

International Students' Perceptions of Learning Environment Related to Learning Outcomes- A Case Study at Huzhou University

Author Details: Nuruddin Ahmed Masud

Masters of Education Management, School of Teacher Education
Huzhou University-No.1 Xueshi Road, Huzhou, Zhejiang, 313000, China.

Abstract

The basic aim of the research is to pursue the international students' perception on learning environment related to learning outcome at Huzhou University to establish the elements of educational culture that contribute learning outcome of international students at Huzhou University. This research has been conducted by a mixed-method design to fertilize realistic illustrations. For quantitative analysis, this research design has been done randomly where 230 international graduate and postgraduate students from different department of Huzhou University thorough survey questionnaire and in-depth interviews have been used in this study to gather quantitative information. The 12 participants for the interview have been picked from different departments of Huzhou University. International students' perception of learning environment has a positive impact related to learning outcome at Huzhou University and the findings of this study stimulate the researcher to emerge with new strategies that can heighten the performance of students. No such research has been found on international students' perspective regarding learning environment and learning outcomes at Huzhou University and this is possibly the very first attempt from the Huzhou University perspectives.

Keyword: Students' Perceptions, Learning Environment, Learning Outcomes.

1. Introduction

The most important aspect of a safe and positive learning environment is the rapport between a teachers and his or her students (Lizzio, Wilson, & Hadaway, 2007). When the students understand that their teacher cares about them and wants them to do well, students feel comfortable asking questions, making mistakes, and taking risks to learn something new (Lizzio, Wilson, & Simons, 2002). To build these kinds of relationships, the teacher should take an interest in each student's strengths and interests, as well as their struggles and frustrations. He or she needs to act as a positive model for learning and celebrating achievements. When the students see that their teacher can learn from his or her mistakes, and laugh even in times when he or she feels frustrated, the students will feel much more comfortable to do the same (Dochy et al., 2005). Moreover, the university that each student attends set their pillars that promote students learning. This research is conducted to look thoroughly at how the school's climate and socioeconomic background promote a positive learning environment (Clifford, Menon, Condon &Humung, 2012). The school can improve students' performance, depending on the school (Rawson, Dunlosky, & Sciartelli, 2013).

The learning environment does not mean only in the classroom. The learning environment is very wide, and its spread is far-reaching. The students' progress and the civilization of that country depend largely on a good learning environment (Lizzio et al., 2002). A good learning environment carries the classroom, accommodation, and sports environment, teaching methods of the teachers, teachers' facilities, and many more (Vasbieva et al., 2018). Teachers must ensure that they create a positive learning environment that serves as the second home for students, and teachers can ask students if they are not performing well or meeting the requirements. So, the teachers play a big role in helping the students grow mentally and physically, making their future courses of action easier and consistently successful (Cohen, 2006). School climate needs to be taken seriously to promote a good school atmosphere. The teacher's good understanding with the students is good for students and good outcomes for any school. Considering the whole aspects, the school and its surrounding educational environment are in the center of the right to service, maintain, progress, and partake in all school and student sectors (Hyry-Beihammer&Hascher, 2015)

Plenty of researches have been conducted on perceptions of learning environment on perceive learning outcomes from students' perspective. For example, a study on nursing students' perception by (Ranse & Grealish, 2007; Henderson et al., 2012; Dimitriadou et al., 2015; Aldridge, 2017), medical students' perception by (Taheri, 2009; Nahar et al., 2010, Belayachi et al., 2015), business students' perception by (Garnjost& Brown, 2018); undergraduate students' perception by (Armstrong, 2011), university students' perception by (Lizzio et al., 2002; Lizzio et al., 2007; Pérez-Pérez, Serrano-Bedia, & García-Piqueres, 2020). However, no such research has been found on international students' perspective regarding learning environment and learning outcomes at Huzhou University and this is possibly the very first attempt from the Huzhou University perspectives. Based on the above discussions two research are obvious to unearth this particular study. Those are,

- RQ-1.* What are the international students' perceptions of their learning environment at Huzhou University?
- RQ-2.* How does Huzhou University foster the creation, and ensure the sustainability of the positive learning environment?
- RQ-3.* How to improve learning environments at Huzhou University especially for international students' learning outcome?

The basic aim of the research is to investigate the international students' perception on learning environment related to learning outcome at Huzhou University. The next sections of this study are designed as follows. Firstly, the study has assessed some closely related literatures to develop hypotheses. Secondly, the study explains the methods to collect and assess the data. Thirdly, the study analyzes and interprets the collected data. In fourth section the study points a discussion notes based on the study outcomes and compare the results with earlier related studies and finally the study ends with concluding remarks.

2. Literature Review

Kelly (2002) explained the definition of education shows that students' education and behavior play a very big role. There are many things involved in the institution's learning environment, which further accelerates the students' performance. Looking at the students' interaction, they can easily understand how sincerely they adapt to the learning environment. It requires the sincerity of both the students and the teachers and the educational institution's smooth running. The standards required for learning include culture, content, and various tools deeply involved in teaching and learning and things that improve student quality (Hansmanet al., 2019). The behavioral willingness to prefer anything is typically depends on certain significant considerations (Khan& Sharma, 2020).

What is most important for students' mental well-being and academic achievement is a positive learning environment where they can accelerate their mental development. The learning environment should be such that they can move around in a feel freeway, and in practical life, they can organize themselves. In addition to education, they need to be more motivated to look at the surrounding conditions and develop structurally. In addition to psychological issues; students need to pay more attention to physical education. The elements of physical education are much more difficult, so that should be taken into consideration. Physical equipment and other educational institutions' technologies should be taught to keep them more mobile. It is also important for students to interact with teachers, teaching materials, and other tools (Teclehaimanot& Hickman, 2011).

The learning environment does not refer to just one place. There are many places where students are engaged in various ways with teaching. Teachers should arrange the classroom and its surroundings to interact well with each other, exchange different information, and respect each other. The learning environment determines many

features and quality standards; such as, the sincerity of the teacher with the students, the equipment of the educational institution. The educational institution's environment has a great impact on the students and the communities of prosperity. Suppose the educational institution does not follow all the rules properly, does not encourage the students, does not have good interaction with the students and teachers, and does not develop the educational institution's infrastructure (McLaughlin & Talbert, 2006) explaining,). In that case, the results of the students are much worse, which destroys their future goals. Some factors directly or indirectly affect students' learning and physical education. There are many means of imparting education, for example, practical and virtual (Filardo, 2008). But socially practical learning environment is much more acceptable to everyone (McGregor, 2004). That is why teachers need to manage all the necessary tools intelligently for a practical learning environment. Students should be given all the facilities to achieve good results in their educational life. The lack of some sources can be considered in the controversy. But it should be noted so that it does not have any bad effect on the students' studies. In many academic researches it is found that, positive perception towards a context can enhance positive outcome in results (Lee & Wallace, 2018; Khan et al., 2019; Asante Boadi et al., 2020). Hence, a hypothesis can be designed based on the above discussion;

Hypothesis 1(H₁): Perception of learning environment has positive impact on perception of learning outcome.

The school management and the board of director's play the biggest role because they can maintain a school properly, and this is what they think is the overall improvement of a school. The place of learning should be a place full of comfort and open air. As seen earlier, the schools were a bit smaller in size. The students' mental development was hampered; the students were left behind from extra curriculum activities. Students were deprived of the overall opportunity for education. With the development of civilization, the education system can be made more attractive by enlarging its size, widening the playground, setting up separate buildings, and considering the overall aspects (Hammond & Ancess, 2002). The study also found that small schools lag far behind in achieving higher profits, have lower rates of everything, do not perform well in studies, do not know about various assessments, have higher degrees are very low, school rankings are low. Considering all the aspects, it can be seen that the big schools are ahead in all aspects. However, small schools cannot do enough on their own. Also, other necessary rules and regulations do not provide adequate facilities for the staff. The staff's capacity, adequate building arrangements, and space constraints, including new building additions, bureaucratic problems, and various other issues, are involved in the school's overall improvement. That is why it is better to think about the school's problems and solve them subject to the discussion of the working council; if there is any dispute among them, and then the school develops. The students' results and their background will depend on the classroom size and the type of teaching method (Graue & Hatch, 2007). The first step in the learning environment is to make the classroom attractive and suitable for reading. The well-appointed building makes the students' minds more enjoyable. They are more involved in learning and with different learning activities. If the school has separate management for each field with all kinds of facilities, those things give a lot of encouragement (Rudd & Reed, 2008). Based on the above assessment a sub-hypothesis can be designed as;

Hypothesis 1a (H_{1a}): Perception of school setting and learning environment for positive learning has positive impact on perception of learning outcome.

The whole responsibility of the classroom environment, maintenance, tidying up, all depends on the teacher. Teachers will be fully assured that the students will get all the facilities in the classroom. Teachers will help to establish socio-emotional learning and intercultural relations between the students. All equipment inside the classroom, such as tables, chairs, boards, lighting, and ventilation, should be ensured. With the development of civilization, the positive learning environment is moving forward to make the classroom more attractive and modern, and the classroom needs to rely on ICT. Notice that the addition of multimedia makes classroom teaching much easier. Because there are so many meaningful aspects of multimedia classrooms that make the teaching system more expansive, the gift of teaching and learning continues to grow exponentially. As the

scope of thinking and teaching grows, so does the development of educational institutions. From the perspective, multimedia classrooms make students more erudite and work within them with dauntless power that makes students' future goals even stronger (Sugrue, 2000; Jonassen and Reeves, 1996). In addition, teachers have to ensure all the good aspects, including treating the students kindly, showing respect, love, and courtesy to each other.

Higgins et al., (2005) Noticed that traditional classrooms are still being used. "But we need to understand that the style of teaching is changing over time. Investigation on Learning style, constructive assessment, different and pathological changes, And the rapid change of technology or the world's gradual improvement. However, we do not have a strong theory of research, regardless of whether it helps to help each other or to do our learning," Higgins et al. (2005). The school building and classroom environment are the most important for the teachers and students, but this system has been neglected for years (Martin 2002). Most teachers don't think about their school and student improvement. Don't think about education and the improvement of teaching. Rather, several teachers hinder educational institutions (Walden, 2009; Weinstein, Romano & Mignano 2007, 2011). Regardless of the school environment or climate, it must be a tidy school with all kinds of facilities, including a pleasant environment, lighting, and ventilation facilities (Walden, 2009). There will be a student-teacher relationship within the school where there are respect and love for each other and good understanding and respect for each other (Anderson, 2016). Sustainable Positive Learning Environment Affects Students' Learning Streams Future Achievements. Sanoff (1994, 1996), in his description, the design or shape of the educational institution, the type of surroundings, and the quiet surroundings, everything is a big factor for its success. Woolner, McCarter, Wall & Higgins (2012) discusses three important theories to understand how schools observe. Those are: sustaining the value of commons, the value of the good architect design, maintain the quality of assessment over time. Hence, another two sub-hypotheses can be designed as;

Hypothesis 1_b (H_{1b}): Perception of creation a positive learning environment has positive impact related to learning outcome.

Hypothesis 1_c (H_{1c}): Perception of running school concept about international students has positive impact related to learning outcome.

A positive learning environment accelerates students' success and makes their future trends easier as a better learning environment influences them. Therefore, this study pursues to attain findings that will appropriate impact on the environment of the school.

3. Methods

Quantitative and qualitative methods have been used in this research to evaluate a positive learning environment's perception. The focus of research here is on student attitudes and understanding of the surrounding environment on how they perceive this learning environment. Besides, data were collected from participants in this school who were the main target of this research. According to Smith (2014), the mixed method here is to approach quantitative and qualitative data by finding new information and using that data very easily to invent something new. This research's problems are better understood using the mixed method, which is obliterating the data collection (Creswell & Clark, 2003). This research was conducted by a mixed-method design to fertilize realistic illustrations. In this research, mixed methods helped to coercible research problems in making this study easier.

The population is a total or aggregate of an object referred to as a subject or a member (Pilot & Hungler, 1999). There are 630 international students are enrolled in Huzhou University under different programs (Huzhou University, 2020). For quantitative analysis, this research design has been done randomly where 230

international graduate and postgraduate students from different schools such as (a) The School of Teacher education; (b) Computer science and Technology; (c) School of Arts, (d) Engineering school; (e) College of life science; and (f) Business school. The purpose of taking each department here is to check and sort the level of education. Besides, each department has been thoroughly analyzed to gather in-depth information about the school environment. Here only the bachelor and master students of Huzhou University have been selected and given the questionnaire.

A 5-point Likert scales (1= strongly disagree, 2= disagree, 3 = neutral, 4= agree, 5= strongly agree) have been used to keep the quantitative data accurate and pure. According to Patton (2002), the questionnaire is commonly used to gather information from research participants, which allows them to gather more information from a large population in a short period and reduce costs. The survey questionnaires' main aims and objectives are to improve the positive learning environment in the school and facilitate the school's structural reform. Item 1 to 15 were figured out participants of school setting/ learning environment for positive learning, Item 16 to 19 were figured out perceptions of creating a positive learning environment, section 20 to 24 were figured out participants perceptions of running school concept about international students regarding positive learning environment, section 25 to 28 were considered with participants perceptions of outcome of a positive learning environment. 230 questionnaires have been shared with the selected sample where only 101 filled questionnaire were sent back to analyze this research. The response rate has been counted as 43.91%. To run the quantitative analysis, the study used MS Excel and SPSS (V, 26) software.

To compare the quantitative measurement with qualitative one, the research has also been designed a qualitative platform. Through interview; researchers have the opportunity to explain participants' experiences (Fontana & Frey, 2000). In-depth interviews have been used in this study to gather information because it is a technique through which researchers get face-to-face and fruitful data. Close-ended survey questionnaires have been used in this study to gather information about students' perceptions about a positive learning environment. The selected participants for the interview were 12 students from different departments of Huzhou University based on their mutual consent through the convenient way. Each of the students were interviewed for a 40 minutes. These participants were asked a series of 4 questions focusing on the topics related to this study. For qualitative data analysis, author's judgmental ability is the key where MS Word has been applied to decorate the qualitative outcomes based on the participants' responses.

4. Analysis and Findings

Study-1: Quantitative Analysis

Demographic Analysis

Under gender analysis, the study has found that (n=76, 75.2%) of the respondents are male and rest of the respondents (n=25, 24.8%) are female among the (N=101) survey participants. In case participants' enrolled department analysis, the study has found that there are in total six (6) departments. Among those departments, (n=18, 17.8%) of the respondents are from School of Teacher Education; and then(n=16, 15.8%) of the respondents are from Computer Science and Engineering;(n=19, 18.9%) of the respondents are from, School of Arts; after that, (n=18, 17.8%) of the respondents are from Engineering School; (n=17, 16.8%) of the respondents are from College of Life Science and finally (n=13, 12.9%) of the respondents are from, Business School.

Table-1: Demographic Analysis

Variable	Dimension	Frequency (n)	Percent (%)
Gender	Female	25	24.8
	Male	76	75.2
	Total	n = 101	100.0
	School of Teacher Education	18	17.8

Participants' Enrolled Department Analysis	Computer Science and Engineering	16	15.8
	School of Arts	19	18.9
	Engineering School	18	17.8
	College of Life Science	17	16.8
	Business School	13	12.9
	School of Teacher Education	18	17.8
	Total	n = 101	100.0
Participants' Enrolled Program Analysis	Bachelor	35	34.7
	Master	66	65.3
	Total	n = 101	100.0

Source: Authors'

The above table-1 denotes that, among the entire selected sample ($n=66$, 65.3%) of the respondents are enrolled in Master's program and rest of the respondents ($n=35$, 34.7%) are enrolled in Bachelor program at Huzhou University.

Reliability Analysis

To run any inferential analysis, internal consistency measurement of the collected data is an integral part. A basic rule has been given by (Nunnally, 1978; Cortina, 1993; George & Mallery, 2003), if alpha is below 0.5 therefore the data is not internally consistent, and if $\alpha < 0.5$ the data is internally consistent. The alpha value for three variables is higher than 0.7 and one variable is near about 0.7 for this analysis, so the collected data has passed the reliability testing.

Table-2: Reliability statistics

Code	Variable Name	Variable type	Cronbach's Alpha	N of Items
ID1	Perception on school setting and learning environment for positive learning	Independent	.846	15
ID2	Perception on Creation a Positive Learning Environment	Independent	.776	4
ID3	Perception on Running School Concept about International Students	Independent	.678	5
D1	Learning outcome of the positive learning environment	Dependent	.803	4

Source: Author's calculation

This analysis means that, all the collected data are reliable and moderately to fairly internally consistent for this particular study. Table-2 reflects the reliability analysis summary.

Correlation Analysis

Pearson product moment correlation coefficient (r) has been conducted to justify the correlation among the selected variable. A correlation matrix of all values of (r) are given in Table-3, the result of Pearson product-moment correlation exposes that there is a positive significant correlations among the variables which indicates that the perception of learning environment and learning outcomes has good correlation in case international students perception at Huzhou University.

Table-3: Correlations

	ID1	ID2	ID3	D1
ID1	Pearson Correlation	1	.718**	.664**
	Sig. (2-tailed)		.000	.000
	N	101	101	101
ID2	Pearson Correlation	.718**	1	.603**
	Sig. (2-tailed)	.000		.000
	N	101	101	101
ID3	Pearson Correlation	.664**	.603**	1
				.588**

	Sig. (2-tailed)	.000	.000	.000	
	N	101	101	101	101
D1	Pearson Correlation	.415**	.593**	.588**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	101	101	101	101

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Author's calculation

ID-1, ID-2, and ID-3 has positive significant correlation with D1 ($r = 0.415$; $p < 0.05$, $r = 0.593$; $p < 0.01$, and $r = 0.588$; $p < 0.05$).

Hypothesis Testing

Hypothesis-1(H₁): Perception of learning environment has positive impact related to learning outcome. To test the hypothesis, the study has considered a regression for the overall model. Regression method is generally used to assess in which extent a dependent variable can be interpreted by an independent variable. The independent variables in this analysis are the perception on school setting and learning environment for positive learning, perception on creation a positive learning environment, and perception on running school concept about international students. On the other hand the dependent variable is the learning outcome of the positive learning environment.

Table-3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.676 ^a	.456	.440	.40314

a. Predictors: (Constant), ID3, ID2, ID1

Source: Author's calculation

The study finds R square= .456 from Table-3, which indicates that 45.6% of the dependent variable (perceive outcome of the positive learning environment) can be described by the independent (perception on school setting and learning environment for positive learning, perception on creation a positive learning environment, and perception on running school concept about international students) variables.

Table-4: Regression result's validity

Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	13.233	3	4.411	27.139
	Residual	15.765	97	.163	
	Total	28.998	100		

a. Dependent Variable: D1

b. Predictors: (Constant), ID3, ID2, ID1

Source: Author's calculation

Table-4 shows that the regression model is valid and significant at 1% level of significance.

Table-5: One sample t-Test ^a

Model	Unstandardized Coefficients		Beta	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error				Lower Bound	Upper Bound
1	(Constant)	1.923	.325	5.920	.000	1.278	2.567
	ID1	-.229	.116	-.233	-1.972	.042	-.460
	ID2	.372	.084	.491	4.426	.000	.205
	ID3	.439	.102	.446	4.324	.000	.238

a. Dependent Variable: D1

Source: Author's calculation

If the study tries to draw a regression equation based on the regression result. The underlying regression equation for the perception of learning environment on perception of learning outcome would be as follows,

$$D_1 = a + bID_1 + cID_2 + dID_3$$

Or, $D_1 = 1.923 - 0.229ID_1 + 0.372ID_2 + 0.439ID_3$ (Based on the table-5 outcomes)

Hence, independent variable of perception on creation a positive learning environment and perception on running school concept about international students are positively and the perception on school setting and learning environment for positive learning is negatively depending on dependent variable the learning outcome of the positive learning environment.

Table-5 indicates that, for one sample t-Test; at 5% significant level the p-value [Sig. (2-tailed)] for perception of learning environment (the perception on school setting and learning environment for positive learning, perception on creation a positive learning environment, and perception on running school concept about international students) for learning outcome of the positive learning environment are smaller than 0.05 ($p < .05$) which results that null hypothesis H_{10} is rejected and alternative hypothesis H_1 is accepted. The analysis depicts that, perception of learning environment has positive impact on perception of learning outcome.

Sub Hypotheses Testing

For part by part justification, the study has drawn three sub hypotheses. Outcomes of those hypotheses are given below.

A. Hypothesis 1_a (H_{1a}): Perception of school setting and learning environment for positive learning has positive impact on perception of learning outcome.

For this particular sub hypothesis analysis, table-6 indicates that, for paired samples t-Test; at 5% significant level the p-value [Sig. (2-tailed)] for the perception on school setting and learning environment for positive learning on learning outcome of the positive learning environment (D_1-ID_1) is smaller than 0.05 ($p < .05$) which results that null hypothesis H_{1a0} is rejected and alternative hypothesis H_{1a} is accepted. The analysis depicts that, the perception on school setting and learning environment for positive learning has positive impact on learning outcome of the positive learning environment

B. Hypothesis 1_b (H_{1b}): Perception of creation a positive learning environment has positive impact related to learning outcome.

For this particular sub hypothesis analysis, table-6 indicates that, for paired samples t-Test; at 5% significant level the p-value [Sig. (2-tailed)] for perception of creation a positive learning environment on learning outcome of the positive learning environment (D_1-ID_2) is smaller than 0.05 ($p < .05$) which results that null hypothesis H_{1b0} is rejected and alternative hypothesis H_{1b} is accepted. The analysis depicts that, perception of creation a positive learning environment has positive impact related to learning outcome.

Table-6: Paired Samples t-Test

	Paired Differences					t	df	Sig. (2-tailed)			
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference							
				Lower	Upper						
Pair 1 D1 – ID1	.28663	.58710	.05842	.17073	.40254	4.907	100	.000			
Pair 2 D1 – ID2	.30446	.58374	.05808	.18922	.41969	5.242	100	.000			

Pair 3	D1 – ID3	.23317	.49286	.04904	.13587	.33047	4.754	100	.000
--------	----------	--------	--------	--------	--------	--------	-------	-----	------

Source: Author's calculation

C. Hypothesis 1_c (H_{1c}): Perception of running school concept about international students has positive impact related to learning outcome.

For this particular sub hypothesis analysis, table-6 indicates that, for paired samples t-Test; at 5% significant level the p-value [Sig. (2-tailed)] for perception of running school concept about international students on learning outcome of the positive learning environment (D_1-ID_3) is smaller than 0.05 ($p < .05$) which results that null hypothesis H_{1c0} is rejected and alternative hypothesis H_{1c} is accepted. The analysis depicts that, perception of running school concept about international students on perception of learning outcome.

Study-2: Qualitative Analysis

Twelve students were interviewed to analyze the qualitative data, and their words were noted with their permission then they were organized in sequence and directly put in the Microsoft word document, and the data was analyzed through thematic analysis (Braun and Clarke, 2006; Alhojailan, 2012; Fereday&MuirCochrane, 2006; Thomas & Harden, 2008). For qualitative analysis 12 students were asked the following 4 questions.

Q1. What steps do you think need to be taken for greater creativity and continuous improvement in the learning environment?

Based on the interview responses the interviewee shared that, Positive relationships need to be established between students and teachers. There should be a clear communication system between teachers and students so that both can solve problems together. Teachers and students must have confidence in each other Students must be given the right to make decisions. Natural environment must be created around the school such noise pollution, air pollution must have adequate measures to prevent. Adequate space for sports, equipment and must be managed by the sports teacher. The classroom must have modern equipment such as lighting, pollution free, and ventilation.

Q2. How teacher-student interactions affect the learning environment and student success?

To respond this particular question interviewee shared that, establishing relationships first is a noteworthy issue. The main purpose is to establish a positive relationship between teachers and students. Teachers need to guide students in an intelligent way. Always be on the side as a mentor, not just from the inside of the study but also from the outside interest. Students should always be encouraged in their work and be careful so students will be more attentive inside the classroom and the absenteeism rate will be much lower. There must be personal interaction between teachers and students as well. Then there is an underlying motivation within the students. Teachers need to have sincerity towards each lesson, focus on the lesson, and know the beginning and end of it so that the students can understand all the subject matter about that lesson. Create a conducive environment inside the classroom, give students the right to ask open questions, create a variety of facilities including the right to respond. Teachers need to be consulted to make the teaching process flexible and diverse. The sincerity of both the issues needs to be established for the smooth implementation of the plan. As a school teacher, need to build an understanding of the diversity of the school. Teachers need to evaluate students' academic performance seriously and need to create a conducive and collaborative environment.

Q3. Will the school's recent development project further accelerate student success?

The following is a set of significant feedback received from participants in answering this research-specific question. The infrastructural development of the school is very important. Schools have to move forward with that goal and increase its opportunities. The main point is that the good condition of the school plays a very important role in the academic goals of the students and the students achieve their desired success. According to

the response of the participants, Huzhou University has planned many things for the past development of various infrastructures. This will further improve and modernize the old system of this university. However, in the past, Huzhou University has been weak in international student management, which has improved over time. Looking at the past, it was observed that the students did not feel comfortable in many subjects. There would be no good interaction with teachers. Which has improved a lot at present. A lot more information is being exchanged between teachers and students. Teachers are helping students in other subjects besides studying. On the other hand, the students could not express their views to the teachers which have now been much accelerated. There are a lot more sports facilities being provided now as well as a lot more sports related events. Students are being encouraged in various sports and sports equipment's are being provided. Apart from this, the security system of the students has been further expedited. The living space has been created as a modern accommodation with various facilities; because the students need both the physical well-being and mental peace. In this context, Huzhou University has undertaken various activities for international students such as the administrative system of the school, to make the curriculum more standardized, to provide professional practical education. To further develop the purpose of education, to give importance to the needs of the students, to move away from the old and adopt new and functional decisions over time, to adopt demographic development, to adapt the school structures, to the needs of the new structure improve the schools infrastructure.

Q4. What do you think Huzhou University's learning environment has a positive impact on international students?

Students feel much more comfortable when they get a positive learning environment. After all, most researchers believe that the more conducive the learning environment, the better the academic performance of students. Teaching or learning in a noisy environment is never good for students.

There are some important ways for students to achieve academic success - safety, healthy relationships between teachers and students, academic expectations, leadership and professional development. This research question seeks feedback from participants on whether Huzhou University's learning environment is really helpful or whether it has a positive impact or not.

An interview participant shared that, "*Every educational institution must have a positive learning environment. Huzhou University offers all kinds of learning environment facilities which have proved to be very helpful for a student.*"

Another interview participant expressed that, "*The classroom environment of this university is fully equipped and the teaching is done with modern equipment's. Adequate lighting system such as natural light or artificial light has been made the main advantage of everything. In order to increase the growing awareness of our body, we have to rely on the natural environment all the time and Huzhou University's lighting system is well-balanced and well equipped. On the other hand, ventilation facilities are much more important inside each classroom because if pure air does not enter our body, the opposite can happen as well as temperature control, the learning space must be comfortable. This exists in every classroom of this university and is a place conducive to study.*"

A student shared something regarding the well-equipped dormitory environment, which is very important for the academic achievement of the students which gives them peace of mind and body. "*There is no shortage of residence halls at Huzhou University but they do not know whether the way student accommodation is set up has a positive or negative impact on their academic achievement. In the dormitories, students spend their time studying, sleeping and resting. So it is very important to establish a pleasant environment for the students which will help them in their academic success. Apart from this, other facilities have been provided in the dormitories of this university and it is a suitable place for the students to stay and academic success or peace of mind plays a much bigger role for international students.*"

This part of the analysis summarizes the information and findings from the participants based on the positive learning environment of Huzhou University. This outcome discusses in detail the elements associated with positive learning environment at Huzhou University such as Classroom environment, linguistic complexity, sports and accommodation, and feedback from participants on a variety of topics, for example, what other steps

need to be taken to improve the learning environment, teachers-students interaction, current university development project and whether Huzhou University is having an impact on the success of international students? After analyzing the collected data, the objectives of this study have been balanced with the research questions. The expected outcomes of international students have been highlighted as the key to their academic success. That is why the university authorities must take advantage of everything. There needs to be more care on teachers and students, more emphasis on a positive environment for academic success. If there is a difficult challenge that helps the students and they have to overcome it, then the expectations of the students of this university will be fulfilled and their future will be bright.

5. Discussion

If all kinds of educational facilities are provided to the students in order to expect good outcomes in a school, then important elements related to the learning environment of an educational institution should be given (Kennedy, 2005). From the participants' view of this study, it is observed that the learning environment of Huzhou University is good for international students. The findings of the study showed that the campuses around the university are in a good position, with school buildings and infrastructural environments well suited for education. From participants view, school provides a variety of facilities including classroom environment, good interaction with teachers and international students, keeping in touch with students and solving problems by keeping communication, organizing sports and cultural events, regular supervision of student accommodation. Huzhou University has been providing facilities to international students with the aim of creating a clear and improved understanding of the diversity of schools. However researchers have raised some important factors that have a slight impact on students. First of all, the school needs to pay more attention to sports and provide sports equipment. Secondly, there should be more interaction and communication between teachers and students. Thirdly, both the teachers and students need to pay more attention to language; emphasis should be placed on English language to facilitate communication between teachers and students and in classroom teaching. Other findings showed that the school climate is very important for good academic performance. Marshall (2004) suggested that, the environment around the school, encouraging students, supporting them, everything can make a school a great success in terms of academic performance. Findings further revealed that the academic performance of the students is further accelerated by the sincerity of the teachers, caring for the students face to face and having a good understanding with them. According to Okeke (2004) if teachers misbehave with students and create distance, it will have a negative effect on students. In addition, school teachers should develop an evidence-based understanding. In this way school curriculum, rules, facilities can be reformed by avoiding the disadvantages of school learning outcomes and valuing the diversity of students. Above discussion from both the quantitative and qualitative outcomes can easily meet the demand of *RQ-1*, *RQ-2*, and *RQ-3*. The outcomes of the main and sub-hypotheses support that, international students' perception of learning environment has positive impact on perception of learning outcome at Huzhou University and the findings of *study-1* is more or less match with the outcomes of *study-2* from the in-depth interview. Both the study outcomes (*study-1* and *study-2*) support the earlier research results of (Lizzio et al., 2002; Chan, 2002; Lee et al., 2011). However the outcomes of this particular research denies the earlier research results of (Henderson et al., 2012; Dimitriadou et al., 2015; Garnjost& Brown, 2018; Pérez-Pérez et al., 2020).

The research has some implications for the practitioners and policymakers. The proper application of this research element will enable students to achieve their desired results. Students' performance in academic life is greatly enhanced by good interaction with teachers and good relationships, and by being extremely supportive and caring towards students. To improve the academic performance of the students in a school, the school environment must be conducive to learning. The research has mainly observed that the school should have beautiful buildings and furniture, experienced teachers, necessary teaching materials and financial well-being. But on the other hand, without proper management in the school administration process, it will not be possible to enlighten the students in the light of functional and useful knowledge or to help them without the required knowledge, skills and vision to meet the needs of life. The future research explored on micro basis such as

department to department or program to program analysis. Few demographic variables such as country origin, gender, age etc. can be used as mediating effect to run the test of international students' perception of learning environment has positive impact related to learning outcome.

6. Concluding Remarks

It is concluded that the academic success of the students and their positive learning outcomes depend entirely on the school environment and the school environment is made up of small structures. The full effect of which is to give much more impetus to the academic success of the students in their professional life. In fact, the school environment and the family environment should complement each other for teaching. On the other hand, a school can have beautiful buildings and furniture, it can have experienced teachers. There may be necessary teaching materials but without proper management in the school administration process, the real purpose of establishing a school i.e. enlightening the students in the light of functional and useful knowledge or meeting the needs of their life will not develop. If there is negligence in the administration system, there will be no coordination among the elements. Therefore, the sincerity of the administration is essential for the smooth running of the school. Many important elements of this study have been thoroughly analyzed only to improve and modernize the academic performance of international students.

References

- i. Aldridge, M. D. (2017). *Nursing students' perceptions of learning psychomotor skills: A literature review*. *Teaching and Learning in Nursing*, 12(1), 21-27.
- ii. Alhojailan, M. (2012). *Thematic analysis: A critical review of its process and evaluation*. *West East Journal of Social Science*, 1, 39-47.
- iii. Anderson, C. S. (2016). *The Search for School Climate: A Review of the Research*. *Review of Educational Research*, 52(3), 368–420. <https://doi.org/10.3102/00346543052003368>.
- iv. Armstrong, D. (2011, October). *Students' perceptions of online learning and instructional tools: A qualitative study of undergraduate students' use of online tools*. In *E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 1034-1039). Association for the Advancement of Computing in Education (AACE).
- v. Asante Boadi, E., He, Z., Bosompem, J., Opata, C. N., & Boadi, E. K. (2020). *Employees' perception of corporate social responsibility (CSR) and its effects on internal outcomes*. *The Service Industries Journal*, 40(9-10), 611-632.
- vi. Belayachi, J., Razine, R., Boufars, A., Saadi, A., Madani, N., Chaouir, S., & Abouqal, R. (2015). *Moroccan medical students' perceptions of their educational environment*. *Journal of educational evaluation for Health Professions*, 12.
- vii. Braun, V. & Clarke, V. (2006). *Using thematic analysis in psychology*. *Qualitative Research in Psychology*, 3, 77-101.
- viii. Chan, D. S. (2002). *Associations between student learning outcomes from their clinical placement and their perceptions of the social climate of the clinical learning environment*. *International Journal of nursing studies*, 39(5), 517-524.
- ix. Clifford, M., Menon, R., Condon, C., & Humung (2012). *Measuring school climate for gauging principal performance: A review of validity and reliability of publicity accessible measures*. Retrieved from http://www.air.org/files/school_climate2.pdf.
- x. Cohen, J. (2006). *Social, Emotional, Ethical, and Academic Education: Creating a Climate for Learning, Participation in Democracy, and Well-Being*. *Harvard Educational Review*, 76, 201-237.
- xi. Cortina, J. M. (1993). *What is coefficient alpha? An examination of theory and applications*. *Journal of Applied Psychology*, 78(1), 98–104. <https://doi.org/10.1037/0021-9010.78.1.98>

- xii. Creswell, J. W., Plano Clark, V. L., Guttman, M., Hanson, W. (2003). *Advanced mixed methods research designs*. In: A. Tashakkori & C. Teddlie (Eds.), *Handbook on mixed methods in the behavioral and social sciences*, pp. 209-240. Thousand Oaks, CA: Sage Publications.
- xiii. Darling-Hammond, L, J. Acess, et al. (2002). "Reinventing High School: Outcomes of the Coalition Campus Schools Project". *American Educational Research Journal* 39(3): 639-673.
- xiv. Dimitriadou, M., Papastavrou, E., Efstathiou, G., &Theodorou, M. (2015). *Baccalaureate nursing students' perceptions of learning and supervision in the clinical environment*. *Nursing & health sciences*, 17(2), 236-242.
- xv. Dochy, F., Segers, M., Van Den Bossche, P., &Struyven, K. (2005). *Students' perceptions of a problem-based learning environment*. *Learning environments research*, 8(1), 41-66.
- xvi. Fereday, J., & Muir-Cochrane, E. (2006). *Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development*. *International Journal of Qualitative Methods*, 5, 80 - 92.
- xvii. Filardo, M. (2008), "Good Buildings better schools". *Economic Policy Institute Briefing Paper*, No.216.
- xviii. Fontana, A. & Frey, J. (2000). *The interview: From structured questions to negotiated text*. Norman K.Denzin & Y. Lincoln (Eds.).*Handbook of qualitative research* (2nd Ed.) (pp.645-672).Thousand Oaks: Sage.
- xix. Garnjost, P., & Brown, S. M. (2018). *Undergraduate business students' perceptions of learning outcomes in problem based and faculty centered courses*. *The International Journal of Management Education*, 16(1), 121-130.
- xx. George, D., &Mallery, P. (2003). *Using SPSS for Windows Step by Step: A Simple Guide and Reference* (4th Ed.). London: Pearson Education.
- xxi. Graue, E., Hatch, K, et al. (2007). "The Wisdom of Class-size Reduction". *American Educational Research Journal* 44(3): 670-700.
- xxii. Henderson, A., Cooke, M., Creedy, D. K., & Walker, R. (2012). *Nursing students' perceptions of learning in practice environments: A review*. *Nurse education today*, 32(3), 299-302.
- xxiii. Higgins, S., Hall, E., Wall,K., Woolner, P.,& McCaughey, C. (2005). *The Impact of School Environments; A literature Review*. The Centre for Learning and Teaching, School of Education, Communication and Language, Science, University of New Castle. Retrieved on 10/11/2016 from: <http://www.ncl.ac.uk/cflat/news/DCReport.pdf>.
- xxiv. Huzhou University. (2020). Huzhou University International College. Retrieved from, <http://gjxy.zjhu.edu.cn/english/>.
- xxv. Hyry-Beihammer, E. K., and T. Hascher. 2015. "Multi-Grade Teaching Practices in Austrian and Finnish Primary Schools." *InternationalJournalofEducationalResearch* 74: 104 113. <https://doi.org/10.1016/j.ijer.2015.07.002> [Crossref], [Web of Science], [Google Scholar].
- xxvi. Jonassen, D. H., & Reeves, T. C. (1996). *Learning with technology: Using computers as cognitive tools*. In D. H. Jonassen (Ed.), *Handbook of research for educational communications and technology* (1st Ed.). Retrieved from <http://www.aect.org/edtech/ed1/>
- xxvii. Kelly, L. (2002). *What is learning...and do museums need to do something about it?* Paper presented at why learning? Seminar, Australian/University of Technology Sydney, 22nd November.
- xxviii. Kennedy, Aileen (2005) *Models of continuing professional development: a framework for analysis*. *Journal of In-Service Education*, 31 (2). pp. 235-250. ISSN 1367-4587
- xxix. Khan, M. R., & Sharma, K. (2020). *Purchase Preferences and Buying Influences on Religious Occasions*. *FIIB Business Review*, 9(3), 216-227.
- xxx. Khan, M. R., Roy, S. K., & Hossain, S. M. (2019). *FACTORS AFFECTING GARMENTS EMPLOYEES'PERCEPTION ON JOB PERFORMANCE: EVIDENCE FROM BANGLADESH*. *International Journal of Management and Sustainability*, 8(1), 32-47.
- xxxi. Lee, G., & Wallace, A. (2018). *Flipped learning in the English as a foreign language classroom: Outcomes and perceptions*. *TESOL quarterly*, 52(1), 62-84.

- xxxii. Lee, S. J., Srinivasan, S., Trail, T., Lewis, D., & Lopez, S. (2011). Examining the relationship among student perception of support, course satisfaction, and learning outcomes in online learning. *The Internet and Higher Education*, 14(3), 158-163.
- xxxiii. Lizzio, A., Wilson, K., & Simons, R. (2002). University students' perceptions of the learning environment and academic outcomes: implications for theory and practice. *Studies in Higher education*, 27(1), 27-52.
- xxxiv. Lizzio, A., Wilson, K., & Hadaway, V. (2007). University students' perceptions of a fair learning environment: a social justice perspective. *Assessment & Evaluation in Higher Education*, 32(2), 195-213.
- xxxv. Marshall, M. L. (2004). Examining School Climate: Defining Factors and Educational Influences [white paper, electronic version]. Retrieved (month, date, year) from Georgia State University Center for School Safety, School Climate and Classroom Management website: <http://education.gsu.edu/schoolsafety/>
- xxxvi. Martin, S.H. (2002) 'The classroom environment and its effects on the practice of teachers', *Journal of Environmental Psychology* 22(1-2), 139-156.<https://doi.org/10.1006/jevp.2001.0239>
- xxvii. McGregor, J. (2004). "Spatiality and the place of material in schools", *Pedagogy, Culture and Society*, 11(3):353-377.
- xxviii. McLaughlin, M and Talbert, J. (2006). *Building School-based Teacher Learner Communities Professional Strategies to improve Student Achievement*, Teacher College Press, Thousand Oaks.
- xxix. Nahar, N., Talukder, M. H. K., Khan, M. T. H., Mohammad, S., & Nargis, T. (2010). Students' perception of educational environment of medical colleges in Bangladesh. *Bangabandhu Sheikh Mujib Medical University Journal*, 3(2), 97-102.
- xl. Nunnally, J.C. (1978) *Psychometric theory*. 2nd Edition, McGraw-Hill, New York.
- xli. Okeke, B. S. (2004). *Teaching in Nigeria. The bureaucracy of professionalism*. 2nd edition. Port Harcourt: Mercury International Publishing Nigeria.
- xlii. Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd Ed.). Thousand Oaks, CA: Sage Publications.
- xliii. Pérez-Pérez, M., Serrano-Bedia, A. M., & García-Piqueres, G. (2020). An analysis of factors affecting student's perceptions of learning outcomes with Moodle. *Journal of Further and Higher Education*, 44(8), 1114-1129.
- xliv. Pilot, D. F., & Hungler, B. P. (1999). *Nursing research: principles and methods*. Philadelphia: JB Lippincott Company.
- xlv. Ranse, K., & Grealish, L. (2007). Nursing students' perceptions of learning in the clinical setting of the Dedicated Education Unit. *Journal of Advanced nursing*, 58(2), 171-179.
- xlvi. Rawson, K., Dunlosky, J., & Sciartelli, S. (2013). The Power of Successive Relearning: Improving Performance on Course Exams and Long-Term Retention. *Educational Psychology Review*, 25(4), 523-548. Retrieved December 29, 2020, from <http://www.jstor.org/stable/43546826>.
- xlvii. Rudd, P., Reed, et al. (2008). *The effects of the school environment on young people's attitudes towards education and learning: Summary Report*. National Foundation for Educational Research: 33.
- xlviii. Sanoff, H. (1994) *School Designs*, New York: Wiley.
- xlix. Sanoff, H. (1996) 'Designing a responsive school', *The School Administrator*, 53: 18 22.
- l. Smith, G. (2014). *Leading the Professionals*. London: Kogan Page.
- li. Sugrue, B. (2000). *Cognitive Approaches to Web-Based Instruction*. In Lajoie, S. P. (Ed.). *Computers as Cognitive Tools, Volume Two: No More Walls*, (pp 133-163). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- lii. Taheri, M. (2009). *STUDENTS'PERCEPTIONS OF LEARNING ENVIRONMENT IN GUILAN UNIVERSITY OF MEDICAL SCIENCES*.
- liii. Teclehaimanot, B., & Hickman, T. (2011). Student-teacher interaction on Facebook: What students find appropriate. *TechTrends*, 55(3), 19.

- liv. Thomas, J., Harden, A. *Methods for the thematic synthesis of qualitative research in systematic reviews.* BMC Med Res Methodol 8, 45 (2008). <https://doi.org/10.1186/1471-2288-8-45>
- lv. Vasbieva, D. G., Sokolova, N. L., Masalimova, A. R., Shinkaruk, V. M., & Kiva-Khamzina, Y. L. (2018). *Exploring the EFL teacher's role in a smart learning environment—a review study.* XLinguae, 11(2), 265.
- lvi. Walden, R. (2009) *Schools for the Future. Design Proposals from Architectural Psychology.* Hogrefe& Huber Publishers.
- lvii. Weinstein, C. S., Romano, M. E., & Mignano, A. J. (2011). *Elementary Classroom Management. Lessons from Research and Practice,* New York: McGraw-Hill.
- lviii. Weinstein, C.S. (2007) *Middle and Secondary Classroom Management. Lessons from Research and Practice (3rdEd.).* McGraw-Hill.
- lix. Woolner, P., McCarter, S., Wall, K., & Higgins, S. (2012). *Changed learning through changed space: When can a participatory approach to the learning environment challenge preconceptions and alter practice?* Improving Schools, 15(1), 45–60. <https://doi.org/10.1177/1365480211434796>