New newsletter rounding up the project — but the conversation continues!

Our latest newsletter has gone out and you can read it here!

In this edition, we're looking back at the past two years of the project and how far we have come now that the project has ended. However, the conversation continues as all project partners are committed to continue to take innovative assessment methods in entrepreneurship education forward.

We will continue to hear interesting conversations on this blog, share updates in our newsletter and with your help build on the collections of tools, methods and examples on this website. Get in touch if you want to chat, contribute or simply learn more — we are always looking to hear from teachers, policy makers, researchers and everyone else.

EntreAssess presented at IEEC conference

In September, Dr Martin Lackéus of EntreAssess project partner Me Analytics AB presented to 400 entrepreneurship educators at the International Entrepreneurship Education Conference in Leeds. Martin talked about **The deliberate 'high tension approach' to designing an entrepreneurial university** from his experience delivering a venture creation programme at Chalmers University of Technology in Gothenburg, Sweden.

He specifically focussed on the aspect of value creation pedagogy that is part of his research and teaching. (We will link here a post with more information about value creation pedagogy very soon.) You can find a recording of his talk here:

"Your website is really helpful and easy to work with!"

We've sat down with teacher **Elena Suhoverhova** from Kharkiv in Ukraine who tells us how the EntreAssess website helped her with the assessment challenge in her teaching. Elena is an English teacher at Secondary School 160 in Kharkiv.



Elena, thank you for sharing your feedback with us and showing other educators how they may use the EntreAssess website to discover innovative assessment methods for entrepreneurial education. What part of the EntreAssess website was most beneficial for you?

First of all, I find the EntreAssess website really helpful and easy to work with. But the best thing has got to be the examples! It is very valuable to me as a teacher that I can read and think about how others teach and how that would fit with my children and our goals. It is valuable when you can compare and choose.

Did you enjoy a specific example that we portrayed?

I have read a lot on the blog and the thoughts of colleagues in the interviews and especially enjoyed the experiences shared from Craigfelen Primary School and Howells School.

Which of the tools or methods that EntreAssess collected did you use in your classroom?

I made the decision to use the website and tools because it is truly beneficial for my pupils. As I am a teacher of English, the main task for me — except to teach grammar — is to make my pupils talk and communicate without difficulties. To fulfil this goal, I am trying to involve them in different cases. Using the site makes my task easier because I can use the toolkit and choose.

I try to connect the aim of my lesson, the interests of my pupils and the usefulness of the site. It is just like magic! With the help of your site and the understanding I gained about the EntreComp framework I can:

- encourage my students to think differently
- make connections between different things

- create opportunities for them
- analyse the context and understand it better
- provide the environment for the creative minds of our students, and ultimately
- support pupils in developing their abilities (which is really important for the youth and children)!

To sum it up, your site is a great thing to work with children!

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I use your tasks for developing speaking skills and I have practiced Dilemma scenarios and planning events with my pupils specifically. For the assessment, we use the Gibbs circle (we make conversation between us).





Entrepreneurial education at

Kvennaskólinn in Reykjavík, Iceland: Interview with Ásdís Ingólfsdóttir



The PEAT-EU team in Iceland recently spoke with Asdís Ingólfsdóttir, teacher at Kvennaskólinn in Reykjavík, Iceland, about her experiences with entrepreneurship education. Ásdís has been teaching at Kvennaskólinn, colloquially referred to as "Kvennó", since 2000. Kvennó is an upper-secondary school that offers programs in maths, sociology, and humanities. Ásdís has a very diverse background and teaches several subjects; chemistry, economics and finance. She has also been the Project manager of Kvennó's foreign exchanges for the last nine years. So, Ásdís has a lot of experience as a teacher. She enjoys teaching and likes to try new things, which she considers important in the school environment as the world is changing and young people today need new approaches to learning. Among the things she has been experimenting with is a practical course on entrepreneurship. Her students in that course recently entered and won a prize for best food company in the Junior Achievement Programme's Young Entrepreneurs competition.

Ásdís, how do entrepreneurial competences figure in your teaching?

In my teaching in general (in chemistry and economics) the competence of entrepreneurship has not been formally outlined or assessed. Even though in some assignments students have to use creativity and entrepreneurial competences to fulfil the assignment. In my entrepreneurship course it is the main focus.

This is a new course that is offered to second and third year students (17 - 18 years old). And, I did actually decide that it was very important that students at my school had the opportunity to learn this competence. I had heard about the JA Programme when I went on an Erasmus Plus job shadowing visit to Sweden. There, I experienced teaching entrepreneurship and the way students were learning and what they learned just got to me. This was something I wanted for my students and I think it is very important that as many students as possible experience this way of thinking and working on assignments. There, I mean the way that enhances their competence of entrepreneurship.

What's the best context to develop entrepreneurial competences? Curricular or extracurricular contexts? Through projects?

Being a teacher I think that the curricular approach is the most effective way of developing this sort of competence. I know that in the Icelandic upper-secondary schools the extracurricular work that students are doing enhances their skills in this field. But, after two years of teaching bigger groups and leading them towards a goal I think that it is the best way, or most effective. The teaching methods were new to me in the beginning and I had a hard time "letting go" and trusting the students. After the second time, I saw that students are very capable and learn/accomplish much more than I could imagine they could during the four-month long course.

"I think that the curricular approach is the most effective way of developing entrepreneurial competences."

What, exactly, do you assess, and how? What works for you?

The students only get "passed" or "failed" in the entrepreneurship course. The course is 5 units in total. To pass students have to fulfil certain "obligations" like attending certain events, visiting firms, participating in group work, attending lectures and meetings. They also have to give presentations about their products and company. And, they have to inform the teacher about how the process is advancing; sending emails, photos, etc. to the teacher. Of course, they also come up with a real product that they sell at the Smáralind mall in Reykjavík during the JA competition. All of the students take part in the JA competition. As part of that they complete a written report that is submitted both to the JA and to the teacher of the course. The main pillars of assessment are:

- Attendance at school (group work, teachers introduction etc)
- 2. Visit to firms
- 3. Fablab visit
- 4. Presentation
- 5. JA participation all events and reporting
- 6. Reports

If a student can't take part in all the above, due to illness for example, it is possible to assess his participation so that he will not fail completely but gets fewer units. That has not happened yet. What has happened is that some students who find the work too hard drop the course.

To what extent are students actively involved in the assessment?

Assessment is discussed in the beginning of the course and the

students are well aware of how the assessment is planned. And, they keep track of it (most of them).

The students are involved in peer assessment of the presentations and group work. They are also asked to let the teacher know if anyone is not taking part in groupwork. This is a little too hard for them and they tend to keep it to themselves until the end of the course (after they learn whether they have passed or failed).

How are other stakeholders involved in the assessment?

JA hands out rewards for certain accomplishments. Very early in the process, students aim for getting rewards, for example in the field of food or sustainability, or for the report. So, even though that does not add up to number or grade, it is an incentive to do well and work hard towards the goal.

Is this a widespread practice in Kvennó? If not, what are the main barriers?

Yes and no. It is common to assess chosen subjects in the way that I do, but mostly coursework is calculated as a numerical grade. So the practice of using "passed" or "failed" is not common. It is used if a student comes from another school and starts at our school to assess what the student has already completed in their prior education. Many of my students came and discussed that they wanted a number grade. All of the students that completed the course felt that they had done so well that they wanted to have the same type of grade that they receive for their other courses.

Progression, that is to say, envisaging a coherent and gradual acquisition of the competence is a challenge. What's your opinion about the EntreComp framework?

I had to look EntreComp up to know what it is. I was not familiar with it. But, when I read about it I totally agree with it. I am very positive towards EntreComp — I agree with

the main goals and I hope it helps towards better futures for schools and society.

I would want EntreComp to be better known. I want teachers to see the importance of enhancing our students' entrepreneurial competence for the future. The future working market will need people with the skills and competences to find new ways to do things and new solutions for our challenges.

"I am very positive towards EntreComp - I agree with the main goals and I hope it helps towards better futures for schools and society. I would want EntreComp to be better known."

What would you like to see happening in the near future? What would you wish for?

That more students get the opportunity to enhance their entrepreneurial competence and also that the way I teach will be used in other subjects. That is, that entrepreneurship be integrated in all subjects such that it leads to the implementation of new teaching methods.

EntreAssess featured in University Industry Industry Innovation Network magazine

We're excited to say that an article about our resources and tools for educators is featured in the current issue of the University Industry Innovation Network magazine! The magazine is handed out to over 450 university leaders, practitioners, CEOs, policymakers and academics at the University Industry Interaction Conference (this year it took place between 20 and

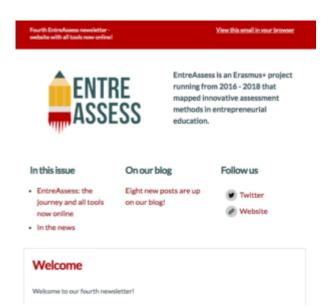
22 June in London) and has a special focus on entrepreneurship education. UIIN members also receive a copy.



The online edition of the 2018 Issue 2 magazine can be accessed **here.** We're on page 22!

Fourth Project Newsletter: now out!

Read our latest newsletter here! We're giving you the run-down of all tools and resources that we made available for you as part of this project and lead you to take your first steps on the EntreAssess journey!



Sign up for future newsletters here and find all past issues here!

THE ENTREASSESS PROGRESSION MODEL OF ENTREPRENEURIAL ASSESSMENT

	Initiating	Developing	Performing
What	EE skills Identified but none explicitly/consistently assessed	Identified but only a small subset (1 or 2) are explicitly/consistently assessed (e.g. Teamwork)	Identified, broader subset is explicitly/consistently assessed
When	Essentially summative, no opportunities for relearn or reassessment	Formative (few control points and opportunities to review and relearn)	Baseline, formative and summative assessment fully integrated (several control points)

	Initiating	Developing	Performing
Where	Tied to specific assignments, projects.	Embedded only in some curricular areas (patchy)	Embedded across the curriculum and in all major assignments/projects
How	Largely and solely based on teacher observation (no tools)	A limited suite of methods is used (eg. rubrics, checklists)	A combination of methods is used according to task, context and student needs. (eg. Teacher observation, learning logs, portfolios, rubrics)
Who	Teacher-assessment	Combines teacher- and self-assessment	Incorporates views of multiple actors (Teacher, self, peer, external stakeholder-assessment)
Why	Aim of assessment activity is to 'tick the box' and comply with externally imposed demands.	Aim of assessment activity is to improve student learning	Aim is to capture and analyse data and evidence to fine-tune Teaching and Assessment practices

Entrepreneurial or innovation, not just another "Buzz" word — thoughts from a teacher educator

The world about us

I think it is fair to say that there are few people that will argue that the world as we know it is not only changing, but

over the last years has changed almost beyond recognition. Explosions in technology, particularly digital technology, has meant that we live our lives differently. Social media connects us on a global basis; working practices are flexible. Everything is immediate; everything is connected. We live within a global network, indeed innovation means many things we once believed would only ever exist in the movies or in science fiction are becoming fact. Driverless cars; artificial intelligence, video communications with the other side of the world.

To enable us to take this "brave new world" and make a success of it we need to transform ourselves to be innovative and adaptable to change. We need to be able to question and challenge our philosophies and be willing to think and react in new and different ways to the opportunities now available to every one of us.

I have always taught my students that as educators we are educating our next generation to operate and live in a world, which is still on the drawing board, a world that is yet to be invented. The revolution of change has not yet finished, new opportunities are waiting. The world is becoming increasingly entrepreneurial and innovative. This being the case, education has to match that innovation.

To enable us to help educate our next generation for these opportunities I would argue that we need to develop new skills, and to me the answer is the EntreComp framework and EntreAssess, for how else do you measure qualities such as creativity and innovation.

But, what do you think?

In my position as a teacher educator I have the opportunity to connect with a wide variety of teachers and academics from a variety of subjects; teaching at a variety of stages. I know some very innovative teachers and I know teachers who only equate entrepreneurial skills with business. Comments like, "yes, that's all well and good, but I teach Geography, or Maths..." abound. And yes whilst the EntreComp and EntreAssess focuses on three main competences enabling actions such as dealing with *ideas and opportunities*, using *resources* getting *into action*.

Within these three focal points are further competencies which relate to the brave new world I referred to earlier and I would argue are crucial in supporting and developing the next generation of learners who can embrace change and live their lives to the full.



EntreComp Framework (Bacigalupo et al, 2016)

To support this view I want to ask you to complete a little task, whether you be a teacher of a specialism or whether you have a special interest in a domain of learning, the most important part of your classroom or learning environment should be your learners.

Which one of you doesn't want an entrepreneurial learner: one who can spot opportunities in life as well as in learning?

A learner who has vision and is creative, a creative learner is able to generate ideas, use divergent thinking to create opportunities and look past what those ideas are to what they could become. A learner who can accomplish all this in a sustainable and ethical manner. Competencies such as this can turn compulsory education into a desire to continue learning throughout life.

How about learners who are able to motivate themselves and others, generating an excitement about learning. Learners who have a resilience to learn from their mistakes and turn that failure into a positive experience; developing the sort of attitude that enables them to take control of their own learning. Learners such as this are likely to be able to recreate the learning to suit their own needs.

There is much evidence that collaboration and social interaction can promote learning, indeed the socioconstructivist learning theories are built on that premise So how about learners who can successfully collaborate with their peers, planning and taking the initiative in the classroom and in life and in doing so becoming able to cope with both ambiguity and risk. If these are the sort of learners we want regardless of discipline, or age, then think about what these learners can contribute as they mature into citizens post education.

The Welsh perspective

Like many countries across Europe, Wales is undergoing massive curriculum change, a change which is starting in our foundation phase and continuing right the way through out secondary education, with hoped for impacts up to Higher Education?

One of the aims of our new education is the creation of a curriculum which will support pupils who are ready for the $21^{\rm st}$ century and all it has to offer. To do this the review of our

current education system, Successful futures (Donaldson 2015), suggests that Wales needs to create a new type of citizen through education that the citizen of Wales should be:

"Ambitious, capable learners who are ready to learn throughout their lives. Enterprising, creative contributors who are ready to play a full part in life and work. Ethical, informed citizens who are ready to be citizens of **Wales** and the world."



Four Purposes of Wales (Donaldson, 2015)

I believe this to be an inspiring and exciting aim of Wales and the Welsh curriculum, I also believe that if you unpick what the review means by, *Ambitious capable learners; Enterprising Creative contributors; Ethical informed citizens and Healthy, Confident individuals* then there is a resonance between developing this "Citizen of Wales" and developing the skills which lie at the heart of the EntreComp and EntreAssess frameworks.

In short we need to promote a culture of creativity in education, a place where our learners can learn by their mistakes, where they have a resilience which allows them to

accept failure as a positive learning experience. Where they have the self —efficacy and self-esteem to make things happen.

An education where motivation turns to excitement.



Dr Jan Barnes, Senior lecturer in 'Cross curriculum close to practice research and enquiry', University of Wales Trinity Saint David, Wales (UK)

San José De Calasanz School

In summary: San Jose de Calasanz School provides primary and secondary education, and vocational training for young adults. Each educational stage includes the development and assessment of transversal entrepreneurial competences and



the School, through a project called "Emprender para aprender", models best practice in project-based training in this subject area.

Age group: Compulsory education (12-16 years) and vocational training (>16 years).

Initial challenges: As a vocational school,, San Jose de Calasanz are in direct contact with nearby enterprises and, through the relationships developed, have identified he need to develop transversal competences with their students to promote successful future employment. The school is committed to entrepreneurship programmes as being the key in developing an entrepreneurial spirit, combined with transformed learning and teaching methodologies, assessment systems and facilities.

What they did about it: Using entrepreneurial education as a guiding principle, active learning and teaching methodologies have been incorporated into all educational stages within the School. Students' entrepreneurial competences are assessed and graded by both teachers and through peer-assessment and contribute up to 25% of the final grade. Students take part in multiple entrepreneurship programmes and activities including: creating ideas; recognising business opportunities; creating companies; and managing and taking part in entrepreneurship fairs. Teaching staff have received intensive training in methodologies associated with the development and assessment of entrepreneurial skills and the School has developed digital tools that facilitate the assessment and monitoring of the students' learning process.

Results: After adapting to several changes, the learning system of the school has been transformed entirely, especially now that it is based on the assessment of competences developed and demonstrated by the students. The motivation of students has increased substantially, and tools and materials have been created in order to support project-based education and learning. The school has received much external appreciation due to various projects developed by students and teachers.

Relevance for entrepreneurial teaching: Student and teachers' satisfaction, motivation, self-confidence and entrepreneurial competences have been shown to have increased significantly through the learning and teaching approach adopted and the

involvement of external enterprises.

Method and applied assessment tools: The "Emprender para aprender" project applies the SET (by TEKNIKA) assessment tool, which allows more personalised assessment and monitoring.

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Personal attributes — pilot results

In short: The personal attributes scale was tried out in a school in Reykjavík in 2016. The list of attributes was selected by the researcher. The aim was to get as broad an overview as possible of how teenagers understand their own attributes, with the emphasis being on entrepreneurial attributes.

APF	PENDIX
DESIREBLE as opposed to correspondingly UNDE	SIRABLE QUALITIES
LEADERSHIP	LACK OF INFLUENCE
INITIATIVE	LACK OF INITIATIVE
ENERGY	LAZINESS
PERSEVERANCE	LACK OF STAMINA
RESOLUTION	HESITANNCY
COURAGE	TIMICITY
CONFIDENCE	ANXIETY
COOLNESS	EXCITABILITY
ALERTNESS	STOLIDITY
CONCENTRATION	LACK OF CONCENTRATIO
RESOURCE	HELPLESSNESS
SINCERITY	INSINCERITU
HONESTY	UNCDRUPULOUSNESS
OBEDIENCE	REVOLT
CONSCIENTIOUSNESS	CAPRICE
WILLINGNESS	RELUCTANCE
CODILITY	INTRACTABILITY
FRIENDLINESS	HOSTILITY
ESPRIT DE CORPS	SELFISHNESS
ADDOMMODATIYENESS	OBSTINAACY
HULITIY	CONCEIT
GENEROSITY	GREED
ORIGINALITY	CONVENTIIONALITY
ACCURACY	INEXACTITUDE
ORDERLINESS	LACK OF SYSTEM
SENSE OF HUMOUR	WANTING THIS SENSE
IMAGINATION	UNIMAGINATIVE
ATTENTION	INATTENTION
LOGIC	SOPHISTRY
TRUTHFULNESS	SUPTERFUGE
GRACE	INSOLENCE
HOUOUSNESS	MOROSENESS
PATIENCE	IMPATIENCE
FORESIGHT	LACK OF FORESIGHT
OPENNESS	SECRETIVENESS

Age group: 11 - 16 years old; 158 children in total.

Initial challenges: The challenge was to get students to acknowledge their attributes without someone else pointing things out to them.

What was done about it: The children were provided with a sliding scale with attributes that are positioned as opposites. All of them were invited to fill out a pre-activity sheet and again at the end of the activities. Some of the activities were entrepreneurial in nature and others were science based.

Results: Initial results of this were firstly, that a large number of the children did not have the vocabulary or understanding of what that the concepts that were presented meant to be able to situate themselves on the sliding scale. Other results that were present in the data was that the boys were more likely to err on the side of positive than the girls. This gender bias was present in both the groups working on the entrepreneurial tasks and in the science groups. In the post activity sheets, there was a marked difference in both the understanding of the concepts and in that both genders were more honest in their replies. There was very little difference in the way that the children observed themselves as having entrepreneurial attributes, whether their activities were based in science or in entrepreneurial workshops. The results of using this tool to allow children to access their own attributes as persons and entrepreneurs suggests that it is not the content being taught at each time but the way the children are allowed to engage with the subjects that matter in the effective development of entrepreneurial skills and attributes.

Relevance for entrepreneurial teaching: Development of an entrepreneurial mindset, attributes or skills is all based on the ability of the individual child to be able to understand themselves as BEING entrepreneurial and not on their only knowing about or having partial training in entrepreneurial education.

Applied assessment methods and tools: The personal attribute tool can be categorised as performance assessment, self-assessment, and as being based on informative assessment.

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