

# Using the head, hands and heart approach in sustainable entrepreneurship courses at European higher education institutions

## *This case in a nutshell*

Head, hands and heart (HHH) is a recent approach that entrepreneurship educators can use as a framework to design, run and evaluate their courses in a holistic manner. HHH offers the opportunity to evaluate students' cognitive, practical and emotional capabilities, extending traditional approaches that consider mainly cognitive aspects – knowledge acquisition. This case study shows how entrepreneurship educator Dr Rita Klapper applied and refined the HHH approach for entrepreneurship-related courses at selected higher education institutions. From an initial application at Leuphana University Lüneburg (Germany) in the context of postgraduate executive evaluations, Dr Rita Klapper introduced HHH into a postgraduate course at the University of Natural Resources and Life Sciences (BOKU, Austria) and IDRAC Business School (France). The HHH approach is found to help students feel empowered in their learning and to create an inspiring and trustful learning atmosphere. Students discover an interest in the concept of entrepreneurship and realise that it is relevant to them. Moreover, HHH also increases the opportunity of a learning journey for the educator.

## 1. Background

### Overview of the HHH approach and its use for entrepreneurship courses

Drawing on work in Sustainability Science, (Sipos et al., 2008) the head, hands and heart (HHH) is an approach that entrepreneurship educators can apply to both their teaching and to evaluating students' performance. "Head" is the cognitive dimension, referring to the knowledge content of education, theory in particular. "Hands" is the psycho-motoric dimension, referring to practical use of knowledge, that is skills development. "Heart" is the emotional dimension, referring to the students' feelings, attitudes and motivation.

Dr Rita Klapper, an entrepreneurship educator herself, observed that the HHH approach concurred with her own experience of transformative learning for sustainable entrepreneurship in higher education. "Transformative" here means that the learning experience emphasises transforming the student's personality towards entrepreneurial thinking and acting, as well as addressing challenges that require societal transformation; "sustainable" means that the students become able to apply their new capabilities in environmentally, socially and economically sustainable activities. As Rita Klapper puts it: Transformative learning implies "doing things better and doing better things, but also seeing things differently". Towards this end, she uses three types of pedagogical activities that highlight the hands and heart dimensions of learning in particular:

1. Creative art-based activities, such as the use of collage, social theatre techniques, painting and music.
2. Practice-based activities: for example roundtables (face to face and online), company visits and case studies written by students.
3. Contemplative and reflective activities, such as meditation practices and learning diaries.

Rita Klapper has found that, as an umbrella framework, the HHH approach is at the interface of entrepreneurship and sustainability, suitable for work with undergraduate, postgraduate and executive

audiences in a range of cultural contexts.<sup>1</sup> Over a time span of almost ten years, she has engaged with the same elements of the framework in her teaching and research, underpinning a number of publications (for example Klapper/Fayolle, 2023). In her most recent teaching and research, Rita Klapper has created conceptual and practical links between literature that focuses on sensory experience in education (Harris, 2021), *withness* rather than *aboutness* thinking (Shotter 2006), and sustainable entrepreneurship education (Klapper/Fayolle, 2023).

This case study focuses on two aspects: First, how Rita Klapper applied the HHH approach in teaching and evaluation of students' performance at three different European higher education institutions. Second, the insights gained from this teaching and evaluation, regarding the value of the HHH approach.

## 2. Objectives - Rationale of using the HHH approach for entrepreneurship courses

HHH provides a framework for designing and delivering courses, as well as for evaluating students' capabilities in a holistic manner, comprising their cognitive, practical and emotional capabilities. This extends traditional approaches to education that consider mainly cognitive aspects and that focus on knowledge acquisition. A holistic or broader approach that engages a wider range of experiential dimensions is arguably more appropriate for the transformation required for the transition to a green, digital and resilient economy<sup>2</sup>, of which sustainable entrepreneurship is a part.

## 3. Input - Resources for applying the HHH approach in entrepreneurship courses

Using the HHH approach in teaching and evaluating entrepreneurship courses requires a coherent and multidimensional approach to educational design. Rita Klapper thus transforms a simple learning theory (HHH) into course descriptions with concrete learning objectives, methods and content, tailored to suit the specific target groups of different higher education audiences. She delivered the courses herself, reflected on her experiences and refined objectives, methods and content for the next iterations.

For the purpose of **course evaluation**, educators can use HHH as a reference framework in two ways: firstly, as a frame for asking students to evaluate a course; and secondly as a frame within which educators assess student performance.

In **student evaluations**, questions are generally posed to students at the end of a course. Question forms can differ, but educators could for instance ask the following:

- **Head:** What knowledge or theory have you learned through this course? For example, knowledge about the concept of entrepreneurship and the entrepreneur? Aspects of creating businesses in different cultural contexts? Knowledge about business support structures? What knowledge have you acquired about the relationship between entrepreneurship and sustainability? What is the role of sustainable entrepreneurship in the 21<sup>st</sup> century?
- **Hands:** What practical skills have you acquired, what ways of doing things, and what ways of exploring your topic? For example, skills for critical reflection, skills for expressing yourself creatively through music, art work? Any new ways of communicating results, and collaborating with others?
- **Heart:** What emotions has this course stirred in you, how and why? Has this course stirred an interest in learning more about entrepreneurship and the entrepreneur? Has the course

---

<sup>1</sup>

See [https://www.researchgate.net/publication/235307335\\_Achieving\\_Transformative\\_Sustainability\\_Learning\\_Engaging\\_Head\\_Hands\\_and\\_Heart](https://www.researchgate.net/publication/235307335_Achieving_Transformative_Sustainability_Learning_Engaging_Head_Hands_and_Heart).

<sup>2</sup> See website of the European Commission related to green, digital and resilient economy at [https://ec.europa.eu/commission/presscorner/detail/en/ip\\_22\\_1467](https://ec.europa.eu/commission/presscorner/detail/en/ip_22_1467).

changed some of your attitudes towards entrepreneurship and the entrepreneur? Has the course made you aware of the relationship between entrepreneurship and sustainability? If so, in what way? Has the course changed your perception of sustainable entrepreneurship – that is, would you like to test yourself as an entrepreneur pursuing a venture with a sustainability angle?

Student evaluations can also take place at different stages during a course, to allow the educator to better assess student learning and personal developments part-way in a phased approach.

Rita Klapper has used HHH extensively to **evaluate different types of student assignments** in different cultural contexts. Such types of assignment have included those asking students to reflect on scenarios that relate to a particular professional context, for example an ethical dilemma, or they may take the form of mini research projects undertaken on an individual or group basis. For this purpose, the following types of questions may be used:

- **Head:** What theories, approaches, models and frameworks does the student present and explain as relevant to the chosen task? What are the links between these? To what extent does the student make these conceptualisations in a plausible, realistic, credible, comprehensible manner? How critical (reflective) is the presentation of these theories, approaches, models and frameworks? How well-argued are the elaborations?
- **Hands:** Does the student apply the approaches, models and frameworks in the given context at all, and if so, how well is this done? Is it convincing? Is something missing? Are they superficially applied? Are they appropriate to the chosen context?
- **Heart:** What reflections does the student make in terms of their own learning, motivation and engagement? To what extent does the course "speak" to the student, and why? What creative and innovative elements does the student bring to the assignment? Does the student document the engagement with the subject, the engagement with the process of learning? Is the student able to reflect on the implications of the perspective for future generations and for different societal groups?

Course leaders may of course add more specific questions, depending on course content, learning objectives, educational methods and delivery mode, that is face to face, online or hybrid.

#### **4. Stakeholders - Involving other actors in entrepreneurship courses**

In general, bringing stakeholders - often practitioners – into the classroom, or having students engage with them externally, for example through interviews and internships, can help with the motivational (Heart) aspects of education. This is the same for courses that do not consciously aim to apply the HHH approach. If students from several departments attend a course, stakeholders will include representatives from these departments, and the educator should liaise with them about learning objectives, overall content, methods and evaluation questions. The educator should also communicate the findings from the evaluation to other concerned departments. The same applies to external actors such as guest lecturers or staff from startup centres, incubators and other relevant organisations.

#### **5. Activities - Exemplary applications of the HHH approach**

##### ***Leuphana University Lüneburg, Germany***

Leuphana<sup>3</sup> is a university with a dedicated humanist, action-oriented, sustainable and entrepreneurial profile. In Winter semester 2022/23, it had 9,696 students. From 2016 to 2019, Rita Klapper worked at

---

<sup>3</sup> See <https://www.leuphana.de/en/>.

Leuphana Professional School as a freelancer creating and evaluating face to face courses and evaluating postgraduate executive's written reports. Later in 2018, she worked as an educator and researcher as part of a team at the Management School of Leuphana University developing management courses with a sustainability focus and researching the impact of such courses.

Rita Klapper's work at Leuphana built on her long experience of designing, teaching and evaluating postgraduate executive courses in leadership, ethics and values. At Leuphana, she examined a substantial number of postgraduates' written reports according to the HHH concept. The students came from different disciplinary and professional backgrounds, for example from engineering, law, business, management and sustainability science. Courses took place mainly in blocks. On average, Rita Klapper created and evaluated approximately three courses and 30 written reports per year.

Evaluation took place after the courses. Whereas it was initially challenging to apply the HHH framework in courses and evaluations of written reports, given the need to operationalise the approach, it soon proved to be a useful and holistic basis for evaluating student performance. The evaluation questions were the same across the courses. A team of educators at Leuphana Professional School refined the questions over time. As the courses at the Professional School of Leuphana University were aimed at professional audiences in particular, the postgraduate executives' written reports were based on professional experiences and lived scenarios of the postgraduate executive learners. This could mean that the learners would choose, for example, to reflect on ethical dilemmas experienced in a start-up situation. The HHH framework and the lived experience-focused nature of the assignment often seemed to help learners "digest" their feelings about these professional situations in a protected, academic environment. Moreover, the theories taught seemed to help learners to critically evaluate the professional situations through relevant theories (entrepreneurial, ethical, related to corporate social responsibility), detach themselves from the experience and to be more aware of their actual and potential learning from the situations that they analysed. In a most recent conversation with one of Rita Klapper's former students from Leuphana Professional school, she explored how the alumnus had reacted to the evaluation sheet which included the theory (Head), practice (Hands) and reflection (Heart) part. The former student, who works in a sustainability-driven organisation, said: *"The evaluation sheet was a well-rounded, well-developed assessment tool that evaluated my work in a holistic manner. It really talked to me, as it went beyond assessing conventional theory. The application was very relevant for my professional project and the critical reflections, i.e. the Heart part, still influences me in my work at my present employer."*

This said, having experimented with the HHH framework in different international higher education institutions, Rita Klapper has also found that one of the limitations when operationalised for evaluation purposes is that it is relatively time-consuming when applied in courses with large cohorts. The exact nature of the operationalisation will depend on the educational context and the educator's preferences in the evaluation of their students. One future option is to apply the HHH framework to multiple choice response formats, which have a range of advantages and disadvantages, but these generally offer little option for the learners to express themselves qualitatively. Nonetheless, this is an area to be explored in future.

### **University of Natural Resources and Life Sciences (BOKU), Austria**

BOKU<sup>4</sup> (original name: Universität für Bodenkultur Wien) has 10,000 students and 15 departments. It is a member of the European Bioeconomy University, an alliance of six universities dedicated to

---

<sup>4</sup> See <https://boku.ac.at/>.

knowledge generation and transfer, including entrepreneurship, in the field of bioeconomy. Rita Klapper contributed insights relating to HHH within the framework of the European project Innovative Education for Sustainable Entrepreneurship in Life Sciences (INTRINSIC, 2018 – 2021). In this project, BOKU implemented HHH as part of a mobile app designed to monitor and assess the entrepreneurial activities of students taking postgraduate courses in innovation. The app and associated monitoring questions also captured aspects of the students' sensorial experience. The courses complemented theoretical learning with a company visit and creative work with recycled material, to express visions of future business ideas.

Rita Klapper was responsible for the development of the guiding survey-type questions that operationalised the framework of HHH within the mobile phone application, with the aim of delivering qualitative and quantitative data that could be subsequently examined. For example, relating to the practical, hands-on dimension of the learning (Hands perspective), one of the questions asked: *Did this learning event positively impact your interest in learning by hands-on activities or working with material with direct material contact?* Other questions asked: *Do you prefer working with your hands and natural materials to listening to lectures, working on case studies etc.? How much did you experience sensory aspects of the material and production environment you visited? Did the experience you had of the material (wood, etc.) and production environment (noise, smell etc.) during this excursion affect your learning and interest and, if yes, how?* In terms of the Head dimension, questions investigated the theoretical learning gained by the students, and more specifically what they had retained of the theories taught. Links were also made to sustainability and to the Social Development Goals, asking the students about their own intentions and ideas as linked to the latter.

The first results of the BOKU work, co-authored with Andreas Zitek, presented at the 3E conference in Aarhus in May 2023, and relating to the same course, showed that most students reported they would prefer to work with materials, as compared to only receiving theoretical input, or performing theoretical case studies. While perhaps not surprising, if acted upon, this does require particular and specific innovation and elements in course design. The majority of learners mentioned that they experienced various sensory aspects during the visit to a production environment. Most often the smell of wood, and the haptic experience of material qualities of wood and metal were mentioned, but also the direct experience of the technical performance of the production machines. Noise, for instance, was experienced as unpleasant. Students reported that they were interested and engaged in the whole learning experience, including the explanations provided by the companies involved, and that this also made them more sensitive to related sustainability issues.

### **IDRAC Business School, France**

IDRAC<sup>5</sup> Business School in Lyon educates in business administration and management as its principal activity. It has approximately 4,500 students. Rita Klapper has been Associate Research Professor at IDRAC since September 2022. She applies HHH as a course evaluation tool, giving postgraduate students the opportunity to express their views on different courses: (Sustainable) Entrepreneurship, Ethical Procurement and Change Management.

Rita Klapper is planning several further educational activities with HHH. For example, she is presently designing a new course on sustainable entrepreneurship for international bachelor students at Idrac Business School, Lyon (France). HHH will provide a framework within which to evaluate student learning and to improve the courses subsequently. HHH will also give the learners the opportunity to express

---

<sup>5</sup> See <https://www.idrac-business-school.com/>.

their views about their learning, making it possible for the educator to adjust the contents in line with changing preferences of the learner generations.

Analysis of students' course evaluation comments within the HHH frame at IDRAC has firstly provided the educator with an insight into the types of learning students have acquired in the course (*What?*), and into what they have appreciated in terms of the theory taught. It also helps to establish what the learners want, want more of, and perhaps need in terms of their further development. Essentially this use of the framework provides ideas that go beyond the present course and opens up avenues for future development.

Secondly, regarding the Hands element, course evaluations have provided an insight into how students perceive the practical application of theoretical concepts in organisational or other contexts (*How?*). Going beyond the traditional application of knowledge, participants have also pointed out that the practical dimension taught them *"To learn more about people, and try to understand them from a different perspective. To be tolerant, to be calm and take a moment to breathe"*.

As Rita Klapper uses contemplative methods drawing on kundalini yoga techniques in her courses, students have sometimes reflected on their surprise when confronted with these techniques in the classroom. The analysis of the Heart dimension has revealed the feelings of the students with regard to the course, its contents and its methods. Reactions are usually positive. Clearly, positive student expressions of appreciating a course are validating for the educator, but they also talk about the learner-educator relationship, and the atmosphere created in class. As a student put it: *"It creates a safe emotion and peace"*.

## **6. Output, impact and lessons learned**

### ***Outputs of courses applying HHH***

Educators can apply the HHH approach to a range of educational formats, including lectures, practice-oriented seminars and excursions as well as to different types of student output such as seminar papers, thesis papers, individual and group presentations, reflective assignments, learning diaries, case study descriptions, creative art products or prospective biographical writing. Arguably there is a correlation between the integration of sensory elements (vision, sound, smell, touch and taste) into a course, its pedagogical tools and outputs, and the heart element of HHH, but this requires further investigation.

Diagram 1 shows exemplary creative outputs from Rita Klapper's entrepreneurship teaching with the HHH approach: collages, diagrams and paintings.



Diagram 1: Exemplary creative outputs from entrepreneurship teaching with the HHH approach



Source: Rita Klapper

**Impacts on students and educators**

Considering the varying degrees of head, hands and heart in the courses considered, overall, students tend to show initial surprise, followed by active engagement with the approach. They express a general feeling of being empowered in their learning; there tends to be a very good learning atmosphere with trustful experiences; students feel safe, experience fun, discover interest in the topic. They begin to see their involvement with entrepreneurship and sustainability in a different light, and learning about it becomes relevant to them.

**Lessons learned**

The following lessons were learned based on Rita Klapper’s experiences with the HHH approach:

- There is significant room for sensory elements in entrepreneurship education, for learners and educators. She has used audio-visual stimuli such as music and art—(existing and created by students), visualisation exercises, haptic exercises to experience touch (for example bringing recycled and green material into the classroom) and olfactory exercises to smell produced or natural materials.
- Transformative entrepreneurship education benefits from a holistic approach involving the cognitive (head), the practice (hands) and the affective side (heart) in line with the societal challenges faced. Imparting knowledge alone may not suffice to train students how to tackle challenges that require physical responses and emotional resilience, as well as intellectual knowledge.
- Engagement through sensory education is a promising way forward for an increasingly demanding and discerning learner audience. Students increasingly want to bring in and develop their whole personality and to learn in a practice-oriented way. Moreover, active and sensory education may also train for unclear careers that demand life-long learning and flexibility.

- HHH is an opportunity of a learning journey for the educators. They can learn from and with students in innovative settings in ways that traditional education does not offer.

### Source

This case study was prepared by Dr Stefan Lilischkis from empirica Gesellschaft für Kommunikations- und Technologieforschung mbH, Bonn, Germany, through collection and analysis of broad documentation about HHH and communication with Dr Rita Klapper. The latter made results available from published and yet unpublished sources for this case study.

The status of information provided in this case study is February 2024.

### Contacts

Rita Klapper, Associate Research Professor, IDRAC Business School, Lyon, France, and Visiting Professor at IREES (Integrated Research on Energy, Environment and Society), ESRIG, University of Groningen, The Netherlands: [rgklapper@gmail.com](mailto:rgklapper@gmail.com).

### Literature

Harris, A. (2021): *A Sensory Education*, Routledge Taylor and Francis Group.

Klapper, Rita; Fayolle, Alain (2023): A transformational learning framework for sustainable entrepreneurship education: the power of Paolo Freire's educational model. In: *The International Journal of Management Education*, Vol. 21, Issue 1, March.

Klapper, Rita & A. Zitek (2023) Head, Hands and Heart as supporting transformative learning experiences in sustainable entrepreneurship, in *Conference Proceedings, ECSB 3E Conference Aarhus, HEAD*, <https://ecsb.org/wp-content/uploads/2023/05/3E2023-Book-of-Abstracts.pdf>.

Klapper, Rita (2022) Hand, Head and Heart — holistic thinking, doing & feeling in undergraduate enterprises courses at Manchester Metropolitan University, <https://ioee.org.uk/2020/03/10/hand-head-heart-holistic-thinking-feeling-undergraduate-enterprises-courses-manchester-metropolitan-university/>

Shotter, J (2006): *Understanding Process From Within: An Argument for 'Witness'-Thinking*, *Organization Studies* 27(4): 585–000 ISSN 0170–8406, SAGE Publications (London, Thousand Oaks, CA & New Delhi).

Sipos, Yona; Battisti, Bryce Thomas; Grimm, Kurt A. (2008): *Achieving Transformative Sustainability Learning: Engaging Head, Hands and Heart*. *International Journal of Sustainability in Higher Education* 9(1):68-86, DOI:10.1108/14676370810842193 ([https://www.researchgate.net/publication/235307335\\_Achieving\\_Transformative\\_Sustainability\\_Learning\\_Engaging\\_Head\\_Hands\\_and\\_Heart](https://www.researchgate.net/publication/235307335_Achieving_Transformative_Sustainability_Learning_Engaging_Head_Hands_and_Heart)).