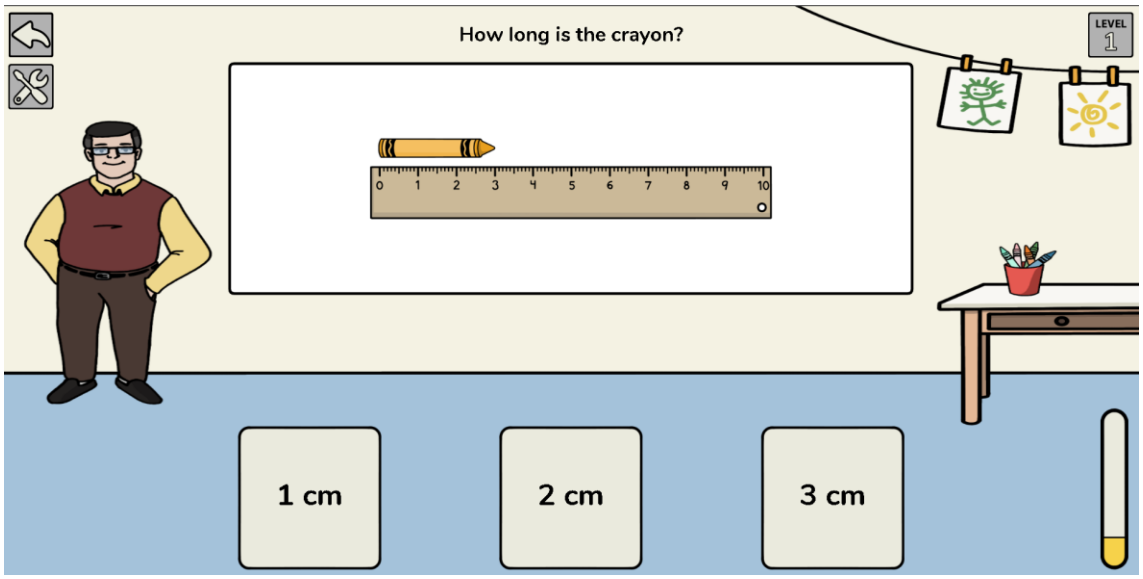

Figure 10: Exercise and Progress Bars

There is also effective but simple gamification rewards and techniques inbuilt such as voice feedback, music and sounds, rewards and progress bars.

Figure 11: Gamification and Rewards

The ability to assign activities to students and track their progress is an important feature and makes The School Board a real competitor to the INCLUDEME project in terms of its scope and

target audience. Drawing on the design and interactivity of the platform would put the consortium in good stead for our own project development furthering the ideas for a broader age range and difficulty level.

Shining Learning and **Ginger Tiger** are other good examples of online subscription platforms for educational software and games specifically aimed at special needs and the impaired user. They include a vast range of cause and effect, timing, matching and simple learning activities and games which can be played over and again at the user's leisure.

Figure 12: Ginger Tiger Games Interface

The unique thing about them is that they have simple design interfaces, a range of control methods for impaired users, accessible gaming elements and a host of accessibility customisation features available on each game activity.

Figure 13: Shiny Learning Cause & Effect Interface

These can be modified in the settings menu and make learning fun and always accessible for the disadvantaged or impaired player.

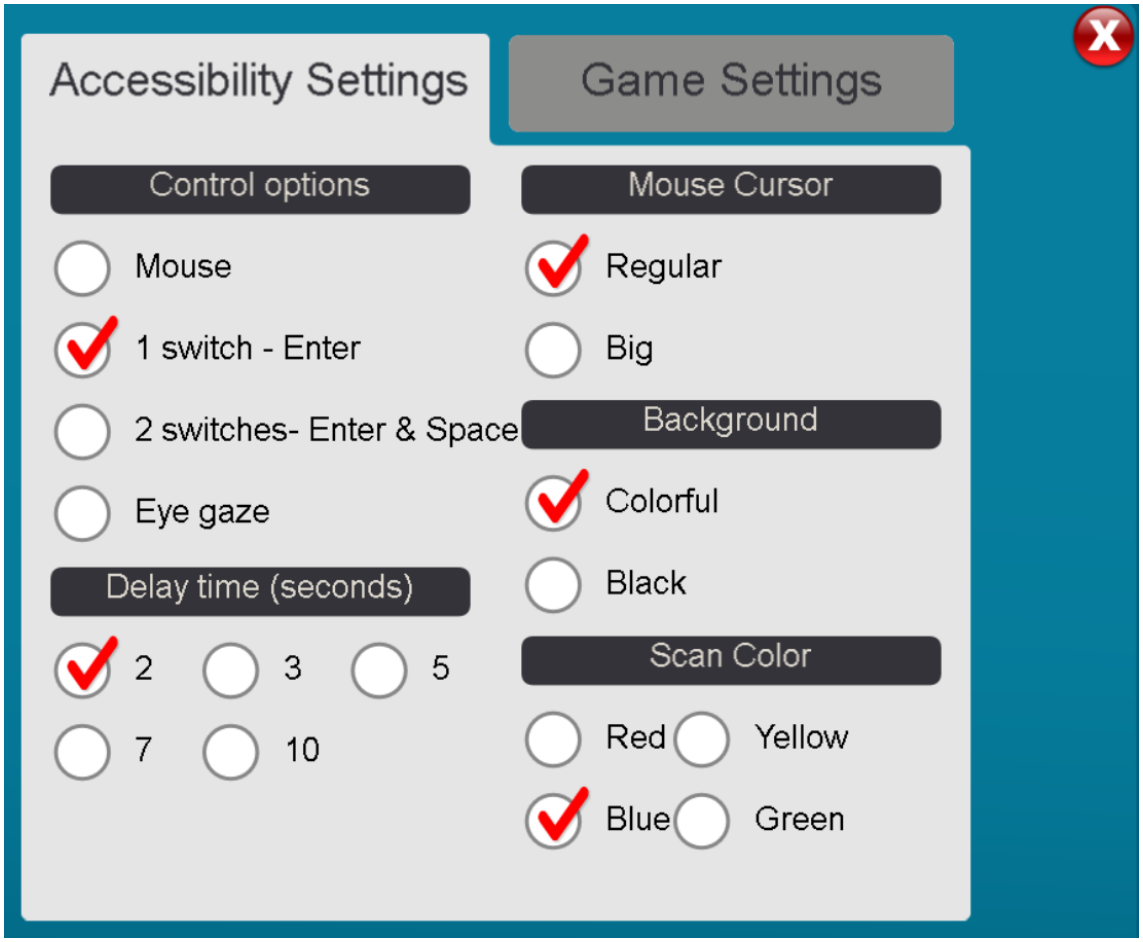

Figure 14: Accessibility Game Settings

Games and activities and not assigned to a user but new titles are frequently added to the library, and they can be played as many times as you like and be made to be part of a lesson or learning plan as the teacher, parent or carer requires.

In terms of market analysis, it has been discovered that although there are many educational software applications and online course creators out there already, there are not so many examples of gamified platforms specifically for the disadvantaged and impaired user. These tend to be specialised to pre-school and special school market with little scope of adding activities geared towards an older audience.

Whereas INCLUDEME will integrate a full range of accessibility features at platform level via accessibility toolbars and elements as well as game-based accessibility techniques, the project will go a step further than current models on the market. This will provide INCLUDEME with a niche market and marketing potential to possible investors and consumers.

The INCLUDEME platform will not only be fully accessible in all areas but will be a learning creation tool with collaborative spaces, authoring tool and assignable activities and games that can be shared across a community of like-minded teachers and individuals wanting accessible learning content for all and not just via mainstream teaching methods. This propels INCLUDEME in the realm of gaming for inclusive education.

With this in mind the following sections of this document will identify potential routes to market and business models to follow to capitalise on the market for implementation of the INCLUDEME platform. In response to this however, it is also important to realise the market barriers that may be faced, the risks involved and provide a compelling argument for strengths and weaknesses of the overall platform, so the consortium can be ready in advance of product release.

2.2 GAMING FOR INCLUSIVE EDUCATION

Inclusive education means that all students attend and are welcomed by their neighbourhood schools in age-appropriate, regular classes and are supported to learn, contribute, and participate in all aspects of the life of the school. That principle would include but is not limited to disadvantaged and to a certain extent disabled students as well. However, a well-designed inclusive education can be expected to expand personalisation to cover all students who might be falling behind or even have specific needs due to their advanced talents.

On the whole, students with disabilities have lower levels of academic achievement which result in poor employment opportunities. Disproportionality this is widespread in special education. Counteracting this situation, inclusive education implements equalizer strategies and involve special needs students in the same group activities, providing access for such students to the general curriculum. If this can be carried out across educational levels these individuals also become economically productive, not only able to support themselves but contribute to the national income as well. Indeed, most countries are becoming increasingly diverse. Diversity often leads to prejudice and conflict, but if the social cohesion can be established, diverse groups prove to be more resourceful and better apt at solving big problems. Developing inclusive societies and global community is both a means and an end.

Implementing inclusive education is not easy: School building and classrooms must have suitable accessibility, even at times of disaster and conflict; educational policy has to be revised, not only on promoting inclusion but also on transition from school to post-school situations; wraparound services need to be developed. But these are relatively easier issues. The harder part is to

develop and deliver appropriate teacher education programmes to ensure teachers are making the right decisions about mixed ability grouping of students, employing evidence-based pedagogy, providing individualized support, and implementing universal designs for learning.

Educational games can be powerful tools to implement inclusive education. Games are social affairs, that improve the social cohesion. Additionally, games get the learners in the flow state of optimal performance, regardless of their (if the game design is right) predispositions. There are three conditions to induce a flow state:

1. Perceived Autonomy: The players should feel that they are in control, the more they attend to the task the more they could command.

2. Perceived Acceptance: The players should feel that they are rewarded for their achievements.

3. Perceived Challenge: The players should feel that they are neither exhausted nor under-challenged in which case they are bored.

2.3 SWOT Analysis

2.3.1 Strengths & Weaknesses

Below is a SWOT analysis of further reflections on the relative position of INCLUDEME against the technologies covered in the sections above.

The INCLUDEME platform has the following **STRENGTHS** given the current state of game-based learning for inclusive education:

1. The well designed game-based activities would present a level of difficulty, bordering the outer limits of each student's abilities which is not possible with typical school activities.

2. Adaptivity not only at interface level but also in game procedures, controlled by not only players' learning abilities but also at competency level.

3. Adaptivity also enables INCLUDEME to be used for independent practice and self-assessment.

4. Gaming enhances motivation, engagement, and eagerness to learn.

5. Integrating game-based learning into the curriculum supports computer literacy skills, problem solving skills and real-world opportunities which all relate strongly with progressive Education and pre-employment aptitudes.

6. Gaming induces a positive mood and attitude, making assessments based on games more reliable.

7. Social bonding within the game promote social learning and emotional anchors for newly learned concepts.

8. Teachers who create or customize content would be deeper involved in students' learning process.

9. Students can have a more active role and a first-person relationship with the learning process.

10. Each challenge in the platform design is well met by capable and track proven partners in the consortium.

11. INCLUDEME games can be customized to account for individuals with disabilities and include them with others in the same game-based learning activity.

12. INCLUDEME lesson plan creation that is team-based will foster the engagement and motivation of individual students, reinforcing collective learning and intelligence.

13. Ready to use scenarios will be developed and proposed in the platform to save development time for teachers.

INCLUDEME platform has the following **WEAKNESSES** given the current state of game-based learning for inclusive education:

1. The assessment methodology, being performance based, may not be rigorous enough for formal assessment and guidance.

2. Any potential business model would depend either on the popularity of the games presented or the capabilities of the authoring pipeline.

3. Immature educational or gaming material as created by novice teachers in game-based education.

4. Authoring software may feel too difficult to be used by some teachers.

5. Some students may develop an addiction or extreme indulgence for this model of education.

6. Teachers may not find any time for authoring or even customization, especially considering the time it will take the students to exploit the games. In that sense, ready to use scenarios shall be developed and proposed to teachers.

7. Educational system in some countries may be too rigid, however the versatility of the platform may effectively address the rigidity of certain educational systems.

8. It is hard to strike the right balance between learning and enjoying. Students may not be able to differentiate game as exercise from game as entertainment or students may get bored with the games, missing the learning opportunities further on.

9. Time spent in gaming may risk the accomplishment of the lesson's objectives.

2.3.2 Opportunities and Threats

Game-based learning for inclusive education market, in its current state, presents the following **OPPORTUNITIES** for INCLUDEME project:

1. If games can be localized with minimal effort, a global audience can be reached.

2. There is a growing trend for multinational non-profit agencies to support educational games.

3. Performance analysis and feedback in real-time.

4. More teachers and students themselves getting more literate in coding and modelling growing the pool of potential authors in the pipeline.

5. Easier grounding of subject matter with real life experiences.

6. For teachers who would be a part of the content creation pipeline, it will be an exercise of creativity, knowledge construction and immediate application of theoretical knowledge. For teachers, it will help in their digital transformation by creating and proposing game based learning activities to their students.

Game-based learning for inclusive education market, in its current state, presents the following THREATS for INCLUDEME project:

1. The choice of technology for controlling adaptivity (if rule-based then it may not be complete or consistent, if probabilistic then there may not be enough training data).

2. Ethical challenges.

3. Possible side effects of unrealistic game narratives, confusing up immature ideas of young students about what is real and what is imaginary.

4. Poor integration with the educational practice.

5. The potential business models not providing enough incentives to each stakeholder in the ecosystem of value creation with INCLUDEME.

6. Technological advances overshadowing educational targets.

7. Some teachers or students not being apt at using technology, some parents having prejudice about the value of games.

8. Not all games raise the same level of interest. Typically, game publishers consider themselves lucky if only some of their game titles are profitable and if just one is a hit. Only 0.1% of mobile games are profitable. Rovio had reportedly failed 51 times before their “overnight success” in Angry Birds.

9. Some players having a me-first attitude in the game, risking achievements of other participants.

10. Inability to employ advanced technology required by very demanding privacy requirements of new legislations and policies.

11. What is engaging as a gaming narrative or experience for one person may be inappropriate or dull for another. Some students who care a lot about the subject content and learning activities, care less about the gaming elements (or vice versa).

12. Technical integration may break up during heavy use of real-time gaming at large scale during pilots.

13. The business models may be too sales oriented and ignore the other costs games bring such as maintenance, change requests, variation requests, distribution, assessment, internal promotion and IT support. Mattel, Lucas Entertainment and Amplify all failed with their edutainment or serious games investments.

14. There is a market barrier in formal education for governments adopting edugames for schools.

15. The **legislative and regulatory changes in EU** about data privacy. Data privacy should not be confused with data security. End-to-end data security can be established by encryption, but data privacy demands control on the role-based accessibility of data in store or in transmission, where the role-based authorisation rules are set by laws or governments or even the real person who the data belongs to.

3.0 EXPLOITATION FRAMEWORK

3.1 EXPLOITABLE RESULTS

3.1.1 Overall Platform

The INCLUDEME platform will usable, adaptable, extendable, and sustainable.

The project strives to ensure that the INCLUDEME platform is innovative, while also serving the purpose to extend the scientific understanding and practice-based experiments of engaging a community of learners including those with disabilities with a more inclusive, connected, and contextualised learning process.

The main outcome of the INCLUDEME project and the innovative approach is built on the pervasiveness of the learning paths and the assimilation of the accessibility tools and features within the stakeholder groups.

The platform is made up of many different components which both separately and combined form the basis of the project exploitable results both for dissemination and marketable product.

The main exploitable results of the INCLUDEME project are

- INCLUDEME Authoring Tool
- INCLUDEME Games
- INCLUDEME Sandbox
- INCLUDEME Learning Resources Centre
- INCLUDEME Information Booth
- INCLUDEME Analytics Component
- INCLUDEME Accessibility Module

The initial “product definitions” of INCLUDEME results are reported in the following sections.

3.1.2 Authoring Tool

The Authoring Tool will be used by teachers and other users to create gamified lesson plans. It offers:

- Templates for game-based activities that can integrate customisable mini games
- Ability to create gamified lesson paths and contribute on the content and narrative
- Integration with teacher and student dashboards for assigning lesson paths and content creation

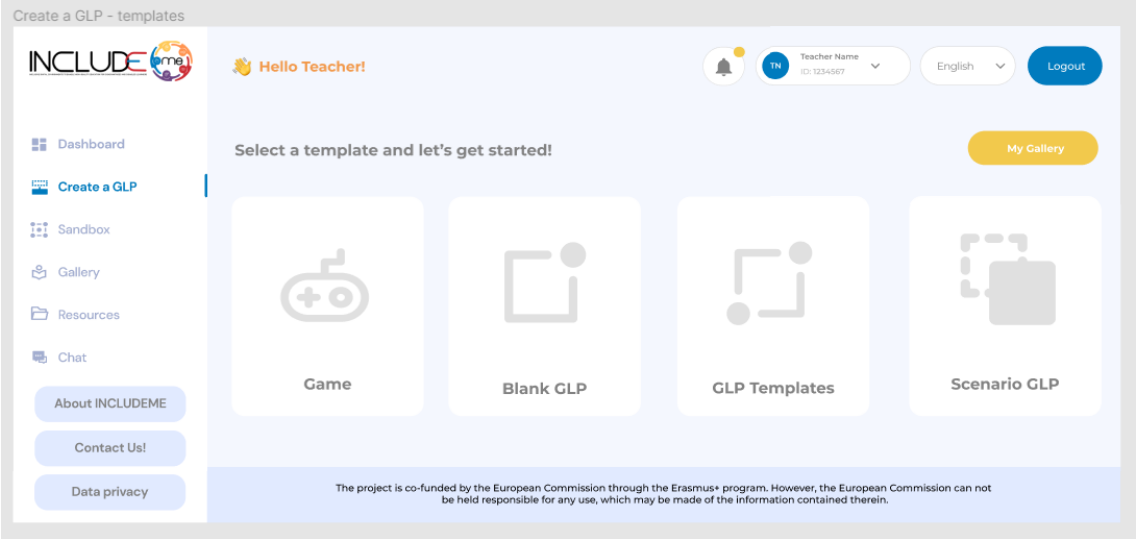

Figure 15: Creating a GLP

3.1.3 Games & Repository

The INCLUDEME repository stores the set of gamified lesson paths and assets produced by the different partners and also by the different stakeholders that will use the lesson paths as they are or will refine them to fit their needs.

The assets in the repository can refer to the customisable mini games that will be created by the consortium. These games can be picked to be included in the gamified lesson paths.

3.1.4 Sandbox

The sandbox is the area of the platform where collaboration is encouraged. GLP's already created can be shared with other teachers or invite other users to contribute to the lesson path and its content with new resources, images, and information to make it more engaging.

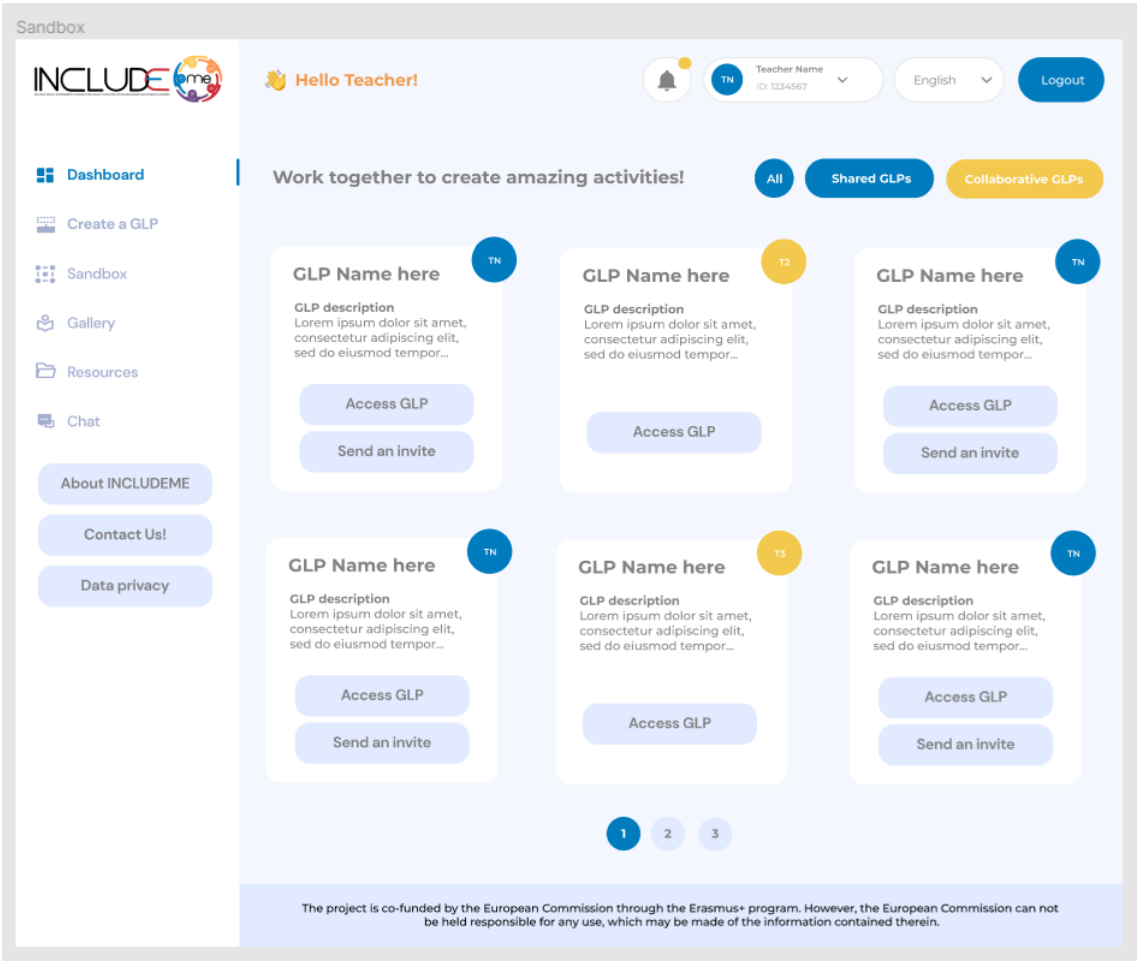

Figure 16: Sharing GLPs and Collaboration

3.1.5 Learning Resource Centre

The learning resource centre aims to bring together as many resources as we can to the users of the platform in order to add to and expand the learning objectives of the lesson path. The centre will include an inventory of serious and learning games that are available to download or access online such as applications for coding, engineering, language acquisition, and environmental problem-solving simulations.

The resource centre will also provide information relating to the best practices when teaching children with impairments or disabilities as well as helpful guides on how to create your own accessible documents and presentations for students.

3.1.6 Information Booth

Providing assistance to users on how to access and use the platform to its full potential is the aim of the information booth. It will take the form of easy-to-follow guides on the implementation and transferability of technology, how to create GLP's, collaborative and use all the accessibility features available within INCLUDEME. There will also be access to INCLUDEME

coaches via a chat / query process. These coaches will be on hand to answer any questions relating to the platform and its usage to get users up and running as smoothly as possible.

3.1.7 Analytics Component

Analytics within INCLUDEME will provide data on the progress of the individual playing through the assigned activities, time spent on the platform and achievement gained. It is also strongly linked to the gamification models that will be applied at platform and game level, representing rewards and bonuses gained by individual users. As we are targeting students with disabilities, we have to be mindful of how the analytics will look for this target group with motivational feedback and simplistic interfaces. The Dashboard for visualizing the progress of each student is used by all stakeholders to obtain feedback at different levels and could offer:

1. Analytics Visualization (ideal vs ongoing achievement trajectory).
2. Enabling adaptivity.
3. Provides “continual assessment”.
4. Feedback on not only curricular competencies but also gaming, learning skills and cognitive faculties.
5. Competency/Skill map validation.
6. Certification- Badges.

3.1.8 Accessibility Module

Accessibility Features are to be implemented at platform level for INCLUDEME via an innovative toolbar. This toolbar can be accessed any time across the different interfaces and components to provide a host of accessible features to customise the screen and interact according to the user’s needs.

an online assisitive toolbar with a number of high quality accessiblity features to aid those with Dyslexia, Neurodiversity’s, Visual and Physical Impairment.

Figure 17: Accessibility Toolbar

This will be implemented at platform level across the front end interfaces, sandbox authoring tool, and within any online resource applications to allow disadvantaged and disabled users to access and manipulate the interface, content and documents to suit their needs in a variety of different ways. ACE offers the following features:

- Text to Speech (40 languages)
- Speech Recognition (100 Languages)
- Magnification
- Changeable Font; including Size, Style and Colour
- Changeable Line & Character Spacing
- Screen Tinting
- Reading Rulers
- Overlay Bars
- Page Translation (100 languages)

- Simplify Page

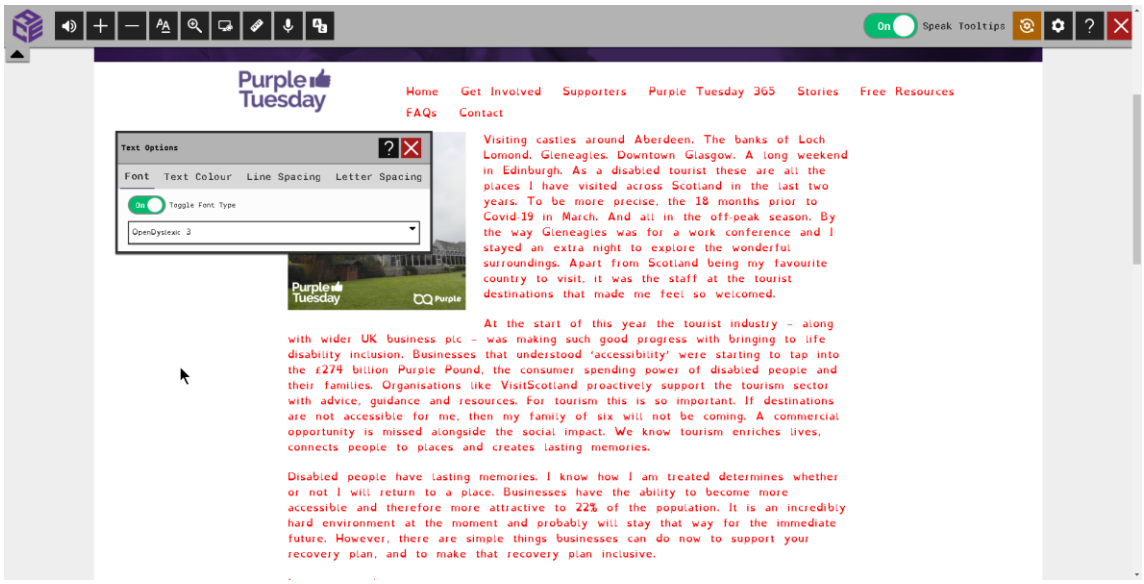

Figure 18: Font and Text Options

During the pilot testing phase as well as the ongoing development phase, these project results can be rigorously tested and the outcomes exploited and disseminated to gain full exposure of the projects' aims and achievements, but also to take on valuable feedback to further enhance the features themselves for a better user experience.

3.2 STRATEGY

3.2.1 Business Models

In this section we discuss and reflect on the existing research literature to the proposed methodological framework (The Business Model Canvas) in the context of the targeted domain. With INCLUDEME, we will use the Business Model Canvas as a framework to analyse business models. The Business Model Canvas (Osterwalder et al., 2010) describes a business model using nine basic building blocks, covering four areas of business: customers, offer, infrastructure and financial aspects. The template for Value proposition and Business Model Canvas is reported in Annex 1.

The possible business models are presented in the next section.

However, to start it could be proposed that the whole INCLUDEME solution could be used, hosted, or sold by:

- Government national platform: Pre-employment initiatives and aptitude testing for recruitment .
- Educational Equipment Suppliers bundling the software to schools and educational establishments.
- Relevant accessibility, learning and gaming partner resellers to add to their portfolio.
- Employment and Course Training providers.

- Local publishers.
- Non-Profit organisations and charities for Families and Children with disadvantaged children and disabilities.
- Partnership with existing Accessible Learning Provider platforms and companies to offer 'Premium Product Version" or add on services for learning and collaboration.
- Set up of new INCLUDEME company to host as a consortium effort and take to market.

The ideas will be explored in more detailed in the next section but in order to have a comprehensive overview of the different possibilities, we describe three models and evaluate these models against three criteria: Scalability, Profitability and Risk.

The Product Model

This model can be described as a relationship where a business creates a product or service that is sold to customers. The value proposition is strongly transactional. The sale of products or services is well established, and this is the most common form of business model.

The prerequisites of operating this kind of model are:

- Identifying potential customers.
- Identifying how to capture awareness and create demand.
- Identifying the mechanisms of monetisation including unit price including discounts.
- Businesses can be structured in a variety of ways including a hierarchical-integrated or as networked partnerships which could include suppliers.

SCALABILITY	Greater volumes typically reduce costs.
PROFITABILITY	When the business achieves scale and there are high entry barriers
RISK	Copycat or Me2 products especially those with lower costs

Table 1: Exploitation Factors for the Product Model

The Solutions Model

This model can be described as a relationship in which the business engages with a customer regarding a specific problem or challenge that the customer faces. The business provides an integrated solution to that problem and consequently the value proposition is relational.

Compared to the product model, the solutions-based model requires much greater customer engagement. There needs to be an environment of trust fostered between supplier and customer.

The boundary between the solutions and product model is a matter of degree. The prerequisites of operating this kind of model are:

- Identifying potential customers.

- Creating and maintaining a high level of trust with customers that facilitates the identification of requirements.
- Tailoring the product or service delivery to fulfil those needs in the context of the customer.
- Charging mechanisms are generally value based as opposed to cost based.

SCALABILITY	Scalability is difficult as greater volumes may result in higher unit costs.
PROFITABILITY	Profitability is good among selected customers.
RISK	Developing relationships with customers and tailor-made solutions require upfront investments intime, money, and relationship building

Table 2: Exploitation Factors for the Solutions Model

The Matchmaking Model

This comparatively new model can be described as a multi-party arrangement in which a business identifies customer groups and brings them together via a digital or physical marketplace. The value proposition of the business is transactional and lies in the matchmaking between parties engaging with the marketplace. The prerequisites of operating this model are:

- Identifying potential buyers and potential sellers and arranging their arrival and onboarding on the marketplace (a double challenge).
- Creating high levels of trust with the groups.
- Establishing a charging mechanism (normally a fee based on transactions).
- Development of the marketplace and the mechanisms for customer engagement are rarely outsourced.

SCALABILITY	Typically high
PROFITABILITY	Margins are typically small as profits rely on volume
RISK	Entry from copycats and envelopment from multisided business models

Table 3: Exploitation Factors for the Matchmaking Model

We will apply the following methodology for selecting and adapting the INCLUDEME business model and subsequent recommendations:

1. Research into Business Models and how they can be applied to learning platforms, especially those for special needs, accessible gaming, and pervasive learning.
2. The compilation of an inventory of potential revenue models to be integrated within the Business Model Canvas (D8.2).

3. An internal consultation will occur from September to December 2022.
4. The selected models will be further elaborated (D8.2) and refined with a view to further internal consultations with consortium partners.
5. The recommended model will then be used as a basis to develop the project sustainability plans.

3.2.2 Types of Business

The INCLUDEME project takes a broad approach in its objectives and not only develops a platform but also aims to nurture a community of collaboration and learning by sharing Gamified Lesson Plans and teaching methods. Due to this broad remit, it is possible that several different types of business activity could emerge.

- Government national platform: Pre-employment initiatives and aptitude testing for recruitment.
- Educational Equipment Suppliers bundling the software to schools and educational establishments.
- Relevant accessibility, learning and gaming partner resellers to add to their portfolio
- Employment and Course Training providers.
- Local publishers.
- Non-Profit organisations and charities for Families and Children with disadvantaged children and disabilities.
- Partnership with existing Accessible Learning Provider platforms and companies to offer 'Premium Product Version" or add on services for learning and collaboration.
- Set up of new INCLUDEME company to host as a consortium effort and take to market.

Solutions Provider

This type of company activity could emerge where the INCLUDEME platform is taken on by a provider to assist in a particular initiative or national project. An example could be a government scheme for pre -employment skills and aptitudes, coaching and recruitment preparation. Existing partners in the consortium have contacts with national schemes where INCLUDEME could compliment the acquisition of skills and assessment frameworks.

Learning Provider

There is scope for the INCLUDEME platform to be utilised not only as a school-based learning tool but for this to be transferred to work based training and role play assessment. The framework of the authoring tool and GLP narratives could lend itself to training courses for employment such as First Aid, Interviewing, Induction processes, Health & Safety, Disability Awareness and so on. Approaching Learning Providers with the system to be put onto their hosting services and offered out to individuals and companies is a viable route.

Market Supplier

In some countries educational software platforms and web-based learning platforms are bundled out to schools and institutions via incumbent telecom operators. This gets the software to a wide audience whilst both parties' benefit from the increased custom.

In the same realm, Equipment and Hardware suppliers to the educational industry could bundle INCLUDEME to their distribution channels and gain huge exposure for the INCLUDEME system as an added benefit to equipment orders for schools, colleges, and educational institutions. Partners within the consortium already have strong relationships with large educational hardware suppliers to the UK.

Reseller Provider

INCLUDEME is an accessible learning platform so going direct to schools and educational establishments seems a natural progression to gain sales and usage. This can be done direct as our own entity or be accomplished via reseller outlets specifically in the educational and accessibility market. This type of scheme works well in terms of less outlay for marketing and puts the emphasis on the resellers to push the product. Partners in the consortium already have established routes to accessible markets and educational outlets that can be utilised as well as active resellers in the accessibility software domain.

Software Provider

There is potential for INCLUDEME to team up with current accessible learning platform software providers. This could be in the sense to add value as an add on service to the current platforms, an example could be Shiny Learning or Skoltlavan as outlined earlier in this document in Technology Watch. Or there is the option to in a sense 'White label' INCLUDEME and sell it on to these already established providers of accessible gamified learning for them to offer it to their customers as a new product launch.

Non-Profit Organisations

There are many charities and non-profit organisations that specifically target disadvantaged families and children with disabilities. These charities often provide assistive equipment and software for the families and children to benefit from. INCLUDEME has the potential to be included here as a service to help those that need access to this type of learning and information for both children and parents.

Pervasive Learning Community

Given the broad basis of the project and the aim to achieve a wide European impact, INCLUDEME could aim to establish a sustainable networking community to share information about pervasive learning and accessible gamified learning techniques, as well as promote open standards for educational application. The INCLUDEME collaboration features provide a springboard for such an initiative. Establishment of a Europe-wide pervasive learning community provides perhaps the biggest opportunity for INCLUDEME to openly involve all European stakeholders and so achieve a major European impact.

There are a number of networking communities that could provide a model for community

activities. Services could include Special Interest Groups, each running regular events such as conferences, invited talks, challenges, hackathons as well as a diverse range of value-added services such as a resources recruitment board, a certification procedure and test facilities.

Conferences and workshops could provide a forum for businesses, policy makers and users to solve problems and chart the future.

Initial Proposal: Commercial exploitation vehicle

The first five of these would be profit making activities and would build on the technical expertise developed in the project. At this early stage, the project has set the target for this Business Plan to investigate the possible formation of a stand-alone company, rather than a continuation of the project as a commercial collaboration or Joint Venture (which could be implemented as a business entity). This is an appropriate first step given that the project has several partners including academics.

In fact, these first five commercial activities can be consolidated into a single entity with IP responsibility, (codename: NewCo); the five different types of activities can provide a route for company evolution. Once the INCLUDEME software platform is adequately developed, NewCo can evolve to first provide solutions. Later, as the software platform component is thoroughly understood and tested, the software itself could be licensed. Thirdly, if there was a proven and sufficient demand, the company could itself provide a learning service.

From this analysis, therefore, it is proposed that two companies are considered in the Business Plan (D8.2). Of course, other exploitation vehicles (e.g., association, foundation, corporate…) will be carefully analysed and proposed to the management committee for consideration.

The sixth and seventh activity could lead to a not-for-profit company (NewCoNet) building on the community and networking activities. Given the broad basis of the project and the aim to achieve a wide European impact, this community would share information about pervasive learning and related technologies and promote open standards educational application.

3.2.3 Approach to Potential Investors / New Company

At some point, during the last part of the project and even beyond its end, an approach will be made to potential investors to finance the establishment and early development of the proposed exploitation vehicle. In preparation for this, the project partners will carry on a number of further actions to refine the market rationale, to describe how the NewCo and NewCoNet will conduct its operations and to establish the financing it will need. Guidance for these key considerations is discussed hereafter as a starting point, covering the specific market problem(s) being addressed, the addressable market share that can be targeted, the sales methods to be adopted and the company organisation (including the team and their roles).

Step 0 The Context

Before a pitch can be made to prospective investors, it will be important to quantify the addressable market and estimate the value of the business that can be generated. A realistic evaluation at this level cannot be carried out as a desktop exercise: it will require market assessments for the intended country or countries of operation and if possible, through direct discussions with prospective customers. This can be a challenging activity. For this reason, it is better to be focused on the specific market that can be realistically addressed with the team that can be funded at the outset and, say, for the first 3 years. For INCLUDEME, there is a good opportunity to assess the addressable market through discussions with the 'customer representative' partners as the different trials get underway. The next steps are proposed as guidance to assist in gathering the necessary information and in preparation for discussions with potential investors.

Step 1 The Problem: the problem that is to be addressed should be stated in easily understood terms.

Step 2 The Opportunity: before any financial forecasts can be prepared there should be a grounded estimate of the market share that can realistically be achieved. It can be difficult to produce an estimate of market share; nonetheless, there are well-established methods that will give some guidance as to how this might be achieved.

Step 3 Revenue Model: in addition to preparing an estimate of market share, it will also be necessary to set out how a customer would be charged as well as what would be charged.

- An up-front charge for set-up + licence + maintenance.
- License only.
- Other.

Several other factors should also be considered under this heading such as who would pay. Will the pilot users become early adopters? How do the charges compare with today's training costs?

Step 4 Cost of Operations: the estimate of market share and the revenue model will enable a forecast of revenues to be prepared. Before financial estimates can be prepared however, the cost of operations must also be considered. For this the structure of the company should be set out, key people named, and their roles described, and the expected size of the team given. In particular, the sales and marketing activities should be considered and the operational team (how will the product be delivered to customers and supported). Overall, the staff costs, office/infrastructure costs and any other cost items such as licenses must be estimated.

Step 5 Financials. Once the preceding information has been assembled, it will be possible to prepare the financial information. A sales forecast taking account of the size and methods of the sales team will be needed and any assumptions justified. The results of the previous sections can then be used to determine profit and loss and cash flow.

3.2.4 Initial Market Positioning / Barriers

Further to development of the technology, the INCLUDEME project concentrates as well as on the assurance of project results, sustainability, and future technology transfer by conducting market studies, gathering feedback from the users, and planning exploitation activities that will take place during and after the project time. Being a part of this work, this section summarizes the market trends in learning platforms, pervasive learning, and game-based learning, identifying features and industry shaping factors.

The INCLUDEME consortium is aware of the market barriers linked to games and gamification.

There is an increasing demand on the public sector to provide "more for less". Evidence-based policy making practices demand the measurability of results, impact assessments and return on investment. This evidence is not explicit yet for Technology Enhanced Learning (TEL) in general and for Pervasive learning in particular. According to the GALA (2014) project results, the main barriers to the use of games for learning are:

- Lack of facts to support the business case for the application of game-based solutions to address specific challenges.
- Lack of information about game practical application.
- Not easy or practical to use it in business.
- Need to rely on external consultants to help addressing the challenges.

In general, the most significant reasons why organisations have been reluctant to use games or gamification are the lack of awareness, lack of information and lack of conviction that the business case for the application of game-based solutions will solve their specific challenges, and secondarily the practicality of use, costs, and difficulty to estimate the Return on Investment. The data indicates that technical aspects do not represent the main obstacle.

There is also market barrier in formal education for governments adopting edugames for schools. On the other hand, private schools in general use their budgets to introduce some games in school life. Among the educational levels primary schools are naturally the keenest to incorporate edugames in their curricula. The market is apparently in its infancy for secondary and tertiary schools. Students in these age groups play console games in their leisure time and need much higher play quality to turn to edugames for their studies.

4.0 TRANSFERABILITY, EXPLOITATION & PILOTING

It is one thing outlining the different business models for INCLUDEME but before we can get to that stage, we need to make people aware of the project, how good it is and valorise the accessibility tools and features throughout. The approach is through a 3-stage process of effective dissemination, exploitations activities / measures and well planned out piloting and testing for a smooth knowledge transfer.

4.1 Exploitation Measures and Dissemination Activity

INCLUDEME needs to exploit connectivity to existing learning communities, to social sites, to relevant meeting points in (social) web to disseminate the inclusive approach.

The consortium should aim to come together as an entity to get the message out and disseminate. There is currently a dissemination calendar in place for partners, but active participation needs to be documented whether that be adding to already established social media or creating new accessibility forums and social media pages for an INCLUDEME buzz.

There are many potential avenues for the right type of dissemination activity. There are key exhibitions and conferences to target in each country, many focussing specifically on accessibility and educational gaming. These could include BETT, hosted in London, UK which is the largest educational exhibition for technology and provides opportunities for direct marketing to schools. There is also ATIA in Florida, USA, the largest and best attended Assistive Software Exhibition and Conference annually.

SEN conferences and Assistive Technology exhibitions are often hosted nationally and key partners in the consortium have regular attendance and good contacts to this industry.

The INCLUDEME platform as a whole need to be exploited to the relevant educational organisations and interested parties. However, there are many elements that make up the system and some of these form exploitable results and measures in their own right which can serve to promote INCLUDEME further.

As illustrated in the Exploitable results section of this document, the collaborative and community essence of INCLUDEME is a sellable asset. The collaborative creation of GLP's and then the ability to share amongst other teachers or students creates a community of learners and creators. An exploitable measure can be a P2P marketplace in which teachers can collaborate and exchange on INCLUDEME based gamified lesson plans and further share their experience, knowledge, and resources on accessibility teaching methods. By having this sharing feature, it also opens up the platform to be used across age groups in different educational levels/sectors – Higher Education (HE), professional development etc.

The accessibility of INCLUDEME is a further exploitable measure. Gaining awareness of the capability of individual customisation of interfaces and game based accessible elements is paramount. The Accessibility Toolbar to be used at platform level is in itself worthy of exploitation to those involved in the accessible software and accessible learning market. Using

this as a USP for INCLUDEME to gain exposure and a foot in the door of a niche market is something to explore by partners.

The INCLUDEME Learning and Resource Centre is a valuable component too, giving information on best practices for creating accessible documents, Accessible teaching methods and best practices with students with neurodiversity's. There is a difference in the prevalence of mainstream teaching with disadvantaged and disabled children amongst European Countries, so guidance, experience and up to date information and procedures will be greatly received.

4.2 Piloting and Knowledge Transfer

There needs to be process of knowledge transfer to potential clients and investors, to standardise the approach and minimise errors in utilisation.

At this stage in the project, it is not feasible to fully document this process as the platform has not yet been developed and used in an educational setting.

As we progress into the piloting phase, we will start to define the KPI's as defined in task 8.1 which will eventually lead to the structured facilitation of the knowledge transfer process.

Once we establish the best routes for transfer then we can look to strategize the method and communicate this via Accessible Tech days, INCLUDEME workshops, webinars to interested parties, dedicated INCLUDEME coached for the information booth, instructional videos, and continued dissemination.

Understanding the roles of partners in the tasks throughout the project and establishing KPI's in task 8.1 for the piloting and transferability approach will form the basis for both task 8.2 and D8.2 Transferability and Exploitation report.

The development of an exploitation strategy and transferability process can only be strengthened via use cases which will allow us to sustain project results beyond the project lifetime and enable adopters to implement the outcomes.

The partners in the consortium have developed good relationships with stakeholders in order to gain their consent to participate in the pilots and testing of INCLUDEME. There is already a good mix of special needs schools, foundations for disabled and intellectually challenged children and young adults, as well as educational institutions with a base of disadvantaged families and students. This forms a reliable test base for the platform with our key target groups, and with which we as a consortium will gain valuable feedback to steer the development of technical features and accessible usability of INCLUDEME.

4.3 TAM Model – Technology Acceptance Model

There must be a process in place to first validate the KPI's of the piloting phase but secondly to assess the usability of INCLUDEME and all its interfaces and features and gauge a user-friendly

index of the platform as a whole. This is vital to get constructive feedback but also to further develop INCLUDEME to fit the needs of our key target groups properly.

One such model is the Technology Acceptance Model (TAM). TAM is an information systems theory that models how users come to accept and use a technology. TAM is proposed by Fred Davis in 1985 relying on the Theory of Reasoned Action. TAM is the dominant model used in predicting, testing and validating information technology products and it's widely used in evaluation educational technologies as well. The model suggests that when users are presented with a new technology, two main factors influence their decision about how and when they will use it, notably:

Perceived usefulness (PU) - defined as "the degree to which a person believes that using a particular system would enhance his or her performance".

Perceived ease-of-use (PEOU) - defined as "the degree to which a person believes that using a particular system would be free from effort".

TAM postulates that actual technology usage is determined by intention to use (Behavioural Intention - BI), which in turn, is viewed as being jointly determined by the person's PU and PEOU (See Figure 19).

In a recent study, quantitative methods for measuring the User Experience in educational technology are found to be in parallel with TAM3 (Hu, 2014). In another study, TAM3 framework was applied to enquire about why existing technology is underutilized in schools and concluded that existing structure and curriculum of the education systems does not afford enough time to incorporate technology into teaching activities. This study also revealed the teacher's age as a factor as well as technical support available (Mosley, 2012).

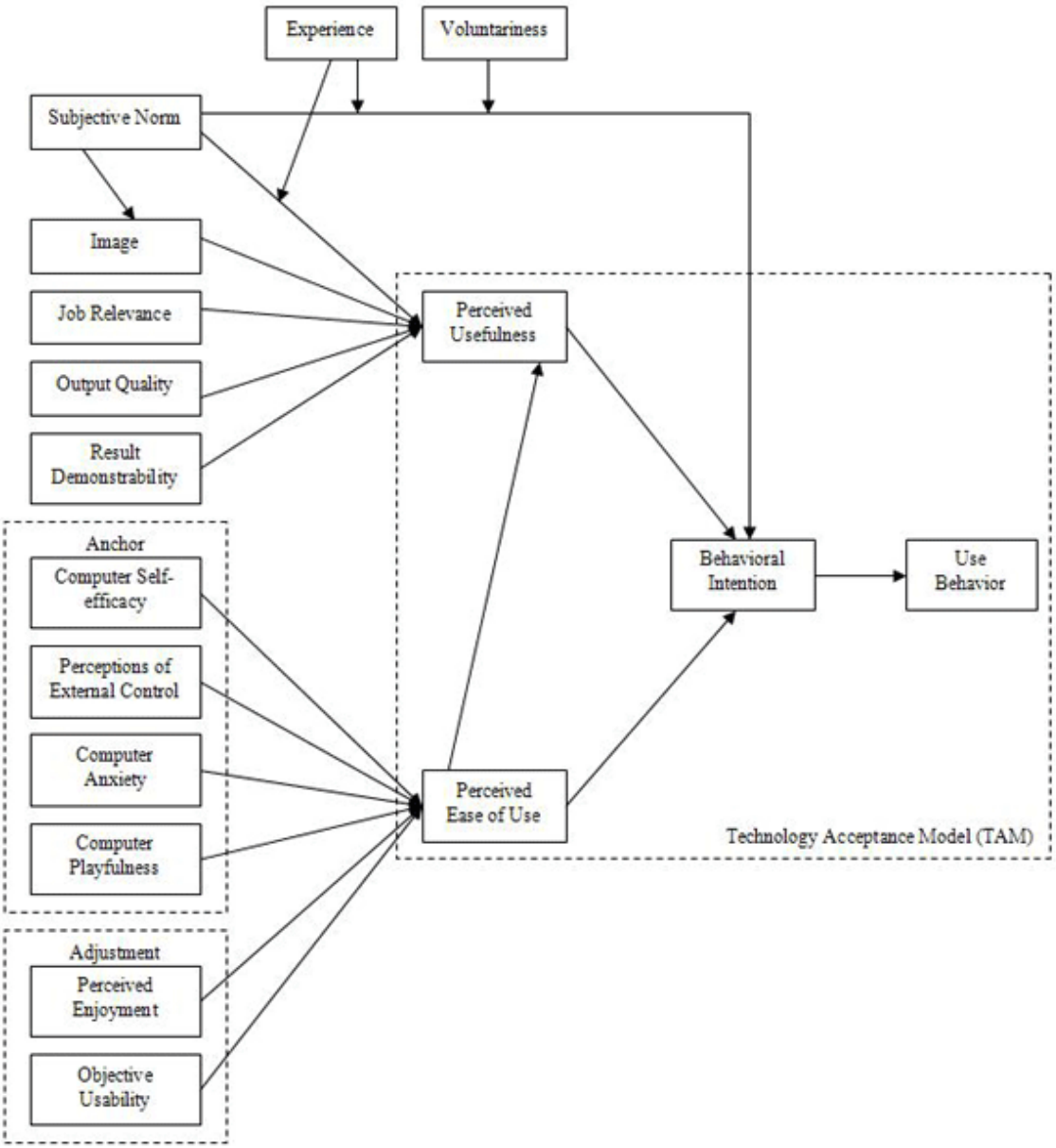

Figure 19: Technology Acceptance Model (TAM) (Davis, 1985)

The tools, which will be used for assessment will include surveying, interviewing, and applying usability tests to the users and stakeholders. - Questionnaire/survey, for capturing quantitative information on user experience and attitude; - Interviews (or focus groups), for capturing more qualitative information on the same concepts; - Usability Testing, involving interaction with users, will be realized through participant observation.

Feedback from the relevant stakeholders will be solicited, based on questionnaires, interviews, and direct discussions. This feedback will be analysed towards deriving main conclusions about the opinion of the end-users about the INCLUDEME solutions and overall approach. The selected

assessment methodologies, tools, and critical indicators are aimed at facilitating the users' evaluations to have measurable results. Therefore TAM (Technology Acceptance Model) and Performance Indicators Benchmarking (KPIs) are chosen based upon similar practices followed by other projects such as Beaconing 'Breaking Educational Barriers with Contextualised Pervasive and Gameful Learning. The critical indicators are defined based on the measurement of the use, satisfaction, interest level and needs of the users, as well as awareness of the stakeholders.

It is therefore realised that after and during the piloting phase using the TAM3 method of questionnaires and observation, relevant results will be obtained to mould INCLUDEME into a fully user friendly, practical, and accessible learning solution.

5.0 CONCLUSION

This first version of the Exploitation Plan will be continuously refined and will be presented in its final version on M36 in D8.2 – Transferability and exploitation report. It is intended to be a working document with a final release at the end of the project with an analysis of sustainability data and, on the basis of that, and the lessons learnt, specific recommendations and suggestions for fostering sustainability after the termination of the project.

The initial technology watch confirmed that there is both an opening and a business case for a complete accessible gamified learning platform to be introduced, not just for the pre school and special school audience, but for the wider age range and mainstream learning routes. INCLUDEME, although designed to be fully accessible can be applied to disadvantaged students, disabled students and the overall learning for pupils in mainstream schools as an addition to the curriculum-based activities already in place.

As we are early in the project life cycle it has been determined too early to set a clear business model and strategy for the project before the design of the platform and testing has taken place. Therefore, the exploitable results of the project have been presented as well as the most feasible business models to be applied for the types of business INCLUDEME could target.

INCLUDEME has a wide scope of marketing opportunities therefore, transferability and dissemination methods have been put forward in this document which will ultimately lead to a decision amongst consortium members as to which direction the project will take after its life cycle. A new company can be set up with IP responsibility, or partnerships taken with existing providers as well as a joint community-based effort to make an impact in accessible methods and education by sharing knowledge and content created in the platform itself.

Once we progress through the piloting and gain feedback using the usability models presented, a more structured strategy will begin to emerge as to how to sustain the efforts of the consortium after the project reaches its conclusion. However, the seeds have been put in place to be built upon and refined within this document in order to give the best possible chance of success.

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ANNEX 1: CANVAS TEMPLATES

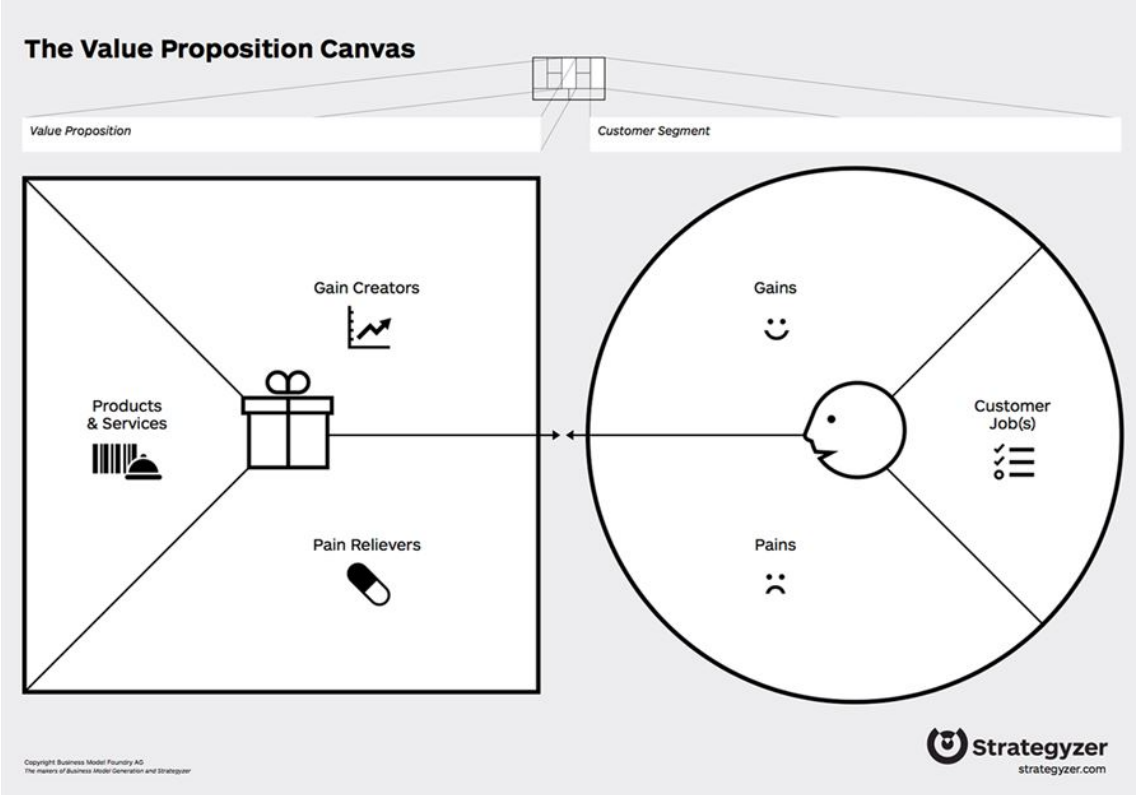

Figure 20: Value Proposition Canvas

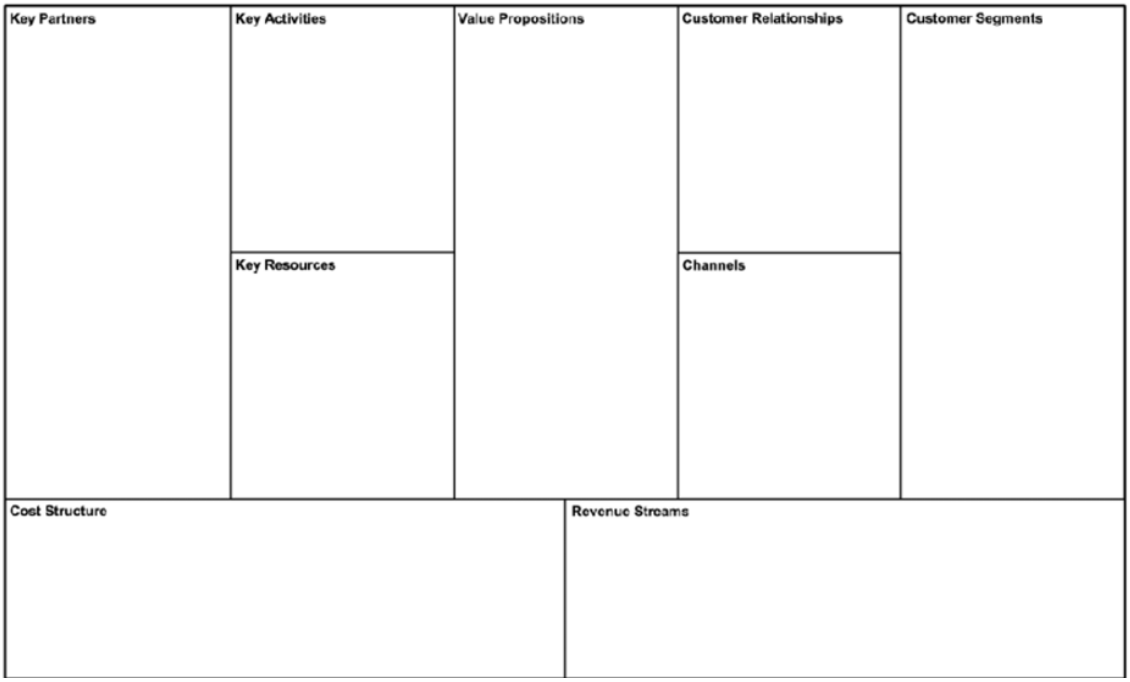

Figure 21: Business Model Canvas