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Entrepreneurial motivation of culinary students through implementation of online heutagogy project-based learning for productive courses

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ABSTRACT

The objectives of this study are to 1) implement online heutagogy Project Based Learning (PjBL) syntax in business-based practice courses, and 2) determine students' entrepreneurial motivation in implementing online heutagogy PJbL in business-based practice courses. This quantitative descriptive research analysed the actual condition of heutagogy PjBL implementation and collected online data from an entrepreneurial motivation questionnaire. The Culinary Technology Education Study Program students who participated in business-based practical/productive learning served as the research subjects. The data were descriptive quantitative with categories established in the form of a Likert scale following the regulations. The results show that: 1) the implementation of online heutagogy PjBL followed the six steps of PjBL syntax, namely identifying problems or projects, designing project plans, preparing project schedules, project implementation, and monitoring, testing results, evaluating and reflecting 2) entrepreneurial motivation of culinary students through the implementation of online heutagogy PJbL in business-based practice courses obtained excellent categories on the sub-indicators of need for achievement with a percentage of 94.3%, locus of control with a percentage of 89.5%, vision, desire for independence with a percentage of 93.5%, passion with a percentage of 92.8%, drive with a percentage of 86.8%, goal setting with a percentage of 89.1%, self-efficacy with a percentage of 89.3 and sub-indicator of risk-taking with a percentage of 82.1% in the good category.

Keywords: Online Heutagogy Project Based Learning, Entrepreneurial Motivation

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INTRODUCTION

The Covid-19 pandemic has caused reforms in Indonesian education systems, including the learning system in higher education institutions. The educational institution started exploring for new alternatives to teach and learn. Furthermore, the Minister of Education and Culture's Circular Letter No. 4 of 2020 proposes that all activities in educational institutions should be carried out under the principle of social distancing, and material delivery is carried out from the students' respective homes. Each institution must also provide updates and innovations in the

learning process. Innovation is closely related to an 'invention' such as an idea, technology, or technique into a successful product, process, or service that meets the students' needs. Innovation in vocational teaching practices is critical in response to learner-centred learning in national training systems. Teachers need to build practical skills, increase knowledge and skills, and adapt vocational pedagogy to realise and maintain the critical role of teachers and coaches in students' aspirations and learning achievement (Figgis, 2009)

Although all learning activities are conducted online, the Culinary Technology Education Study Program manages to carry out productive courses oriented at the mastery of competencies according to the defined program output. It is challenging to achieve the expected students' competencies in this situation. One of the strategies implemented is practical learning with independent projects through online-based learning. The implementation of this online heutagogy Project Based Learning (PjBL) was observed in the Culinary Technology Education Study Program, especially in business-based courses. It includes courses in catering business management, thematic catering services, Indonesian Patisserie Business Management, franchising, and catering management). Following the implementation of online learning, the heutagogy learning approach reemerges. Heutagogy is learning determined independently by the students, which offers complete freedom to the students to assess learning patterns, while teachers, lecturers, or other educators only function as facilitators. This concept provides certain practices as a response to the development of higher education. The learning environment facilitates the development of students' skills, competencies, and learning capacities (Ashton & Newman, 2006) (Hase & Kenyon, 2007) (Hase Stewart Hase, 2016).

The current implementation of PjBL Heutagogy online is very effective in learning because of the epidemic, and then all teaching is carried out online. In the implementation process, the urgency of implementing heutagogy learning has a broad agreement with the lecture participants to be able to agree between students and lecturers, especially in project implementation for courses in culinary business practices, thematic catering services, and franchising. The main difference with the implementation of face-to-face lectures is in the performance of tutoring for the guided PjBl huetagogy approach, which is carried out online. Project determination is determined by student agreement, during the process, lecturers carry out mentoring as facilitators during project operations) can develop students' entrepreneurial motivation and mastery of entrepreneurial skills. The ability to design and market a product and execute independent or guided projects will grow due to using the heutagogy approach or online independent PJbL. In business-based practice courses, students in online heutagogy PJbL gain and expand their talents by mastering entrepreneurial skills.

Heutagogy is one of the most acceptable forms of education in the current period. Heutagogy is the study of self-directed learning; it may be considered a natural development of

previous educational methodologies, particularly from the development of abilities. It offers a 21st-century learning strategy (Hase Stewart Hase & Kenyon, 2001) that proposes a set of principles and practices to respond to higher education's development. Heutagogy emphasises the development of learning competencies and the development of learning capacity abilities (Ashton & Newman, 2006).

Students benefit from heutagogy since it focuses them on their studies. It focuses on learning to learn rather than what is taught. This philosophy produces students' capability of surviving in the era of fast-changing economic and cultural aspects (Hase & Kenyon, 2013). Lecturers can prepare students to work in the industrial world and be entrepreneurs by implementing heutagogy. Students are engaged in the topics they study because they make their own choices, allowing them to explore and expand their interests. Online learning in Indonesia emphasises technology with the independent learning process through assigned tasks. Independent learning emphasises learning from various sources with minimal assistance from others. To get around the instability in the situation, the online method can be one of the strategies that are pretty effective in overcoming it. This unstable condition needs further clarification, meaning that learning with guided PjBl Huetagogy is part of online learning that provides solutions to bridge the difference in distance and place to conduct lectures. Thus, it is hoped that all limitations related to environmental conditions and regulations exist can reduce crowding activities due to the covid-19 pandemic can be overcome). According to the Ministry of Education and Culture, the online method could solve the challenges that arose during the pandemic. This strategy is reported to encourage students to use their home facilities maximally. Learning will be more effective if it refers to Project Based Learning (PjBL), in which each class is assigned a project related to the subject. This learning method involves one subject and can also relate to other subjects. By applying this method, the students collaborate in working on projects, and other lecturers are also allowed to form teams.

Students will face several challenges during the online learning process, which must be solved by themselves through self-regulation challenges, technological literacy, and competency (Rasheed et al., 2020). Students with high self-regulation can overcome their obstacles because their thoughts, feelings, and actions to achieve learning goals have been well-planned. Using technology is significant in achieving learning goals because tasks can be completed quickly and precisely. Project-Based Learning (PjBL) can be implemented when lecturers want to establish student-centred learning. PjBL provides more exciting learning experiences and also produces works based on problems that occur in everyday life, including in practicum courses in which the students create and market products to foster the students' entrepreneurial spirit. In addition, several courses in Culinary Technology Education are devoted explicitly to practising entrepreneurship, such as catering business management and patisserie business management.

This learning ran smoothly based on the results of the business-based practice courses from the previous semester. The students achieved the goals that had been previously set and decided. Based on previous achievements, the learning results were observed. This vocational learning innovation group was investigated through a Research Group regarding the students' entrepreneurial motivation and skills. This study explored Online heutagogy PjBL implementation improve culinary students' entrepreneurial motivation and entrepreneurial skills in productive courses.

Heutagogy is not a new concept in education. It has been around since the year 2000 as stated by Stewart Hase & Chris Kenyon "Heutagogy is the study of self-determined learning and applies a holistic approach to developing learner capabilities with the learner serving as the major agent in their learning, which occurs, as a result of personal experience." (Hase Stewart Hase, 2016). Heutagogy learning is an appropriate learning method in the current era. Heutagogy is the study of self-determined learning; it can be seen as a natural development of previous educational methodologies. It focuses on developing abilities and provides an optimal approach to learning in the 21st century (Hase Stewart Hase & Kenyon, 2001). The concept of heutagogy offers certain principles and practices that can be considered a response to higher education development. Heutagogy learning emphasises the development of learning competencies and learning capacity (Ashton & Newman, 2006).

Heutagogy learning benefits students by focusing on their studies. Instead of learning what is taught, the emphasis is on learning how to learn. It produces students who are competent and capable of surviving in today's world's rapidly changing economic and cultural environments(Hase & Kenyon, 2013) . By learning heutagogy, lecturers have the opportunity to prepare students to work in the industrial world or to become entrepreneurs. The students are fully involved in their study topics because they make their own choices. They can explore and deepen what material they want (Dawe et al., 2004). Heutagogy in vocational education, according to (Hase Stewart Hase & Kenyon, 2001), is not only teaching and learning but includes all aspects of the learning process. Its purpose is to enable students to remember how to learn and facilitate the development of abilities. Thus crucial stakeholders are involved in determining learning objectives and how these can be achieved. This experience is overlooked if formal learning is involved, emphasising the process rather than the result. Being owner-centred personally during learning is increased, and the likelihood that the learning will be meaningful.

In vocational education, such as the nursing profession, engineering, and professional education, it is explained that heutagogy can provide solutions to problems faced by students in the workplace and provide an overview of the work environment later (Hase & Kenyon, 2007). For example, research (Hase & Kenyon, 2007) states that heutagogy provides a learning framework that addresses the needs of nursing students who must learn in an ever-changing and

unpredictable environment. Learning with a heutagogy approach helps them become lifelong learners to understand the uncertainty in determining patient care.

The principles of heutagogy, according to Kenyon and (Hase & Kenyon, 2007), are: (1) approval, approval for heutagogy in the curriculum as an approach to learning, (2) Facilitators, facilitators, or lecturers ensure student readiness, (3) Choice, the lecturer gives students a choice according to their ability or time availability, (4) Review, lecturers provide feedback to students, (5) Assessment, an agreed assessment system before learning begins, (6) Feedback, lecturers provide informal discussions with students exchange ideas experiences that are useful for students.

The development of information technology in the industrial era of 4.0 has greatly influenced the teaching and learning process. Easier access to information improves the quality of education. Keengwe & Georgina, (2012) conduct a study that concluded that the development of information technology had changed the implementation of teaching and learning. The use of information technology allows students to learn anytime and anywhere, involves training, imparting knowledge, and motivating students to interact with each other and exchange and respect differences of opinion (Sofyana & Rozaq, 2019). Online learning provides quality learning even though it is in a network and is massive and open. Suggests that online learning is "instructional content or learning experiences delivered or enabled by electronic technology."

Research (Rusli et al., 2020) reported that more than 75% of students agree to use online learning with a heutagogy approach that can shape creativity, fun, motivating, and improve students' ability in the learning process. Research conducted by (Khusniyah & Hakim, 2019) shows the effectiveness of online-based learning in increasing the scores obtained by students, and the development of daily scores shows a significant increase. In the opinion of (Sun et al., 2008), online learning will encourage continuous discussion about the effectiveness of using information technology that can increase the success of universities and faculties in online teaching and improve the quality of higher education. According to, online learning in Indonesia started with individual learning through the assigned tasks. Independent learning emphasises learning through all sources that can be supported with minimal assistance from others. The development of online learning became apparent when there was distance learning. Through online learning, the government can address the issue of equal distribution of education for all individuals. Through distance learning, the learning process is combined with e-learning. Since then, online learning has continued to develop in Indonesia. Online learning in Indonesia is growing rapidly. At first, online learning was still combined with conventional learning to train students to be more independent. Practicing independent learning for students in Indonesia is not easy since the previous learning system (traditional pattern) assumed that educators were the

primary source of learning. After participants are independent, online learning can be carried out thoroughly.

However, the use of technology and media in education is not new. Technology is the equipment to support the learning/education process in education, such as computers, software, communication networks, and printed books (Dawe et al., 2004). While the media is a term that contains the meaning of 'deliver' and 'interpret .'So 'media' is a product that contains content (communication material) created by someone and understood by the person receiving the communication. In this case, text, graphics, audio, video, and computing can be categorised as media because they can be an introduction to meaningful 'ideas' and 'images'. Media, according to Bates, can also be seen in a broader sense, namely as a way of representing, organising, and communicating knowledge. However, the media are dependent on technology.

Practical online learning must be well-planned and designed. There are five learning frameworks: infrastructure, technical standards, institutional, pedagogic, and materials in digital/online form. Online learning infrastructure and technical standards require the teaching and learning process to use the internet network, structured institutions, and mature human resources. Project-based learning is a type of instruction that focuses on learning activities and real-world problems that students must solve in groups. Project-based learning is a learner-centered learning model and provides a meaningful learning experience. Learning experiences are built from the results of products created in the Project-Based Learning process.

Project-based learning is an example of active learning. Students are involved independently with the expectation that the learning will increase students' thinking power toward metacognition, such as critical thinking about projects that will be worked on through problems identified by students. Project-Based learning is authentic, so indirectly, this learning will involve students in constructive investigations. The objective is that students' accountability will improve due to autonomous learning. Students will develop more innovative ideas since their project work will be distinct from traditional projects or traditional learning, making the project a meaningful and challenging task. Project-Based learning aims to develop knowledge and skills in a structured investigation process. It can create products and is certainly different from teacher-centred learning. With Project-Based Learning, students gain knowledge and meaningful skills in the long term, which supports constructivist learning theory. Knowledge grows and develops through experience, simultaneously increasing knowledge in the academic, social and personal domains. Within Project-based learning, students will go through a long process of inquiry, responding to questions from complex problems, or challenges, and practising skills demanded in the 21st century.

The characteristics of Project-Based Learning, according to the Agency for Human Resources Development for Education and Culture and Education Quality Assurance, include

students decisions about frameworks or work steps, a posed problem, students' design of the processes to determine solutions to problems, students' collaboration to solve problems, continuous evaluation and assessment, students' regularly reflection on the process being carried out, product evaluation, and the learning which is tolerant of errors and changes. The steps of the Project-Based Learning model consist of (1) opening the lesson with a challenging question (start with the big question). Learning begins with a driving question that can assign students to carry out an activity. The topics taken should be under the realities of the natural world and begin with an in-depth investigation, (2) planning the project (design a plan for the project). Educators and students work together on the planning process. As a result, students will feel engaged in the project. Planning contains the rules of the game and the selection of activities that can support answering essential questions by integrating various supporting subjects and informing the tools and materials that can be used to complete the project, (3) developing a schedule of activities (create a schedule). Educators and students collaboratively arrange activity schedules for completing projects. The project completion time must be precise, and students are given directions to manage the available time. Let students try to explore something new, but educators must also keep reminding students if their activities deviate from the project objectives. Students carry out projects that take a long time to complete, so educators ask students to complete projects in groups outside of school hours.

When learning is done during school hours, students have to present the results of their projects in class, (4) supervising the project (monitor the students and the project's progress). Educators are responsible for monitoring the activities of students while completing the project. Monitoring is done by facilitating students in each process. In other words, educators act as mentors for student activities. Educators teach students how to work in a group. Students can choose their respective roles without putting aside the group's interests, (5) assessing the product (outcome). The assessment is carried out to assist educators in measuring the achievement of standards, play a role in evaluating each student's progress, provide feedback on the level of understanding that students have achieved, and assist educators in preparing the next learning strategy. Product assessment is carried out when each group presents their products in front of other groups in turn, (6) evaluation process (evaluate the experience) at the end of the learning process where educators and students reflect on the activities and project results. The reflection process is carried out individually or in groups. At this stage, students are asked to express their feelings and experiences while completing the project, (7) Project-based learning can be applied when lecturers want to condition student-centred learning. PjBL has a more exciting learning experience and produces works based on problems that occur in everyday life, including in practicum courses in which some products must be produced and marketed to foster the students' entrepreneurial spirit. In addition, several courses are devoted explicitly to practicing

entrepreneurship, such as catering business management, patisserie business management, and other subjects.

METHOD

This quantitative study described the learning qualifications of online self-guided projects held at the Culinary Technology Education Study Program at UNY. The research subjects were the Culinary Technology Education Study Program students who participated in business-based practical/productive learning. Data were collected through online questionnaires and documentation to reveal the students' entrepreneurial motivation for the Culinary Technology Education Study Program. The questionnaire has been tested for validity and reliability. The validity was assessed based on expert judgment, namely a research instrument seminar. The reliability was tested with instrument trials. Analysis of instrument trials used product moment. Data were analysed descriptively quantitatively with categories formulated as a Likert scale.

RESULTS AND DISCUSSION

In light of the current situation in which offline learning is not practicable, the teachers' primary duty is to create methods to ensure that practical and theoretical learning continues. With today's communication technology making it easy to access and exchange diverse information with students, online learning is one of the efforts that may be performed. Information technology (IT) presents an indirect new offer for the ease with which heutagogy learning can be implemented (self-determined learning).

Heutagogy Project Based Learning was a step taken to provide solutions to Culinary Technology Education students' business-based practical learning process. These courses included Thematic Catering Services and Practice of Catering Business Management. Heutagogy has been called a "net-centric" theory that leverages the core capabilities of the Internet; it is also a pedagogical approach that can be applied to new technologies in distance education, as well as serving as a framework for the digital era of teaching and learning (Hase & Kenyon, 2013).

The research procedure was as follows: The implementation of online pedagogy PJbl in business-based productive courses was self-guided project-based learning that reflected the concept of online pedagogy. The syntax applied in real terms included:

1. Giving projects or real questions,
2. Planning ideas for projects,
3. Schedule planning,
4. Project implementation and development,
5. monitoring development,
6. Performance appraisal or reporting of project results.

At each syntax stage, the entrepreneur stage was applied to the question-giving stage, the exploration stage for students looking for ideas. A business plan was applied at the idea planning stage, which was sparked from exploring ideas related to the business, plans, and schedules. Facilitation stages involved providing a project implementation schedule, implementation process, development, and monitoring. Project implementation actions, monitoring, and achievement assessment were part of the entrepreneurial stage. The outcomes of completed projects could be observed in the entrepreneurial results stage.

The Heutagogy Project Based Learning response was highly positive and demonstrated that the learning process could be carried out utilising heutagogy through project-based learning. This result was in line with various research findings that reported similar results.

In heutagogy, students must acquire competencies and abilities. Competence is a proven ability to acquire knowledge and skills. In contrast, the capability is characterised by the learner's belief in his competence and, as a result, the ability, as quoted from Gardner, to take appropriate and effective actions to formulate and solve problems in familiar and unfamiliar settings.

The results of the reflection also showed that students had superior and commendable competencies related to self-efficacy, communication and teamwork skills, creativity, adaptive and flexible approach and positive value. References support the acquisition of students' mastery of knowledge and skills in this study, stating that when students are competent, they demonstrate that knowledge and skill acquisition can be repeated, and knowledge can be regained. Ability is then an extension of one's competence, and without competence, there can be no ability. Students become more aware of their preferred learning style through multiple repetitions. They can quickly adapt new learning situations to their learning style, thus making them more capable learners. With a dual focus on competence and ability, heutagogy moves educators one step closer to better addressing the complex needs of adult learners and changing work environments. Regarding the results of reflection on the monitoring process, the role of the lecturer as a facilitator is strengthened by the results of the study, which states as follows: As in the andragogy approach, in the heutagogy, the lecturer in charge of the course also facilitates the learning process by providing guidance and resources, but completely relinquish ownership of the learning pathway and process to the learner or students, who negotiate to learn and determine what will be learned and how it will be learned.

The evaluation process is reinforced by references stating that assessments are flexible and negotiable. In heutagogy, students are involved in designing their assessments. Learner-determined and negotiated assessments have been shown to increase student motivation and engagement in the learning process andake students feel less threatened by the instructor's control over their learning process (Hase Stewart Hase, 2016). One way to incorporate negotiation into the assessment process is learning contracts (Hase Stewart Hase, 2009). The students are more

independent, creative, professional, responsible, productive, utilise free time, have more practice creating and managing actual and individual independent businesses, and learn to master many things. In addition, they are trained to learn that being an entrepreneur is not easy. They do not give up but are more enthusiastic about learning. It is challenging because all tasks must be completed independently, and there are many obstacles in terms of signals and necessities. The role of motivation in entrepreneurship might be compared to that of a gasoline engine. The entrepreneurial motivation that is adequate will drive dynamic behaviors in entrepreneurship, but the motivation that is too high may harm the business's effectiveness (Aidha, 2016).

Most people who succeed in this world have a strong motivation that encourages their actions. Motivation to develop new efforts is required by self-confidence in terms of its ability to succeed and by accessing information about entrepreneurial opportunities.(Olakitan, 2014) states that entrepreneurship motivation significantly had a positive effect on entrepreneurial intentions. The results of other studies (Kumalasari, 2013.) say that motivation has a positive and significant effect on entrepreneurial intentions.

Sub-variables Entrepreneur Motivation was divided into eight indicators: Needs for Achievement, Locus of Control, Risk Taking, Vision, Desire for Independence, Passion, Drive, Goal Setting, and Self-efficacy.

Table 1. Mean Value and Category of Entrepreneur Motivation Indicator

Scores	Mean	Percent
Need for achievement	3.88	94.3
Locus of control	3.58	89.5
Risk-taking	3.49	82.1
Vision, desire for independence	3.48	93.5
Passion	3.74	92.8
Drive	3.52	86.8
Goal setting	3.52	89.1
Self-efficacy	3.59	89.3

On the need for achievement (nAch) indicator, students' entrepreneurial motivation was in the "very good" category of 94.3% and 5.7% for the "good" category. Based on these findings, it was apparent that students' entrepreneurial motivation in need for achievement was very high. It demonstrated that when entrepreneurship-based learning courses were implemented, students were motivated to perform at their best to receive the highest suitable scores. On the other hand, students were also motivated to be successful in entrepreneurship, even though they were still in the beginner or learning stage. Need for achievement (nAch) had been recognised as a concept related or associated with entrepreneurs and their behavior, especially in studying their

entrepreneurial personality (Reimers-Hild et al., 2005). Thus, this finding was relevant because it was in line with (Justice Malebana, 2014) (Akhtar et al., 2020). Previous studies showed a strong correlation between nAch motivation and entrepreneurial behavior.

The same thing had been proven in research (Amin et al., 2018), revealing an upward positive linear relationship between achievement motivation and entrepreneurial persistence with a reasonably strong correlation. It was in line with (Barba-Sánchez & Atienza-Sahuquillo, 2018) considering nAch as a contributing factor to success and ascertaining the impact of motivation on entrepreneurial behaviour. It was concluded that nAch is one of the reasons influencing entrepreneurial behaviour. Similarly, Mulyono (2009) noted the role of nAch in fostering entrepreneurial behaviour and success. The findings suggested that nAch could be developed to lead to higher performance. On the locus of control indicator, student entrepreneurial motivation was very good (89.5%) and good (10.5%). It was evident that students have a high level of entrepreneurial motivation. It demonstrated that when entrepreneurship-based learning courses were implemented, students felt confident in their ability to run a business and make decisions. These results were consistent with research conducted (Fuzan et al., 2019), which showed a positive relationship between locus of control and achievement motivation in entrepreneurship. It was also in line with (Barba-Sánchez & Atienza-Sahuquillo, 2012), showing that internal locus of control positively affected entrepreneurial motivation for graduates of the Management Study Program of Unihaz Bengkulu. Internal locus of control contributed more significantly than entrepreneurial knowledge in fostering entrepreneurial motivation for graduates.

The risk-taking indicator rated student entrepreneurial motivation as very good (82.1%) and good (17.9%). Based on these findings, the students demonstrated a high entrepreneurial motivation to take risks. It indicated that students were capable of taking risks in the implementation of entrepreneurship-based learning courses. However, some students still felt unable to take the risk of their business failure. In the vision desire for independence indicators, students' entrepreneurial motivation was very good (93.5%) and good (6.5%). Evidently, students' entrepreneurial motivation and desire for independence were very high. It suggested that the students were capable of having the vision and desire to operate a business when entrepreneurship-based learning courses were implemented.

Entrepreneurial motivation among students was very good (92.8%) and good (7.2%) on the passion indicator. Based on these results, it was inevitable that students' entrepreneurial motivation in their passion for being entrepreneurs was very high. It proved that students could decide to be entrepreneurs or manage a business when entrepreneurship-based learning courses were implemented. In the drive indicator, the students' entrepreneurial motivation was categorised as very good with 86.8% and good with a percentage of 13.2%. Based on these results, it could

be seen that the entrepreneurial motivation of students in drive-in entrepreneurship was very high. It indicated that in implementing entrepreneurship-based learning courses, students could lead or control someone/employee in entrepreneurship or managing a business. They were supported with the opinion, which distinguished four aspects of drive: ambition, purpose, energy and stamina, and perseverance. Ambition affects how entrepreneurs seek to create something extraordinary, meaningful, and significant when they pursue opportunities. Entrepreneurial ambition may include making money or the desire to create something new, from conception to actuality.

Students' entrepreneurial motivation is very good with 89.1% and 10.9% in the goal-setting indicator. Based on these findings, it was noticeable that students' entrepreneurial motivation for setting entrepreneurship goals was exceptionally high. It means that students could set entrepreneurship or business management goals when entrepreneurship-based learning courses were implemented. It was consistent with Erickson (Barba-Sánchez & Atienza-Sahuquillo, 2012), who supported that goal setting was very important in growing entrepreneurial motivation among prospective entrepreneurs. Since goal setting was closely related to beliefs about personal abilities, business schooling that must develop the students' self-confidence.

Student entrepreneurial motivation was rated very good (89.3%) and good (10.7%) on the self-efficacy indicator. Based on these findings, students' entrepreneurial motivation and self-efficacy in entrepreneurship were influential. It showed that the students could demonstrate self-efficacy in entrepreneurship or business management by implementing entrepreneurship-based learning courses. One study directly assessed the effect of self-efficacy on several dimensions of the entrepreneurial process. Rated company founders in the architectural carpentry industry on several variables include general traits and motives (e.g., tenacity and positive effectiveness), specific skills and competencies (e.g., industry experience and technical skills), situation-specific motivations (e.g., goal setting and self-efficacy), vision, and strategic action (e.g., service quality and emphasis). Baum found that self-efficacy has a strong positive relationship with realised growth. It is the single best predictor in the entire variable array.

CONCLUSION

Online heutagogy learning is performed with six steps of project-based learning syntax: identifying problems or projects, designing project plans, preparing project schedules, implementing and monitoring, testing results, evaluating, and reflecting. The students' entrepreneurial motivation in the Culinary Technology Education Study Program through the implementation of online heutagogy PJbL in business-based practice courses obtains very high scores on the sub-indicators of need for achievement (94.3%), locus of control (89.5%), vision

and desire for independence (93.5%), passion (92.8%), drive (86.8%), goal setting (89.1%), self-efficacy (89.3%) and sub-indicator of risk-taking (82.1%), respectively.

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