

“Learning Nomad” in Higher Education: Students’ Learning Patterns from Three Self-Designed Major Programs in Taiwan

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Abstract

As higher education struggles to catch up with the constantly shifting social climate, many modern students are being left overwhelmed by the sheer volume of choices they are being offered in a phenomenon known as the “tyranny of freedom”. This issue is exacerbated when they do not have the appropriate guidance from either their parents or universities to build their own identity and find a suitable position in a functional society. Following the innovative education trend, a few top-ranking universities have started self-designed major programs, making themselves pioneers of experimental education in the traditional university system. The purpose of this study aims at discovering how Taiwanese self-designed major students organize their study maps from human and identity capital perspectives.

Fifteen research participants were recruited from the three universities providing self-designed major bachelor programs and asked to participate in a semi-structured interview. The content analysis result outlines those students as “learning nomads” who break department or field boundaries to do interdisciplinary learning with clear goals by tracing their learning resources across borders. Three crucial outcomes have been found: first, identity capital mainly influences college entrance channel choices in regards to motivation and has a minor influence on how self-designed major students arrange their learning maps. Second, in regards to human capital, modularized and self-directed learning and the arrangement of theoretical and experiential knowledge do not work alone but together. Finally, learning guidance was found to be essential under the stress of tyranny of freedom.

Keywords: self-designed major, higher education, learning pattern, learning nomad

1. Introduction

The function of higher education has come into doubt recently as the old system was established over 100 years ago. Within these ten years, not only technology such as the popularity of the internet but also the COVID-19 pandemic have dramatically changed people’s lifestyles. Understanding and handling learners’ characteristics and learning map is an urgent issue for higher education. In Taiwan, the college entrance channel has been renovated from taking one standard college entrance exam in 1960 to now focusing on diversity (Luoh, 2018). To respond to the needs of Generation Z (those born around late 1990 to 2010), whose learning patterns are deeply influenced by the internet, the Taiwan Ministry of Education (MOE) launched an innovative college entrance channel named the Early Admission Program without General Scholastic Ability Test (GSAT) in 2018 to expand the level of student diversity and learning autonomy (MOE, 2017). Following this innovative education trend, a few top-ranking universities began self-designed major programs, becoming pioneers of experimental education within the traditional university systems. The purpose of this study aims at discovering how Taiwanese students majoring in self-designed major programs organize their study maps through interview content analysis from human and identity capital perspectives.

2. Literature Review

2.1 Learning Nomad Within the Higher Education System

Comparing farmers settling down at a place with plenty of resources, nomads move around to find the place that is most fruitful for them. If the metaphor of farmer and nomad could be applied to learners, a university with a

good knowledge providing system is like a fertile field that attracts all kinds of learners. For over one hundred years, learners have been nurtured as farmers staying on campus to gain knowledge growing from departments or colleges. However, as time changes, some learners have noticed that the knowledge provided by departments is not enough to satisfy their needs. Therefore, learning nomads show up. This new type of learner hunts learning resources across departments or even campus boundaries. According to their different learning goals, they gather knowledge from different places.

Sustainable Development Goal (SDG) raised by United Nations in 2015, especially SDG 4 Quality Education, attracts attention from higher education (Heleta & Bagus, 2021). A higher education institution is a base to provide graduate employability (Tomlinson, 2017) and improve the global economy (Schofer, Ramirez, & Meyer, 2021). Colleges integrate academic knowledge such as curricula and workplace skills to increase students' ability to match with their future work (Riu, Casabayo, Sayeras, Rovira, & Agell, 2022). As the higher education system has begun to falter and the social climate changes, modern students are facing too many choices with what is known as the 'tyranny of freedom' (Schwartz, 2004), especially when they do not have appropriate guidance from either their parents or universities to build their own identity and find a suitable position within society. Many signs have pointed out that the higher education system has become out of touch with 21st society in regards to cultivating and utilizing the talents of students.

2.2 Identity Capital

College transition is important to high school graduates (Bozzato & Longobardi, 2021). Côté (2016) proposed that identity capital relating to people's mental health, resilience, and coping strategies could be a solution to cope with adult transition difficulties. Two identity capital resources have been identified (Côté, 2016): Tangible and intangible. Tangible resources are more sociological, such as social class, gender, or important memberships. Intangible resources, which can be defined as psychological strength, include personality, characteristics, and agentic capacities, such as meaning or purpose of life.

Beyond resources, motivation is another factor of identity capital. Students treated as customers in colleges are cultivated as "farmer-learners" with lower learning motivation and waiting for being fed knowledge; therefore, evoking students' learning motivation is important. There are five motivations Côté and Levine have identified (2000): default, expectation-driven, careerist-materialist, personal-intellectual development, and humanitarian. Default motivation indicates students whose choices are very limited so that they can only follow set paths; expectation-driven motivation involves parents' expectations making their children choose what will please their families rather than themselves. Those two are passive approaches measured by skills acquired and grades attained. Careerist-materialist involves students seeing universities as means of finding an interesting and satisfying career in order to achieve a finer life or personal success; personal-intellectual development describes students pursuing personal growth by studying and learning without specific materialist-goals; humanitarian assumes students are willing to contribute to the world, improving the human condition by learning.

Adult transition difficulty and commercialized higher education make students lose the motivation to be actively engaged in the educational environment (Côté & Allahar, 2011). Identity capital could be a good angle for understanding how people with different levels of enthusiasm fit in a learning environment, workplace, or adult community (Butterbaugh, Ross, & Campbell, 2020).

2.3 Human Capital

Human capital includes knowledge, skill, competency, and the abilities that people gain from learning or training (Schultz, 1961; Becker, 1964) that occurs in education institutes. Through this process, people can become more productive in the labor market (Marginson, 2019) and raise the value of their employability by enhancing skills such as problem solving (Rahimi, Pourzakeri, Rostami, & Shad, 2019).

Learning knowledge at school is a human capital investment. Learning can be split into two categories: modularized learning and self-directed learning. Modularization in learning means the curriculum can be divided into many smaller units which are independent and non-sequential (Dejene, 2019). This approach, which is teacher-centered (Dejene, 2019), helps educators to deliver skills and knowledge efficiently (Malik, 2012) due to its characteristics of clear goal setting, easy understanding, and organized structure (Wang & Lee, 2005). Compared to modularized learning, self-directed learning is learner-centered, which means that students have the responsibility to manage their learning objectives and progress. It is not only an individual and customized experience (Morris, 2019) but also empowers learners to adapt to ever-changing social contexts (Kranzow & Hyland, 2016).

According to Huang (2013), knowledge resources can be divided into two types: theoretical knowledge and

experiential knowledge. Experiential knowledge is learner-oriented, meaning it keeps being changed and influenced by interactions between the learner and environment. Learners' goals guide their actions to interact with the environment and create new experiences, becoming knowledge. Theoretical knowledge is the essence extracted from the stored experiential knowledge of many people gathered over a period of time. Compared to experiential knowledge, theoretical knowledge is teacher-oriented and helps learners to gain senses and skills more effectively. However, if learners only utilize theoretical knowledge, it easily becomes a tool, containing skills distinguished from the environment (Huang, 2013). Theoretical knowledge helps people learn faster, but experiential knowledge helps people learn through answering questions they want to know. Therefore, a good learning method is to balance and combine theoretical and experiential knowledge.

3. Methodology

To understand how self-designed major students facilitate identity and human capital, a semi-structured interview providing more space for researchers and research participants to exchange their thoughts (Alshenqeeti, 2014) has been applied. The interview is a tool to explore new topics by understanding and finding information from key people (Qu & Dumay, 2011). As Kvale (1996) states, the interview is a way to get research participants' viewpoints through dialogue and self-awareness. By analyzing interview content, researchers are able to sketch a picture of research topics.

3.1 Research Context

Universities in Taiwan have noted that the education system, in regards to aspects such as learning design, has to be changed to match future talent cultivation. From 2015, three universities named School A, B, and C started self-designed major programs (Table 1).

Table 1. Overview of sample programs

	School A	School B	School C
Launch Year	2018	2018	2016
Recruitment	Open to all school students to apply, but limited only 1 % of each college. No limitation to students enrolled in a special program.	Only accepts students enrolled in a special program.	Students enrolled in a special program and open to all school students to transfer in.
Curriculum	Three main sections: Compulsory for 28 credits, core course, and up to 33 credits in a self-developed independent project.	Three main sections: Compulsory for 26 credits, core course for 46-84 credits, and a selective course for 18-56 credits.	Must fulfill at least one minor's requirement.
Guiding System	Maximum of 5 learning committee members including 1 main advisor.	Assigns mentors to students according to their core course choice.	Assigns mentors to students according to their minor choice.
Degree	Dependent on student's learning tendency to issue a professional college-based Bachelor's degree.	Depends on student's Core course choice to issue a bachelors' degree.	Depends on student's minor choice to issue bachelors' degree.

3.2 Participant

Fifteen research participants were recruited from the three universities (two from northern and one from southern Taiwan) (Table 2), providing self-designed major bachelor programs. Those participants have joined self-designed major programs lasting from one to three years. One research participant has a self-study background, two were in experimental high schools, one was in an international school, and the rest of the participants studied in normal high schools.

Table 2. Overview of research participants

School A			School B			School C		
Code	Length	Channel to enter colleges	Code	Length	Channel to enter colleges	Code	Length	Channel to enter colleges
A1	2 years	Interview	B1	2 years	Interview	C1	3 years	Exam
A2	2 years	Interview	B2	2 years	Interview	C2	2 years	Exam
A3	2 years	Interview	B3	2 years	Interview	C3	2 years	Exam
A4	2 years	Interview	B4	2 years	Interview	C4	2 years	Exam
A5	1 years	Interview	B5	2 years	Interview	C5	3 years	Exam

3.3 Data Collection and Selection

Since self-designed major programs are new, the total number of students is around 190. To collect more stable information, students staying in the self-designed major program for more than one year are required. Since qualified participants are in different schools, convenient and snowball sampling was applied.

Fourteen questions were aimed to disclose self-designed major students' identities (5 questions) and human (9 questions) capital formation. Face-to-Face and one-by-one interviews were conducted. Each of those 15 research participants has been interviewed by three trained and qualified interviewers, and the average length of interview time is 70 minutes. All research participants are aware of their rights and agreed to be recorded.

3.4 Data Coding and Analysis

Interview content was analyzed from a ground theory (Glaser & Strauss, 1967) perspective, which helps researchers to examine phenomenon by providing explanations through systematic content analysis, such as coding and induction (Hsu, 1997).

The first step is to re-organize interview contents into questions of identity and human capital. Overall, resources relating to students' backgrounds, like high school learning experiences and college entrance motivation, have been found and explain identity capital formation. For human capital, students' attitudes toward learning patterns (modularized learning and self-directed learning) and the concept of knowledge (theoretical knowledge and experiential knowledge) were found.

Second, interview content categorizing in terms of two capitals has been summarized through 2-3 keywords. After analyzing all contents, consisting of the usage of keywords by arranging and integrating them. Therefore, similar concepts analyzed from interview content utilized the same keywords for descriptions. After that, another researcher with a professional qualitative method background did all the analysis procedures again. Comparing two researchers' analyses, the similarity reached 0.85 and the confidentiality has been calculated as 0.92.

4. Results

4.1 Identity Capital

Identity capital could be seen as a direction guiding students' self-image and actions (Lewis, 2016). Students build their identity through motivations, including expectation, default, careerist-materialist, personal-intellectual development, and humanitarian, through tangible and intangible resources (Côté, 2002; 2016). The result has shown that all participants had tangible resources from their high schools, such as flexible learning environments or solid knowledge.

High school aims at assisting students to enter colleges by getting higher grades. Although students must follow fixed courses, some teachers creatively let their students do projects or experiments. Therefore, I had a chance to do my own special projects. (A2)

I focused on what I was interested in instead of schoolwork when I was in (Waldorf) high school. My parents supported me to develop my interests, and one of them is a teacher from the Waldorf education system. (B4)

My high school teachers were pretty young. They liked to do some creative teaching or classroom-flips, which allowed us to not be pressed by exams. Instead, we had many chances to do projects or research. I was inspired by them so much. (C2)

Moreover, research participants shared their default motivations for college applications. However, beyond this default motivation, participants from School A and B had personal-intellectual development motivation, while School C participants had expectation motivation.

I didn't have a choice if I didn't choose to come here (School A). Although my college entrance exam grade was high, I rather choose a pre-major department comparing to enroll in a specific department. Moreover, School A is one of the top universities in Taiwan. (A1)

I studied in a Waldorf system high school and had a gap year before graduation. My focus is architecture and I was planning on studying abroad. However, School B is a pretty ideal choice. The main problem is they only offer architecture in graduate school, but if I can enroll in School B through that newly launched program, which breaks the rigid limitation of course selection, that would be what I want. Therefore, I applied. (B5)

I was majoring in Business Management when I enrolled in the college. However, I actually would like to study Film, which displeases my parents. I usually have different opinions from my parents' and we spend

a lot of time communicating. Finally, I was tired and agreed to try Business Management. (C3)

4.2 Human Capital

Human capital is how people invest in knowledge and skills for their future (Schultz, 1961; Becker, 1964). Research participants' learning map about the role of modularized, self-directed learning, theoretical and experiential knowledge was investigated. The result showed that they all agreed modularized learning is more teacher-oriented and self-directed learning is more learner-oriented. Modularized learning is a good reference or starting point when exploring a new field. After getting the basic sense of the new field, they tend to break modules and build a new curriculum focusing on and fitting their own learning needs. Therefore, modularized learning could be a starting point for learners who are not familiar with certain topics. After that, self-directed learning provides flexibility to focus on what learners are interested in.

Many engineering courses are modularized. My self-designed curriculum focuses on my own interest and re-organizes/mixes those modules across departments. Although those modules are not exactly the same as those set by the departments that set them, I think it is still modularized learning. (A2)

Seeking flexible space from modularized courses is how I started to design my own curriculum, but I now can ignore those modules and fully focus on what I want to learn myself. I do not mind whether I can graduate or not, but I do mind if I cannot learn what I want to learn. (B5)

My self-designed curriculum is similar to the one that Electrical Engineering Department students have. However, the difference is I can choose those courses fitting my needs instead of taking all the courses the department requires. This is the flexibility that a self-designed major program provides to us. (C4)

Beyond modularized and self-directed learning, how students use theoretical and experiential knowledge in their study map is another point of human capital analysis. All participants agreed that both theoretical and experiential knowledge are equally important. Although experiential knowledge happens first, theoretical knowledge helps learners to learn faster. Two kinds of knowledge should work together to solve real problems.

Essentially, theoretical knowledge is accumulated from experiential knowledge. Although experiential knowledge triggers me to do actions, theoretical knowledge is the reference I rely on. I mix theoretical and experiential knowledge through symbiosis. I can't just be forced to take theoretical knowledge without experiential knowledge. (A4)

For me, experiential knowledge triggers learning motivations. Taking my internship for example, I worked in a TV station before I enrolled in college. That involved good experiential knowledge learning. Although I am not a nerd, I find textbooks sometimes are good resources of fundamental knowledge, building from experiential knowledge for generations. Theoretical knowledge is boring but necessary. (B4)

Theoretical knowledge is what we systematically learn in class. Theoretical knowledge providing a fundamental base is unavoidable, especially when I want to learn new things. However, theoretical knowledge is much more than experiential knowledge in college. Moreover, it doesn't provide a mechanism to assist learners in learning. Instead, it just pushes learners to learn the knowledge they offer. In my opinion, maybe we should have less theoretical but more experiential knowledge learning opportunities, such as projects. When learners find they have a lack of knowledge while doing projects, they can still make it up by themselves. (C3)

According to the interview content, research participants' conception of theoretical and experiential knowledge is organized in Table 3 below.

Table 3 Research participants' conception of theoretical and experiential knowledge

Type	Explanation	Participants
Type V	 <ul style="list-style-type: none"> ● Put more emphasis on TK for 4 years ● No relationship between TK and EK 	—
Type W	 <ul style="list-style-type: none"> ● Put more emphasis on TK at the beginning ● TK as a core influences EK ● As time goes by, TK has less emphasis and EK receives more 	—
Type X	 <ul style="list-style-type: none"> ● Put more emphasis on TK at the beginning ● TK and EK intertwine with each other ● As time goes by, TK has less emphasis and EK receives more 	A2, C4, C5
Type Y	 <ul style="list-style-type: none"> ● Put more emphasis on TK at the beginning ● No relationship between TK and EK at the beginning but intertwine with each other latter ● As time goes by, TK has less emphasis and EK receives 	A5, B1, B2, B3, B4, B5, C1, C2
Type Z	 <ul style="list-style-type: none"> ● TK and EK are equally important ● TK and EK intertwine with each other ● TK and EK gradually receive more emphasis 	A1, A3, A4, C3

Note. Illustrator: White color=Theoretical knowledge (TK); Black color=Experiential knowledge (EK); Thick line=More emphasis; Thin line=Less emphasis; Bottom to top=The first year to the fourth year in college; Straight line=Fixed; Curvy line=Intertwined.

According to Table 3, it is clear that participants' patterns concentrate on Type X, Y, and Z. Theoretical knowledge is intertwining with experiential knowledge for self-designed major students.

Taking my electrical control projects, for a Type X example, seeking online information was the way I learned at the beginning. It is very experiential. Although I have done this project for years, I still need to rely on theoretical knowledge when our team encounters a flow valve problem. I finally found a creative way to solve that problem by searching for useful theoretical knowledge based on experiential knowledge. (A2)

The way I learn is more like Type Y. I am sure experiences from other people and gaining experiences by ourselves are equally important. However, experience from other people is especially effective and essential when you start a new field. (B5)

Type Z fits my learning habit. When I learn, I tend to think about how to apply knowledge to my daily life and make it connect to reality. If I cannot find a way to apply the knowledge I'm gaining, I lose my appetite for learning it. (C3)

The result proves that self-designed major students are not satisfied with learning theoretical knowledge which is not related to experiential knowledge or making theoretical knowledge as an unchangeable core. Those students focusing on real problems tend to mix experiential knowledge with theoretical knowledge and apply theoretical knowledge to real problems to enhance their experiential knowledge.

4.3 Reflection

Overall, the last interview question was asking participants to review the learning structure that their schools provide, and flexibility is an advantage they all agreed upon. However, supporting resource shortages such as guiding, including student-teacher relationships and unstable learning structures, are two main factors that need to be noticed.

The advantage is having learning flexibility, and the disadvantage is not having enough resources or support. Although some students criticize the limited flexibility, it actually is already much more flexible

than what non-self-designed major students have. However, flexibility is the only thing this program provides. (A1)

The mentor system is really helpful. Maybe because my goal is relatively clear and my field is familiar to my professor's. (A2)

A self-designed major program provides us with learning flexibility. We aren't forced to choose one specific department; we can choose and arrange our courses without many limitations like other students do. (B3)

I now am left in wonder as to why some students have learning mentors and others have life mentors. Not only is it not clear how the department arranges students and their mentors, but the mentor system's purpose is also unclear to me. (B5)

The best thing is course selection freedom. I can select courses I like and avoid those I dislike. Although it may also provide chances for students to avoid difficult but necessary courses, students should take the responsibility for themselves. (C4)

My mentor experience varies each year. For example, one mentor provided assistance and guidance when a student's progress was delayed. The other mentor is more goal-oriented, so students that were falling behind were given up on. (C5)

5. Discussion

This study aimed at outlining self-designed major students' learning maps from perspectives of identity and human capitals, and three crucial outcomes were found. First, identity capital mainly influences college entrance channel choices through motivations, and it has a minor influence on how self-designed major students arrange their learning maps. Second, in human capital, modularized and self-directed learning and arrangement of theoretical and experiential knowledge do not work alone but together. Finally, learning guidance is essential under the stress of tyranny of freedom.

A good transition is the foundation of learning in universities (Bozzato & Longobardi, 2021) and predictor of work performance after graduating (Butterbaugh, Ross, & Campbell, 2020). Identity capital could be a solution to smoothen university transition and adjustment (Côté, 2016). Although the students with different high school learning system backgrounds, they got tangible resources which influenced their motivations and choices of college entrance channels. Self-designed major students with more flexible high school backgrounds had more opportunities to explore before entering colleges and had advantages when they chose the non-GSAT channel. Consequently, they have mixed motivations regarding default and personal-intellectual development. Students with less flexible high school backgrounds invested their time in studying for standardized exams and have advantages when they enter college through GSAT. Moreover, parents and teachers are their main advisors when deciding majors due to their lack of exploring experience. Default and expectation are the motivations for those students' entering college.

To increase graduates' work value (Marginson, 2019) and employability (Tomlinson, 2017), the human capital of conception of learning patterns and the operation of knowledge is essential. Self-designed major students believe that modularized learning is more teacher-oriented, while self-directed learning is more learner-oriented. Coincidentally, students believe that modularized learning is a good starting point, helping them pick up basic knowledge while exploring a new field, while self-directed learning is suitable for learners ready to focus more deeply on specific topics. The operation of knowledge is the other key to examine self-designed major students' human capital. All the research participants agreed that theoretical knowledge is accumulated from experiential knowledge. Moreover, students believe the two kinds of knowledge are equally important and influence each other.

Learning guidance within human capital issue is a key solution to university transition, especially for self-designed major students. Students might have more experiences in regards to self-interest exploration; however, they still experienced different levels of difficulties when they entered college, which is a new environment. Schwartz (2004) calls this the tyranny of freedom, and while School A, B, and C all provide advisory systems, those supports have not completely matched self-designed major students' needs.

Comparing self-designed and non-self-designed major students, there are several similarities and differences. First, both types of students got tangible resources in high school and gained experiences of either learning freedom or being forced to study for exams. Therefore, default and expectation are two shared motivations. The minor difference is that self-designed major students' motivation is more personal-development oriented, but non-self-designed major students' motivation is more careerist-materialist oriented (Chen, Wu, & Chang, 2021).

In human capital comparison, non-self-designed major students put more emphasis on schoolwork, and they spend more time on modularized classes and learning theoretical knowledge (Chen et al., 2021). Self-designed major students aim at their own study interests and mix modularized and self-designed learning. Theoretical knowledge is seen as an efficient way to help self-designed major students solve problems while experiential knowledge mainly leads to their learning motivation.

Beyond Taiwan, in universities such as Brown, Stanford, New York University (NYU), University of Washington, William and Mary College, and Wesleyan College, their self-designed major programs share the same goal of providing an interdisciplinary, tailor-made, and undefined place for students who are capable and passionate about doing independent studies. In self-designed major programs across the world, students are guided by advisors. Although the function of that guidance has not been empirically proven, universities have found the urgent need to provide a place for the group of learners whose learning patterns are different. Launching self-designed major programs aims at encouraging that kind of learners to explore fields that are not defined yet. Interestingly, according to the result of this study, guidance with self-designed major programs can prove difficult in meeting learners' needs, as those students are exploring fields no one is familiar with at present. However, the rise of self-designed major programs has proven that "Learning Nomad" has been found across cultures and countries.

6. Conclusion, Limitations, and Future Direction

Higher education is now facing a turning point, as its structure has to match the needs of learners in this modern and high-tech society. This study uncovers the look of "new learners."

A new term proposed here is "Learning Nomad", and it defines "new learners" according to the results found in this study: these students are learning like nomads, hunting knowledge as prey without a stable habitat. Although the identity capital (resource and motivation) they gained is similar among all high school students, the human capital of self-designed major students is distinguished from other students. Learning nomad does not follow either modularized or self-directed learning, nor does it adhere to only theoretical or experiential knowledge. The learning is based on experience knowledge, and students pick up certain theoretical knowledge they need within a modularized learning structure to develop their self-directed learning map to aim at solving problems in reality. To do so, learning nomads need to cross fields which are defined as departments or professions and mix or combine knowledges as a complete solution. Their problem-based learning breaks academic boundaries like nomads tracing resources everywhere. Learning nomads have not only been founded in Taiwan, but other countries such as the United States all now offer self-designed majors and recruit students by focusing on and pursuing interdisciplinary and undefined topics.

Another issue that has been brought up to learning nomads is learning guidance. It becomes more important when students need to explore learning interests and develop learning maps without assistance from department defined paths. Research participants have mentioned the importance of guidance, and this matches with the concept of Schwartz's tyranny of freedom (2004), which refers to unlimited choices easily making people feel lost and decreasing their life quality and happiness. It has been proven by those research participants' experiences that providing freedom without guidance may be a toxic and irresponsible behavior to students. However, what the appropriate guidance for a learning nomad is could be the next question waiting to be solved.

Beyond learning nomads' guidance in regards to adjustment and performance, the third limitation of this study is not having proof about whether a self-designed major program structure in these three schools helps students to pursue their goals. Comparing self-designed major students when they are freshmen and after they graduate will be an important topic to explore in future studies.

The findings open a window to knowing more about self-design major students, and the term "learning nomad" is also defined in this study. Learning nomad may not be a viable option for all students, but it is a concept that should not be ignored and is vital to consider in the future restructuring of the educational system.

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