

Entrepreneurial Practice Towards Resilient Future: A Good Practice From Erasmus+ Ka2 Kateika Project

Hiroko KAWAMORITA^{1*}, Soner ÇELİK², Kürşat DEMİRÜREK³, Leonardo MAGNANI⁴

¹ Hachinohe Gakuin University, Regional Collaboration Research Center, Hachinohe, 031-8544, Japan,

^{2,3} Ondokuz Mayıs University, Faculty of Agriculture, Department of Agricultural Economics, Samsun, 55270, Türkiye,

⁴ Artéteka ltd, 77 Lower Camden Street, Dublin, D02 XE80, Ireland

¹ <https://orcid.org/0000-0002-8253-7340>

² <https://orcid.org/0000-0001-8177-0389>

³ <https://orcid.org/0000-0002-6193-9957>

⁴ <https://orcid.org/0009-0002-5864-9040>

* Corresponding author: h-kawamorita@kg.hachinohe-u.ac.jp

Research article/Reviews

Article History:

Received: 12.11.2023

Accept: 07.12.2023

Available online: 04.01.2024

Keywords:

1 Entrepreneurial culture

2 Entrepreneurial competences

3 Erasmus+

4 International Collaboration

5 Home Economics

6 Sustainable Development Goals

7 Resilience

ABSTRACT

Lifelong learning is a well-established and applied concept worldwide, especially in Europe. In addition, Erasmus+ is one of the most successful lifelong learning programmes of the European Union, which brings people together and promotes cultural exchange and peace worldwide. This study presents an excellent example of the Erasmus project “KATEIKA 家庭科 :Piloting Home Economics in the EU Primary School Curricula” developed and implemented through international collaboration. The authors have connected the outcome of the research result and the concepts of entrepreneurship to demonstrate the importance of such activities. Entrepreneurial mindset and competencies are the keys to creating an entrepreneurial culture in schools and beyond towards a resilient future.

Introduction

Since its announcement, the 2030 Agenda for Sustainable Development has been the focus of many scientists in different fields. These 17 international development goals with 169 targets are planned to be achieved by 2030 worldwide (Volles, 2016; Weitz et al., 2023). According to the google trend search, the Sustainable Development Goals (SDGs) started to be popular in 2015 and especially became the key trend keyword in 2021. Not only by the scientists but also businesses and the whole community have been introducing and engaging in numerous activities and initiatives for the aim of “Transforming Our World” through the SDGs at local, regional and international levels.

In order to achieve these SDGs, the first step is to introduce educational and awareness-raising activities to promote the importance of such goals related to our life in different settings. To do so, interdisciplinary approach is crucial in education throughout the implementation process (Annan & Molinari, 2017; Venâncio & Pinto, 2020). Providing the information is not

enough, and we need to take actions. Entrepreneurship & Innovation plays a significant role in creating a positive and successful outcome of those actions (Patzelt & Shepherd, 2011; Kawamorita et al., 2020; Tajpour et al., 2020). In this context, home economics is one of the subjects which has the great potential to accelerate progress towards achieving some of the SDGs such as Goal 1 No poverty, 2 Zero hunger, 3 Good health and well-being, 6 Clean water and sanitation, 7 Affordable and clean energy, 11 Sustainable cities and economies, 12 Responsible consumption and production, 13 Climate action, 14 Life below water and 15 Life on land (Anerua & Obiazi, 2009; Pendergast, 2017; NCCA, 2018; Takeshita & Suzuki, 2022).

This study presents the outcome of the KATEIKA (Home economics in Japanese language) project under the framework of Erasmus+ programme, which is a Lifelong learning programme, well-established and applied around the world. Erasmus+ is one of the most common and popular supporting mechanisms for international activities in Europe (Kawamorita et al., 2020).

The Erasmus+ KA2 KATEIKA 家庭科: Piloting Home Economics in the EU Primary School Curricula” was developed and implemented through unique international collaboration. It is good example emphasising on one of the core principles of 2030 Agenda, which is “to establish multi stakeholder partnerships for mobilising and sharing knowledge, expertise, technology and financial resources, to support the achievement of SDGs”. The authors have connected the outcome of the research result and the concepts of entrepreneurial learning to demonstrate the importance of such activities towards creating resilient future as demonstrated in the below Figure 1.

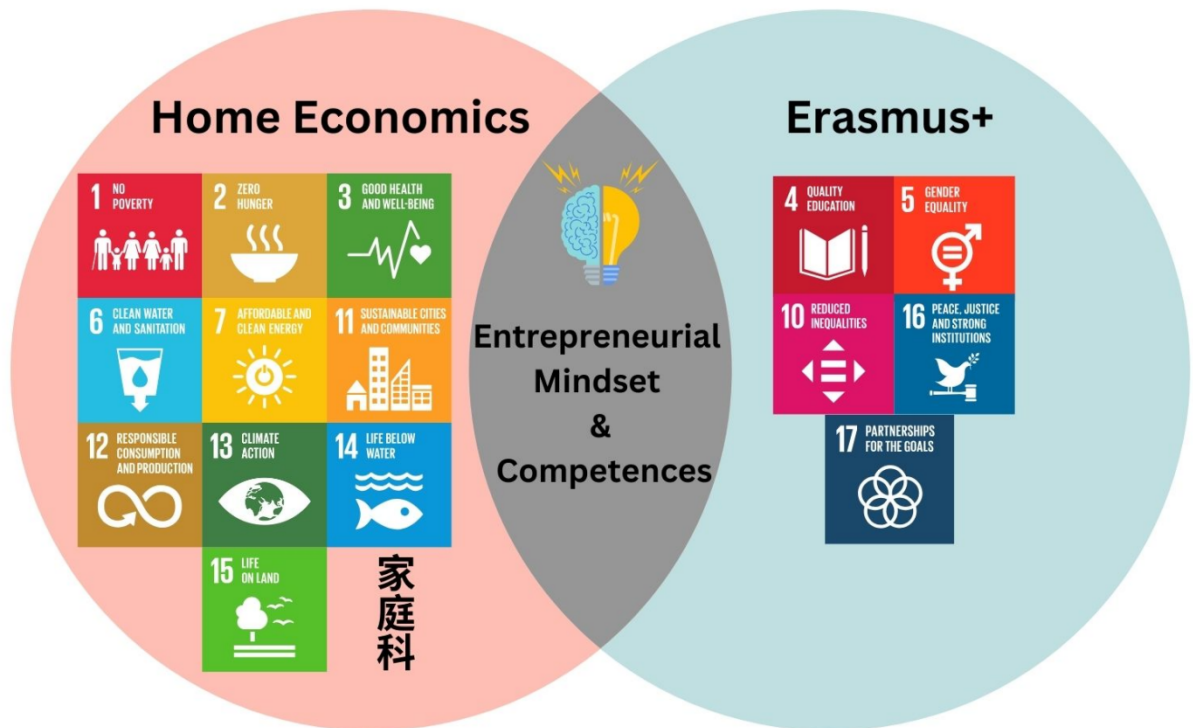


Figure 1 created by authors:

The connection between Home Economics and Erasmus+ considering SDGs

Lifelong learning and Entrepreneurship

Nowadays, Lifelong learning is one of the most important global agenda in education, ensuring sustainable development focusing on “inclusive and quality education to promote lifelong learning opportunities for all” (English et al., 2020; Volles, 2023). We all need to have the capacity to act upon opportunities and ideas, to work with others under the challenging conditions and changing environment. In order to achieve these goals, entrepreneurial mindset is essential as it fosters creativity, adaptability, and a problem-solving approach to life (McGrath & MacMillan, 2000). According to the European Union: “Lifelong learning include all general education, vocational education and training, non-formal education and informal learning undertaken throughout life, resulting in an improvement in knowledge, skills and competences within a personal, civic, social and/or employment-related perspective.” That include the provision of counselling and guidance services (EPCE, 2006). Entrepreneurship is a continuous learning and a journey throughout the whole process which has become a cornerstone of economic development (Ratinho et al., 2020; Nogueiro et al., 2022).

In 2016, the European Commission has developed EntreComp which is the European Entrepreneurship Competence Framework presenting the entrepreneurial mindsets. The framework is useful for many situations such as for re-designing of curricula in the formal education, and introducing the entrepreneurial experiences in non-formal learning contexts (Mitchelmore & Rowley, 2010; Bacigalupo et al., 2016). The key three competence areas are divided into 15 sub competences in 8 level progression model as illustrated in the below figure.

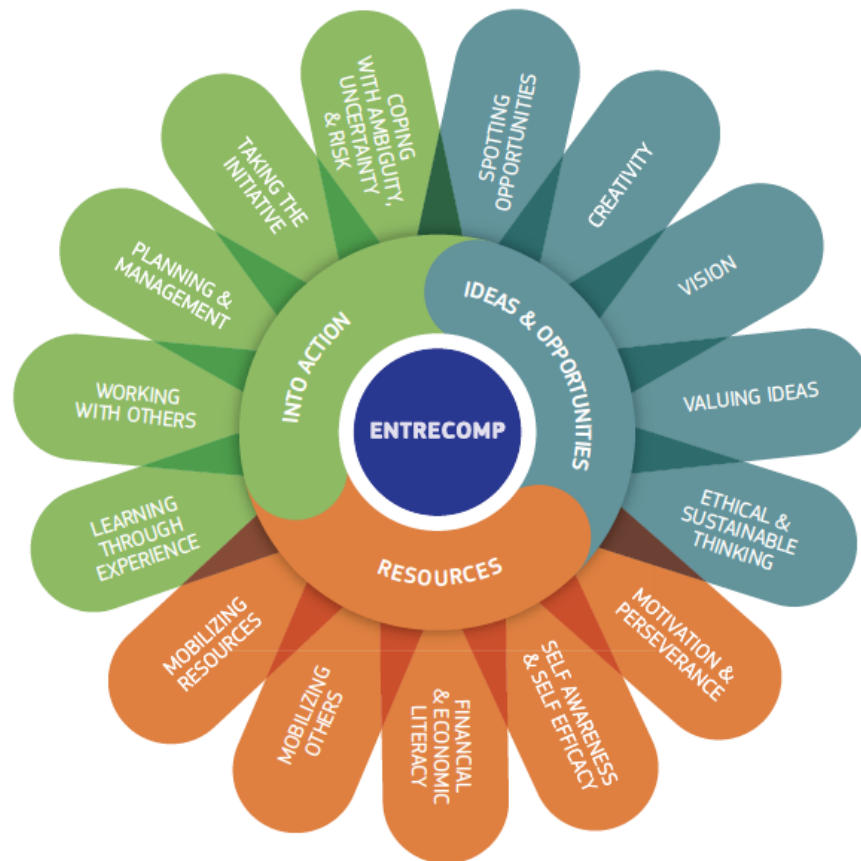


Figure 2: Areas and competences of the EntreComp conceptual model (Bacigalupo et al., 2016)

Rațiu et al (2023) recently conducted research on the EntreComp framework bibliometric review based on the 37 articles from the Web of Science Core Collection (WoS) between 2016 to June 2022. Research patterns and trends addressing the EntreComp framework were analysed in 31 different countries. Among them, 4 studies were about the improvement for the subjects that have been using EntreComp in their activities. As this framework have been commonly

applied in similar context such as related to the real-life practice, the EntreComp was also used in this study to evaluate the activities in Türkiye at OMU Foundation College observation explained in Methodology and results section. Many scientists highlighted that educating teachers is essential and active reflection is the key for learning development in School Education (Shulman & Shulman, 2004; Westbury et al., 2005; Schwartz, 2006; Seikkula-Leino et al., 2021). Together with the education and training, the Entrepreneurial mindset (attitudes, skills and behaviors) will be developed throughout the learning process and Entrepreneurship competences (creativity, a sense of initiative, problem-solving, the ability to marshal resources, and financial and technological knowledge) enable to adapt to change (Mawson, 2023).

Home Economics towards Resilient Future

The Japanese word 家庭科 (Kateika) means “home economics” and it is a compulsory subject from primary to secondary schools that covers a comprehensive range of topics in Japan. At the primary school level, the overall objective of Kateika education is to enable children to acquire the fundamental knowledge and skills necessary for everyday life, through practical and hands-on activities in the areas of family and family life, daily meals and basics of cooking, comfortable clothing and housing and daily consumption and environment according to the Ministry of Education, Culture, Sports, Science, and Technology (MEXT, 2008).

For a long time, the aim of Kateika has been for students to become independent in their daily lives. For example, cooking by themselves, washing clothes by themselves, and cleaning rooms by themselves, are the big aims for students because of necessity. Kateika has a suitable methodology for students to acquire those competences across curricula.

In this context, introducing Kateika in European primary schools would allow the development of critical competences that students will take in their lives. Learning to cook, clean and manage money are vital skills often overlooked, that should be the pivotal competences for independent adults. Moreover, most of these skills are also connected to the current changes that we are seeing in society: learning to cook can also integrate competences regarding food purchase, as well as sustainable consumption and production.

International Collaboration through Erasmus+ Programme:

Experience from KA2 KATEIKA PROJECT

The overall objective of the project is to “Develop key skills for independent and responsible adults in primary school students across the EU through the introduction of Kateika in the school curricula”. Therefore, the small-scale partnerships in school education KA210-SCH project proposal “KATEIKA: Introducing Home Economics in EU Primary School Curricula” was submitted by “Externo Paulo VI” school in Braga, Portugal with partners “Ondokuz Mayıs University Foundation College” in Samsun, Türkiye, ‘‘Ai Campi Elisi’’ in Trieste, Italy, “Arteteka” in Dublin, Ireland and “Hachinohe Gakuin University” and “GLOBAL ENTREPRENEURIAL NETWORK JAPAN” in Hachinohe, Japan. It was accepted with project no 2022-1-PT01-KA210-SCH-000082859 (<https://www.ovkateikalearning.com>).

The project began in 2022 with the online training sessions organised by Hachinohe Gakuin University and GLOBAL ENTREPRENEURIAL NETWORK JAPAN to introduce “Kateika” for teachers and staff from Portugal, Italy, Türkiye and Ireland. These online sessions provided better understanding of how Kateika is implemented in Japan, what are the key aspects to consider when developing a Kateika session and what are the learning objectives for the school curriculum. In addition, it was a great opportunity to discuss if and how home economics is currently implemented in each country and identify barriers and opportunities for mainstreaming Kateika in curricular and extra-curricular activities. Upon the completion of the online training sessions, activity ideas were presented by each school followed by the feedback of the Japanese partners.

The second part of the project were organised and implemented by Portugal, Italy and Türkiye. Especially with two international mobilities, one from Italy and Türkiye to Portugal, and one from Portugal and Ireland to Italy to pilot the activities developed by the teachers. The international mobilities offered unique opportunities for pupils from each school to attend lessons and meet peers from the hosting country. The accompanying teachers also had the chance to network with other teachers from Europe.

Research was conducted and a final conference for school decision-makers were organised and hosted by Ondokuz Mayıs University, Türkiye. As the final results of the project, the project website and a handbook were prepared with activities implemented alongside the results

of the analysis carried out by Arteteka and OMU Foundation College. The project outcome contributed to create a roadmap for further project development in this field.

Methodology and Results

The research activities were implemented in two phases (See Table 1: Research Map); First phase in the Italian and Portuguese schools with student mobility, and the second phase in Turkish school targeting the local students.

In the first phase, the representative from Turkish and Irish partners have conducted an online questionnaire designed to analyses the inclusiveness of the activities, as well as the contribution to the green and digital transition during the piloting of the Kateika activities. All the activities seemed to be very inclusive at the social inclusion level. For instance, the questionnaire highlighted the presence of students with special needs in the piloting activities. However, no barriers or obstacles were identified for those participants. The result of the first phase is well presented in the Handbook of Kateika Project. Additionally, the overview of this Kateika Project focused on collaboration was published by Kawamorita (2023) prior to this study. Therefore, in this study, the second phase of the research is presented in details emphasizing on Entrepreneurial competences (The Post-Training Survey and The Observation).

Table 1: Research Map

Phase	Target school	Methods	Research conducted by	Outcome (Identified learning competences)
1	Italy (Ai Campi Elisi)	Online Questionnaire Survey	Ireland (ArtéTeka LTD)	Digital competences Green competences Opportunities to promote Diversity and Inclusion
	Portugal (Externo Paulo VI)		Türkiye (OMU Foundation College)	
2	Turkyie (OMU Foundation College)	Online Questionnaire Survey & Observation	Türkiye (OMU Foundation College)	Entrepreneurial competences
			Türkiye (Ondokuz Mayıs University)	

In accordance with the objectives of the project, four training courses were organised with around sixty students of the 6th-grade students of 6A, 6B and 6C Classrooms at OMU Foundation College, Türkiye. To assess the outcomes and impact of the training courses, a post-training survey was conducted in the computer room of the College on June 8, 2023. The outcomes and impact of the KATEIKA activities based were assessed. The survey result was

collected among 43 students (21 female and 22 male) who participated at home economics pilot activities.

The post-training survey questions were focused on identifying the gained competences, skills and knowledge from the activities, the increase of their awareness of the themes of the courses and their intention to use these competences and knowledge in practice and future. Table 2 present the list of activities implemented in Türkiye at OMU Foundation College. Five activities were divided into 4 sections (questions) and the results of seven factors; Attendance, Interest, Comfort (speed/pace), Time and Resources, Instructors' engagement and Satisfaction are shown in percentage. The rate of the students who understood the purpose of the course is relatively high and this is a success of the project implementation. One of the essential findings of the survey is that the students claimed that they would retain the knowledge and competences they have from the training. Only one student's answer is no. The rates of their satisfaction are very high in terms of their expectations about the quality, duration, instructors and learning materials of the activities. The overall rate for the retention of the implemented activities is high as 67.4% which demonstrated the success of the project.

Table 2: Activities In Türkiye at OMU Foundation College result

Activity Number	Course Name	Activity Detail	Question Number	Sub QN	Factor	Rate round off
1	A Cleaning and Keeping Organized	The participant students were trained to clean the classroom and organise their school lockers and bags.	1	1.1	Attendance	91%
				1.2	Interest *	60%
				1.3	Comfort (speed)**	80%
				1.4	Time and Resources**	80%
				1.5	Instructors' engagement*	80%
				1.6	Satisfaction*	80%
				1.7	Retention*	70%
2	A Clothes Training	We taught our students to button up a shirt, tie a shoelace, tie a necktie, fold the laundry, hang clothes on a clothes hanger, hang washed laundry, sort the laundry to be washed, sew a button, draw, paint and iron on t-shirts.	2	2.1	Attendance	93%
				2.2	Interest *	70%
				2.3	Comfort (speed)**	77%
				2.4	Time and Resources**	72%
				2.5	Instructors' engagement*	74%
				2.6	Satisfaction*	68%
				2.7	Retention*	70%
3	A Food Waste Management	Students learned how to separate waste, and we demonstrated them to make organic fertiliser from food waste with their active participation	3	3.1	Attendance	84%
				3.2	Interest *	64%
				3.3	Comfort (speed)**	60%
				3.4	Time and Resources**	66%
4	Composting Training			3.5	Instructors' engagement*	68%
				3.6	Satisfaction*	64%

				3.7	Retention*	58%
5	A Preparation of Healthy Meal	The students were trained to make a shopping list, allocate a budget, do shopping, prepare healthy food, serve food, clear the table after the meal and wash the dishes.	4	4.1	Attendance	98%
				4.2	Interest *	86%
				4.3	Comfort (speed)**	77%
				4.4	Time and Resources**	82%
				4.5	Instructors' engagement*	82%
				4.6	Satisfaction*	78%
				4.7	Retention*	84%

*5 is the highest and 1 is the lowest

**3(Fair) is the highest and 1 (Too fast / Slow) is the lowest

Table 3: Activities In Türkiye “before and after” result

Activity number	Sub number	Activity Name	Comparison	Excellent	Good	Fair	Poor	Very poor	N/A
1	1	Fold the laundry	Before	17	14	8	0	1	3
			After	27	10	3	0	0	3
	2	Hang clothes on a clothes hanger	Before	20	13	3	3	1	3
			After	28	8	4	0	0	3
	3	Hang washed laundry	Before	17	11	5	0	7	3
			After	24	11	4	1	0	3
	4	Sort the laundry to be washed	Before	15	7	8	3	7	3
			After	10	14	6	7	3	3
	5	Sew a button	Before	0	6	12	8	14	3
			After	31	6	1	0	0	5
	6	Clean classroom and desk	Before	24	12	3	0	0	4
			After	27	7	3	1	0	5
	7	Organise school locker and school bag	Before	23	10	4	2	0	4
			After	13	14	3	5	1	7
2	8	Button up a shirt	Before	27	7	3	2	1	3
			After	33	6	0	1	0	3
	9	Tie a shoelace	Before	25	8	3	4	0	3
			After	29	7	2	2	0	3
10	How to tie a necktie	Before	2	4	7	7	20	3	
		After	26	12	2	0	0	3	
3,4	11	Separate waste	Before	8	9	11	5	3	7
			After	10	14	8	3	1	7
	12	Make an organic fertilizer from food waste	Before	7	4	7	5	13	7
			After	23	16	0	1	0	3
	13	Draw, paint and iron on t-shirts	Before	9	15	9	4	4	2
			After	30	10	2	0	0	1

5	14	Make a shopping list, allocate a budget and do shopping	Before	17	16	7	1	1	1
			After	24	11	5	1	1	1
	15	Prepare a healthy food	Before	16	10	10	3	3	1
			After	29	4	7	2	0	1
	16	Serve food	Before	16	12	10	1	3	1
			After	29	4	7	2	0	1
	17	Clear the table after the meal and wash the dishes	Before	13	13	11	3	2	1
			After	29	6	4	3	0	1

The activities were observed by the educator of entrepreneurship from the University to identify the connection with entrepreneurial mindsets. Table 3 is the assessment list to support the development and understanding of entrepreneurial competence in this context. The learning progress of each competence were observed in all Kateika activities which confirmed the validity of the existing framework and provided an example in the real-life practice setting. For instance, the competence 3.4 Working with others is one of the areas enhanced throughout all activities under the framework of Erasmus+ which is in line with the SDG 17 Partnership for the goal.

Table 4: EntreComp conceptual model adapted by authors for assessment

Areas	Competences	Actions	Related Kateika activity (Table 3)
1. Ideas and opportunities	1.1 Spotting opportunities	Identify opportunities for creating value	All
	1.2 Creativity	Develop creative and purposeful ideas	All
	1.3. Vision	Imagine the future and develop a vision to turn ideas into action	All
	1.4 Valuing ideas	In social, cultural and economic terms	All
	1.5 Ethical and sustainable thinking	Assess the consequences and impact of ideas, opportunities and actions	All
2. Resources	2.1 Self-awareness and self-efficacy	Believe in yourself and keep developing	All
	2.2 Motivation and perseverance	Stay focused and don't give up	All
	2.3 Mobilizing resources	Gather and manage the resources you need	14
	2.4 Financial and economic literacy	Develop financial and economic know how	14
	2.5. Mobilizing others	Inspire, enthuse and get others on board	All
3. Into action	3.1 Taking the initiative	Go for it	All
	3.2 Planning and management	Prioritize, organize and follow-up	All

	3.3 Coping with uncertainty, ambiguity and risk	Make decisions dealing with uncertainty, ambiguity and risk	All
	3.4 Working with others	Collaborate and Network	All
	3.5. Learning through experience	Learn by doing	All

Discussion and Conclusion

Implementation of Kateika Project created the entrepreneurial culture in schools, and it is one of the good examples of entrepreneurial initiatives, with diverse collaboration between different actors (schools, University, LTD Company and NGO) from Europe and beyond. This project was not only successful among the project team but also created the entrepreneurial culture and encouraged all actors to act towards a resilient future in schools and beyond.

The conducted research (phase 1) provided the insights of the potential to further integrate digital and green competences, as well as to point out opportunities to promote diversity and inclusion. The activities have also promoted green practices and environmental awareness, both within the scope of the activities (e.g. recycling waste and composting organic waste) and in how they were implemented (e.g. going to the shop by foot instead of taking transportations). The digital skills development through the activities could be further enhanced, as only two activities could integrate digital tools in the delivery.

Our experience learning and implementing Kateika has been extremely positive and the students enjoyed the activities, as well as the international aspect of this Erasmus+ project. We encountered small challenges in the implementation of the activities, mainly due to the logistics of the Kateika sessions and the national regulations (e.g. in Italy it is not possible to involve students in cooking due to safety reasons). However, by adapting the Kateika activities while staying close to the philosophy of this concept, we managed to deliver innovative actions within the schools that have helped the students develop key skills for life. This study could be useful for practitioners, researchers in the field of entrepreneurial competences in similar context and as it provides a guide for future research directions based on the project result.

Acknowledgements

We would like to acknowledge the commitment and work of all the teachers from Portugal, Türkiye, Italy and Japan who have delivered the Kateika project and have contributed to its success. Special thanks to Lisa Silva (Externo Paulo VI” school in Braga, Portugal), Şengül

Cay (Ondokuz Mayıs Foundation College” in Samsun, Türkiye), Francesca Gregoratti (Ai Campi Elisi” in Trieste, Italy) and Prof. Yasuko Kato (Hachinohe Gakuin Regional Collaboration Research Center in Hachinohe, Japan) for continued support and hardwork throughout the entire project.

References

- Anerua, F. A., & Obiazi, A. E. (2009). Entrepreneurship education in home economics: problems and prospects. *Journal of Qualitative Education*, 7, 1-7.
- Annan-Diab, F., & Molinari, C. (2017). Interdisciplinarity: Practical approach to advancing education for sustainability and for the Sustainable Development Goals. *The International Journal of Management Education*, 15(2), 73-83.
- Bacigalupo, M., Kampylis, P., Punie, Y., & Van den Brande, G. (2016). *EntreComp: The entrepreneurship competence framework*. Luxembourg: Publication Office of the European Union, 10, 593884.
- English, L. M., & Carlsen, A. (2019). Lifelong learning and the Sustainable Development Goals (SDGs): Probing the implications and the effects. *Int Rev Educ* 65, 205–211. <https://doi.org/10.1007/s11159-019-09773-6>
- Kawamorita, H., Yazici E, & Kizilkaya R., (2020). INTERNATIONALISATION OF HIGHER EDUCATION: EXPERIENCE FROM ONDOKUZ MAYIS UNIVERSITY, FACULTY OF AGRICULTURE. *Research, Results Scientific Journal*, 460-469.
- Kawamorita, H., (2023). COVID-19 AND HIGHER EDUCATION INSTITUTIONS IN SUSTAINABLE RESILIENT RECOVERY: A CASE OF HACHINOHE GAKUIN UNIVERSITY, JAPAN. *Digital Resilience and Sustainable Entrepreneurship in the Time of Covid*, 53.
- Kawamorita, H., Salamzadeh, A., Demiryurek, K., & Ghajarzadeh, M. (2020). Entrepreneurial universities in times of crisis: Case of COVID-19 pandemic. *Journal of Entrepreneurship, Business and Economics*, 8(1), 77-88.
- Mawson, S., Casulli, L., & Simmons, E. L. (2023). A Competence Development Approach for Entrepreneurial Mindset in Entrepreneurship Education. *Entrepreneurship Education and Pedagogy*, 6(3), 481-501. <https://doi.org/10.1177/25151274221143146>

- McGrath, R. G., & MacMillan, I. C. (2000). *The entrepreneurial mindset: Strategies for continuously creating opportunity in an age of uncertainty* (Vol. 284). Harvard Business Press.
- Ministry of Education, Culture, Sports, Science and Technology (MEXT) (2008) ‘Course of Study: Home economics in primary school’. Online. www.mext.go.jp/component/english/_icsFiles/afieldfile/2011/03/17/1303755_009.pdf (accessed 12 October 2023).
- Mitchelmore, S., & Rowley, J. (2010). Entrepreneurial competencies: a literature review and development agenda. *International journal of entrepreneurial Behavior & Research*, 16(2), 92-111.
- National Council for Curriculum and Assessment. (2018). *Education for Sustainable Development: A Study of Opportunities and Linkages in the Primary and Post-Primary Curriculum*. Dublin: Online. https://ncca.ie/media/1505/well-being_and_post-primaryschooling_a_review_of_the_literature_rr_6.pdf (accessed 12 October 2023).
- Nogueiro, T., Saraiva, M., Jorge, F., & Chaleta, E. (2022). The Erasmus+ Programme and Sustainable Development Goals—Contribution of mobility actions in higher education. *Sustainability*, 14(3), 1628.
- Patzelt, H., & Shepherd, D. A. (2011). Recognizing Opportunities for Sustainable Development. *Entrepreneurship Theory and Practice*, 35(4), 631-652. <https://doi.org/10.1111/j.1540-6520.2010.00386.x>
- Pendergast, D. (2017). *SDGs and Home Economics: Global Priorities, Local Solutions*. In 1st International Conference on Social, Applied Science and Technology in Home Economics (ICONHOMECES 2017) (pp. 233-239). Atlantis Press.
- Ratinho, T., Amezcua, A., Honig, B., & Zeng, Z. (2020). Supporting entrepreneurs: A systematic review of literature and an agenda for research. *Technological Forecasting and Social Change*, 154, 119956.
- Rațiu A, Maniu I, Pop E-L. (2023). *EntreComp Framework: A Bibliometric Review and Research Trends*. *Sustainability*.; 15(2):1285. <https://doi.org/10.3390/su15021285>
- Schwartz, M. (2006), “For whom do we write the curriculum?”, *Journal of Curriculum Studies*, Vol. 38 No. 4, pp. 449-57.

- Seikkula-Leino J, Salomaa M, Jónsdóttir SR, McCallum E, & Israel H. (2021). EU Policies Driving Entrepreneurial Competences—Reflections from the Case of EntreComp. *Sustainability*. 13(15):8178. <https://doi.org/10.3390/su13158178>
- Shulman, L.S. & Shulman, J.H. (2004). “How and what teachers learn: a shifting perspective”, *Journal of Curriculum Studies*, Vol. 36 No. 2, pp. 257-71.
- Tajpour M, Kawamorita H, & Demiryurek K., (2020). Towards the third generation of universities with an entrepreneurial approach. *International Journal of Technoentrepreneurship (IJTE)*, Vol. 4, No. 2.
- Takeshita, H., & Suzuki, A., (2022). The Development of a Conceptual Understanding of a Sustainable Society in Home Economics Education. 広島大学大学院人間社会科学研究科紀要「教育学研究」第3号 pp.139–146
- Venâncio, A., & Pinto, I. (2020). Type of entrepreneurial activity and sustainable development goals. *Sustainability*, 12(22), 9368.
- Volles, N. (2016). Lifelong learning in the EU: changing conceptualisations, actors, and policies. *Studies in higher education*, 41(2), 343-363.
- Weitz, N., Carlsen, H., Bennich, T., Nilsson, M., & Persson, Å. (2023). Returning to core principles to advance the 2030 Agenda. *Nature Sustainability*, 6(10), 1145-1148.
- Westbury, I., Hansen, S.-E., Kansanen, P. & Bjoörkvist, O. (2005). “Teacher education for research-based practice in expanded roles: Finland’s experience”, *Scandinavian Journal of Educational Research*, Vol. 49 No. 5, pp. 475-85.