

“Building Learning Power” (BLP) to Senior High School Students Towards Enhanced Learning Program

Kun Ren^{1,2,*}

¹ Graduate School, Adamson University, CO 1000, Manila, Philippines

² Department of Chinese language and literature, Guilin Normal College, China

* Corresponding author Email: 443594637@qq.com

Abstract: "Lifelong learning" is a global education theme. For a long time, the all-round development of students has been the focus of the global education system. How to enable students to achieve all-round development is the key to school talent training. It not only focuses on students' test scores, but also pays more attention to Students' ability to self-study and enjoy learning has become a theme of educational discussion in various countries. Based on Guy Claxton's "Building Learning Power" (BLP) theoretical basis, this article explores the correlation between teachers' teaching ability construction and students' learning ability development. It takes middle school teachers as the research object and selects all teachers from Guidian Middle School to use a questionnaire. Survey and data analysis are the main methods to study how teachers cultivate the four “R”s of BLP, resilience, resourcefulness, reflectiveness, and reciprocity in their students. First, the relevant literature, concepts and structural dimensions were reviewed, and teachers' classroom teaching variables were explained, including Lessons' content, "Soft creativity", Enhancing skills and Attitude development, and a theoretical analysis was conducted on students' practical abilities, namely the "4 R's". Secondly, based on literature research, relevant scales were proposed and revised to collect the data needed for this study. The tool used for the main research content is a questionnaire. The questionnaire consists of three parts. The first part contains the personal information of the interviewed teachers, such as gender, age, teaching experience, etc. The second part is the correlation between teachers' classroom teaching practices and building learning abilities. Assessment, the third part is the assessment of the interviewed teachers' understanding of building learning abilities. This study used SPSS22.0 to develop the questionnaire, and adopted reliability and validity analysis, correlation analysis, independent sample t test, Mann-Whitney U /Kruskal-Wallis test. Spearman's rho Correlation Analysis and Decision Criteria. Finally, based on the "Building Learning Power" (BLP) theory, the influencing factors of teachers' classroom teaching practices on the development of students' learning abilities are discussed and summarized, and corresponding development strategies are proposed.

Keywords: Lifelong Learning; Teacher's Teaching Practice; Enhance Students' Ability.

1. Introduction

Guy Claxton (2012) is a major contemporary thinker in education who argues that the traditional concept of education, which is still the focus of government policy for schools, is unfit for preparing students for the challenges and complexities of the twenty-first century. Claxton's theories have had a practical impact in many schools which have engaged with his “Building Learning Power” (BLP) programme, a programme which according to Claxton, there are two central aspects of educational change, firstly, the world is a changing environment where students will have to cope with uncertainties, the complexities of developing technology and complicated infrastructures. For Claxton, education must also change to meet these challenges, but, he cautions: “This will not happen if they remain founded on a narrow conceptualization of learning, one which focuses on content over process, comprehension over competence, “ability” over engagement, teaching over self-discovery. “(2002c:121) Secondly, Claxton stated that cognitive science suggests most students have the faculty to become better learners if the conditions for learning are appropriately supportive and encouraging. Claxton believes science now offers a broader means of perceiving what learning is all about. This perception ‘includes feeling and imagination, intuition, and experience, external tools and the cultural milieu, as well as the effort to understand (Claxton, 2002c: 121) (Aubrey and Riley, 2019).

If this fresher notion of learning and teaching is adopted, instead of the more traditional approaches, then students will be better prepared to confront the challenges they face throughout their lives. Being aware of the influence of culture is paramount in this new fresher notion of learning and teaching. As it ‘impacts on students’ interpretation of task performance and their views of themselves as learners’ (Pollard 2005).

Interestingly, Claxton does not shy away from the effort students need to exercise in building a capacity to learn and is quite forthright in questioning levels of student's persistence: “Learning is finding out something that you did not know and struggling with it. It is almost as if, if (today's students) do not know something immediately they feel as though they are failing,” (2012:7).

What hampers such lack of persistence and the realization that learning is a struggle could be the students' possible deficiency in suitable habits, skills, and attitudes in which Claxton states are needed for what he termed “learning power”. If the students acquire this learning power and if the teachers create and structure appropriate lessons, they can work at noticeably greater levels of learning and achievement (Griffith and Burns, 2013) (Aubrey and Riley, 2019).

2. Statement of the Problem

Learning power is about developing the whole student. It is more than just learning skills, it is about enjoying the learning experience, about having a learner identity and

seeking opportunities for learning. Building learning power involves developing four aspects of student learning, the four “Rs” according to Claxton, resilient, resourceful, reflective and reciprocal. All these are attractive solutions to developing learning and have practical implications for the classroom today. Thus, the researcher aims to determine and to assess the pedagogical practices and understanding of the teachers in the senior high school students as to the implementation of the Building Learning Power in the classroom as solution to better learning among students.

Specifically, it seeks to answer to the following questions:

1. What is the profile of the respondents in terms of:
 - 1.1. Sex
 - 1.2. Age
 - 1.3. Length of experience
2. What is the assessment on the pedagogical practices of teachers in the classroom in relation to “building learning power” using the following subvariables:
 - 2.1. Lessons’ content
 - 2.2. “Soft creativity”
 - 2.3. Enhancing skills
 - 2.4. Attitude development
3. What is the assessment of the teacher respondent’s understanding of “Building Learning Power” as learning and teaching practices in relation to the following subvariables?
 - 3.1. resilience
 - 3.2. resourcefulness
 - 3.3. reflectiveness
 - 3.4. reciprocity
4. Is there a significant difference between the teacher respondents’ understanding of “Building Power” and pedagogical practices of teachers in the classroom when the respondents are grouped based on their demographic factors?
5. Is there a significant relationship between the teacher respondents’ understanding of “Building Learning Power” to the pedagogical practices of teachers in the classroom?
6. What output can be proposed based on the findings of the study?

3. Scope and Delimitations

The study was held at Guidian middle school and 1 Jinji Road, Guilin City, Guangxi, China. The respondents of the study were the senior high school teachers who are actively teaching in Guidian middle school. The school has a total population of 200 teachers and 2400 senior high school students. The participants are the population and they are purposively sampled since the researcher relied on her judgment when to choose members of the population to participate in the survey. Self-made questionnaire was created and the process of validation and reliability was done prior to the data gathering. the validity of the survey questionnaire was also done by panel of experts in China and the reliability test used the cronbach alpha, as a way of assessing reliability on the amount of variance among the items in the survey instrument.

4. Hypothesis

Ho1. There is no significant difference between the teacher respondents’ understanding of “Building Power” to the pedagogical practices of teachers in the classroom.

Ho2. There is a significant relationship between the teacher respondents’ understanding of “Building Learning Power” to the pedagogical practices of teachers in the classroom?

5. Research Design

This study employed a descriptive-correlational quantitative design which will naturally measure the occurrence of variables. Specifically, the descriptive research design and cross-sectional assessments will be used to describe the significant relationship between the teacher respondents’ understanding of “Building Learning Power” teaching and learning practices in the classroom. The subvariables identified in relations to understanding and pedagogical practices using the building learning power approach will be statistically measured.

By definition, descriptive research is non-experimental research used to describe and interpret the current status of individuals, settings, conditions, or events, while the researcher is studying the phenomenon of interests as it exists naturally with no attempt to manipulate any of the variables. And the cross-sectional survey is helpful to examine the possible differences of characteristics among several samples or population measured at one point in time (Mertler, 2016).

6. Research Locale and Research Participants

The study was held at Guidian middle school and 1 Jinji Road, Guilin City, Guangxi, China. The respondents of the study were the senior high school teachers who are actively teaching in Guidian middle school. The school has a total population of 200 teachers and 2400 senior high school students. The participants are the teachers and they are purposively sampled since the researcher rely on her judgment when to choose members of the population to participate in the survey.

7. Data Gathering Procedure

Prior to the conduction of the study, the ethical clearance was obtained from the ethical Board, and since the Apostilled was permitted, the researcher sought and used it.

The researcher sought the necessary validation of experts to investigate the survey questionnaire.

The researcher selected participants from the Guidian Middle School, senior high school students, who fulfil the criteria for the study, they are welcomed, and a rapport is established within the participant. Secondly, a consent form is taken from the participants keeping to all the ethical guidelines and code of conduct. Lastly, the participant was also given a brief detailing about the rationale of the study and the procedures and brief introduction about the questionnaires are introduced.

After the collection of data, the researcher sought the help of the Statistician to treat and guide her to make tables and analyze the results.

8. Research Instrument

The researcher constructed a self-made questionnaire that assessed significant relationship between the teacher respondents’ understanding of “Building Learning Power” to the pedagogical practices of teachers in the classroom. The pedagogical practices of teachers in the classroom in relation to “building learning power” using the following subvariables, Lessons’ content, “Soft creativity”, Enhancing skills and Attitude development would be assessed. The teacher respondent’s understanding of “Building Learning Power” as learning and teaching practices in relation to the following

subvariables, resilience, resourcefulness, reflectiveness, and reciprocity would also be measured.

To satisfy the validity and reliability of the self-made survey questionnaire, a panel of experts in educational and specialized field will evaluate it. Pilot testing will also be conducted prior to the gathering of data.

9. Results and Discussion

This chapter presents the results of the study in tabular

presentation following the sequence of the statement of the problems and its discussion.

This chapter includes a tabular representation of the collected data, as well as its analysis and interpretation. The conclusions presented in this section are based on the findings of a statistical analysis conducted using jamovi 2.3.19.

9.1. Lessons' Content

Table 1. Assessment of Pedagogical Practices of Teachers in Relation to Building Learning Power in terms of Lessons' Content

Indicators	Mean	SD	Verbal Interpretation	Rank
1The teacher let the student demonstrates information given in a realistic and practical way.	3.05	0.94	Highly Evident	8
2The teacher let the student understands the main objective of the lesson.	3.05	0.94	Highly Evident	8
3The teacher let the student be given tangible reinforcers the moment the task is accomplished efficiently and effectively.	3.05	0.97	Highly Evident	8
4The teacher let the student demonstrates in critical and creatice way the lessons' content taught.	3.08	1.29	Highly Evident	5.5
5The teacher designs engaging content on the lesson tasks.	3.15	0.98	Highly Evident	3
6The teacher uses scaffolding for students to grasp new concepts.	3.14	0.91	Highly Evident	4
7The teacher let the student develops patience when working towards long-term goals.	3.08	0.99	Highly Evident	5.5
8The teacher always plan and assess learning activities effectively.	3.39	1.21	Highly Evident	1
9The teacher creates a realistic timeline for the lessons.	3.22	0.91	Highly Evident	2
COMPOSITE MEAN	3.06	0.93	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not at All Evident); 1.51-2.50: Disagree (Not Quite Evident); 2.51-3.50; Agree (Highly Evident); 3.51-4.00: Strongly Agree (Very Highly Evident)

Table 1 summarizes the respondents' assessments of pedagogical practices in relation to building practices in the classroom in terms of lessons' content. It resulted in a composite mean score of 3.06 and a standard deviation of 0.93, indicating that the practices are highly visible and that they agree that they always perform planning and assessing learning activities effectively (M = 3.39) and create a realistic

timeline for the lessons (M = 3.22). Furthermore, they agree that they create engaging content for lesson tasks (M = 3.15) and use scaffolding to help students grasp new concepts (M = 3.14).

9.2. Soft Creativity

Table 2. Assessment of Pedagogical Practices of Teachers in Relation to Building Learning Power in terms of Soft Creativity

Indicators	Mean	SD	Verbal Interpretation	Rank
1The teacher let the student make connections to the lesson on the other discipline or situation.	3.14	1.03	Highly Evident	5
2The teacher let the student asks critical questions about anything.	3.13	1.01	Highly Evident	6
3The teacher let the student understand and empathize with others.	3.21	0.97	Highly Evident	3
4The teacher let the student builds lasting friendship with his classmates through collaborative tasks.	3.07	1.03	Highly Evident	8
5The teacher let the student be proficient in team-oriented skills and ready to motivate others.	3.12	1.01	Highly Evident	7
6Negotiation and persuasion are visible to the student's way of communication.	3.29	1.28	Highly Evident	1.5
7The teacher let the student manages conflict well by exposing them to practical situations.	3.16	0.97	Highly Evident	4
8The teacher let the student creates plan to maximize success in a variety of tasks that involve teamwork.	3.29	1.28	Highly Evident	1.5
COMPOSITE MEAN	3.05	1.05	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not at All Evident); 1.51-2.50: Disagree (Not Quite Evident); 2.51-3.50; Agree (Highly Evident); 3.51-4.00: Strongly Agree (Very Highly Evident)

Table 2 provides the assessment of pedagogical practices in relation to building practices in the classroom in terms of soft

creativity of selected teachers. Based on tabulated data, it obtained a composite mean score of 3.05 and a standardized deviation of 1.05. This means that the teachers agree that the practices are highly visible and that negotiation and persuasion are visible in the student's communication style ($M = 3.29$) and that they allow the student to create a plan to maximize success in a variety of teamwork tasks ($M = 3.29$).

From Teaching Experimental Political Science by Elizabeth A. Bennion (2024), Chapter 2 of this book connects teaching best practices to four strategies for teaching experimental political science in diverse classrooms. These strategies include: active learning, team exercises,

community framework values, and project frameworks. Because a diverse classroom can also lead to a broader high school experience, her team discussed the importance of teaching foundational skills and knowledge rather than assuming background training. Explores ways to strengthen students' soft skills critical to project success. These methods not only advance student learning; they also inspire innovative, culturally relevant research and inspire enthusiasm about how experimental social science can serve their home communities.

9.3. Enhancing Skills

Table 3. Assessment of Pedagogical Practices of Teachers in Relation to Building Learning Power in terms of Enhancing Skills

Indicators	Mean	SD	Verbal Interpretation	Rank
1The teacher let the student shows the ability to select between 2 or more alternatives to reach the best outcomes in the shortest time.	3.12	0.95	Highly Evident	5
2The teacher let the student cooperates with peers personally and socially.	3.08	1.00	Highly Evident	7
3The teacher let the student acknowledges differences in peer abilities in reaching learning goals.	3.18	0.96	Highly Evident	4
4The teacher let the student develops good decisions that foster opportunity for growth for the class.	3.10	0.97	Highly Evident	6
5The teacher let the student interacts with peer in a fun and challenging group-related activities.	3.24	1.31	Highly Evident	1
6The teacher let the student enjoys the benefit of positive social interaction and always makes sense to a difficult situation with intelligent solution.	3.19	0.95	Highly Evident	2.5
7The teacher let the student looks for a best solution to a problem.	3.19	1.00	Highly Evident	2.5
8The teacher let the student be aware of the benefits of being skillful to various profession or job tasks that is why he improves his wide range of competencies such as logic, and determination.	3.07	1.29	Highly Evident	8
COMPOSITE MEAN	3.06	0.99	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not at All Evident); 1.51-2.50: Disagree (Not Quite Evident); 2.51-3.50; Agree (Highly Evident); 3.51-4.00: Strongly Agree (Very Highly Evident)

Table 3 displays the assessment of pedagogical practices in relation to classroom building practices in terms of skill enhancement, with a composite mean score of 3.06 and a standard deviation of 0.99. The findings show that the teachers agree that the practice is highly visible, that they allow the student to interact with peers in fun and challenging group-related activities ($M = 3.24$), to benefit from positive social interaction, and that they always make sense of a difficult situation with an intelligent solution ($M = 3.19$). They also agree that they allow the student to look for the best solution to a problem ($M = 3.19$) and to recognize differences in peer abilities in reaching learning goals ($M = 3.18$).

In their paper on Staff – student collaboration: student learning from working together to enhance educational practice in higher education, Claire Dickerson, Joy Jarvis &

Lewis Stockwell (2016) explored the connection between research and teaching, and the relationship between students and academic staff in higher education. Roles and responsibilities and the nature of their interrelationships are important issues. Students' reflections showed that they perceived learning to be linked to employability skills and graduate qualities, and more importantly to their views of themselves as learners and the role they play in their own and others' learning. This article draws attention to the potential of teacher-student collaborations, collective environments, in developing teaching practice, and the opportunities they can provide for individual students' learning in the higher education process.

9.4. Developing Attitude

Table 4. Assessment of Pedagogical Practices of Teachers in Relation to Building Learning Power in terms of Developing Attitude

Indicators	Mean	SD	Verbal Interpretation	Rank
1The teacher let the student improves his attitude by giving situational cases to apply.	3.07	0.98	Highly Evident	8
2The teacher gives direct experience and examples for students to model.	3.17	0.96	Highly Evident	6
3The teacher let the student regulates his emotion, thoughts and behavior effectively in different situation.	3.49	1.13	Highly Evident	1
4Students who are focused in task are affirmed by the teacher.	3.27	1.29	Highly Evident	2
5Students in the presence of peers engage better in tasks, so the teacher always incorporates this strategy.	3.18	0.93	Highly Evident	4.5
6The teacher let the student practice their coping mechanism in problem solving situations.	3.24	1.31	Highly Evident	3
7The teacher gives enough lesson activities that test the self-regulation of the students.	3.18	0.96	Highly Evident	4.5
8The teacher plays an arbiter to challenging situations confronted by the students, then process the learning on it.	3.10	0.99	Highly Evident	7
COMPOSITE MEAN	3.08	1.03	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not at All Evident); 1.51-2.50: Disagree (Not Quite Evident); 2.51-3.50; Agree (Highly Evident); 3.51-4.00: Strongly Agree (Very Highly Evident)

Table 4 shows how the teachers rated the assessment of pedagogical practices in relation to developing attitudes in terms of building learning power. According to the descriptive statistics, the composite mean score was 3.08, with a standard deviation of 1.03. This implies that respondents agree that they allow students to effectively regulate their emotions, thoughts, and behavior in various situations ($M = 3.49$) and that students who are focused on a task are affirmed by them ($M = 3.27$). Furthermore, they agree that they allow the students to practice their coping mechanisms in problem-solving situations ($M = 3.24$) and provides enough lesson activities to test the students' self-regulation ($M = 3.18$).

David Blazar and Matthew A. KraftView (2016) Research on Teacher and Teaching Effects on Students' Attitudes and Behaviors has primarily focused on how teachers influence student performance on standardized tests, although there is evidence that a wide range of attitudes and behaviors affect their long-term Success is equally important. But teachers have a strong influence on self-report measures of students' math self-efficacy, classroom well-being, and classroom behavior. Student attitudes and behaviors can be predicted by the instructional practices closest to these measures, including teachers' emotional support and classroom organization. However, teachers who are effective at improving test scores are often not equally effective at improving student attitudes

and behavior. These findings provide empirical evidence for established theories about the multidimensional nature of teaching and the need to identify strategies to improve teachers' comprehensive skills.

Similarly, the paper Teacher Effectiveness in First Grade: The Importance of Background Qualifications, Attitudes, and Instructional Practices for Student Learning by Gregory J. Palardy and Russell W. Rumberger (2008) uses data from the Early Childhood Longitudinal Study to investigate three aspects of teacher effects. The importance of general aspects—teacher background qualifications, attitudes, and instructional practices—to improved first-grade reading and mathematics achievement. Results indicate that background qualifications are less strongly associated with achievement gains than teaching practices. These findings suggest that the No Child Left Behind Act's "highly qualified teacher" provisions, which screen teachers based on their background qualifications, are not sufficient to ensure that classrooms are led by teachers who can effectively improve student achievement. To achieve this, education policy must focus on improving all aspects of teaching, such as teaching practices and teachers' attitudes.

9.5. Resilience

Table 5. Assessment of the Understanding of Building Learning Power in terms of Resilience

Indicators	Mean	SD	Verbal Interpretation	Rank
1The teacher let the student demonstrates nonverbal social reinforcers like smile or high five to a difficult task that is achieved or completed well.	3.14	0.93	Highly Evident	8
2The teacher let the student controls his anger when he did not achieve his goal.	3.39	1.21	Highly Evident	1.5
3The teacher let the student process challenging life experiences as viewed on films.	3.39	1.22	Highly Evident	1.5
4The teacher let the student demonstrates understanding of being self-motivated despite of a challenging task.	3.36	1.23	Highly Evident	3
5The teacher let the student practice emotional and behavioral flexibility in the class.	3.31	1.27	Highly Evident	4
6The teacher let the student exhibits responsible personal and social behavior that respects self and others.	3.18	1.00	Highly Evident	6.5
7The teacher let the student develop patience when working towards long-term goals.	3.25	0.95	Highly Evident	5
8The teacher let the student learns coping strategies when he feels sad or fearful to a situation unfamiliar to him.	3.18	0.99	Highly Evident	6.5
COMPOSITE MEAN	3.12	1.09	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not at All Evident); 1.51-2.50: Disagree (Not Quite Evident); 2.51-3.50; Agree (Highly Evident); 3.51-4.00: Strongly Agree (Very Highly Evident)

Table 5 provides respondents' perceptions of building power as a learning and teaching practice in relation to resilience. It yielded a composite mean score of 3.12 and a standard deviation of 1.09, indicating that the teachers agree that they allow the student to control his anger when he did not achieve his goal ($M = 3.39$) and allowed the student to process challenging life experiences as seen in films ($M = 3.39$). They also agree that they have allowed the student to demonstrate understanding of being self-motivated despite a difficult task ($M = 3.36$) and to practice emotional and behavioral flexibility in class ($M = 3.31$).

The paper Developing Resilient Agency in Learning: The

Internal Structure of Learning Power by Ruth Deakin Crick, Shaofu Huang, Adeela Ahmed Shafi & Chris Goldspink (2015) explores and generates a more robust and concise measurement model, strengthening its research properties and practical value. The new model proposes a view of learning as a specific, interconnected process through which the flow of energy and information can be regulated to achieve specific ends. Learning dispositions reflect the way in which resilient agents develop by regulating the flow of energy and information in learning to respond to challenges, risks, and uncertainties, and to adapt and change proactively.

In Stephen Sterling's (2013) book Resilience in Social-

Ecological Systems, the topic of Learning for resilience, or the resilient learner? Towards a necessary reconciliation in a paradigm of sustainable education is also discussed. This exploratory paper proposes, in various discourses, the possibilities and potential of an integrative paradigm for sustainability education that reconciles instrumental and intrinsic educational traditions and is informed by resilience theory and social learning. The article argues that this integrated perspective is necessary in the context of the urgent need to build more resilient local socio-ecological systems (SES), and that this perspective provides new energy and

direction to the education for sustainable development debate. There are also similarities with the tensions in debates when sustainable development is viewed as an ideal or a process. The paper concludes by proposing a transformative educational paradigm- “sustainable education” -that must integrate instrumental and intrinsic perspectives and develop resilient learners who can thrive in the face of threats, uncertainty, and surprises. The future lies in the development of resilient social and ecological systems.

9.6. Resourcefulness

Table 6. Assessment of the Understanding of Building Learning Power in terms of Resourcefulness

Indicators	Mean	SD	Verbal Interpretation	Rank
1The teacher let the student practice problem-solving skills in quick and clever way.	3.15	0.98	Highly Evident	6.5
2The teacher uses minimal resources in a lesson for the students to find ways to enrich the outcomes.	3.20	0.90	Highly Evident	4
3The teacher let the student to take always the initiative.	3.13	0.96	Highly Evident	8
4The teacher let the student create useful and unique solutions to problem/situation.	3.33	1.25	Highly Evident	2
5The teacher let the student be proficient in team-oriented skills that are practical and usable.	3.50	0.50	Highly Evident	1
6The teacher assess students in an out-of-the-box test to monitor the generation of ideas in a resourceful way.	3.28	1.29	Highly Evident	3
7The teacher let the student possess a resourceful mindset to difficult task.	3.18	1.00	Highly Evident	5
8The teacher let the student creates plan to maximize success in a variety of tasks that involve teamwork.	3.15	0.96	Highly Evident	6.5
COMPOSITE MEAN	3.07	1.00	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not at All Evident); 1.51-2.50: Disagree (Not Quite Evident); 2.51-3.50; Agree (Highly Evident); 3.51-4.00: Strongly Agree (Very Highly Evident)

Table 6 The evaluation of the understanding of building learning power as a learning and teaching practice in terms of resourcefulness is presented in Table 6. According to the descriptive statistics, the composite mean score was 3.07, with a standard deviation of 1.00. This implies that the teachers agree that they allow the student to be proficient in team-oriented skills that are practical and usable ($M = 3.50$) as well as allows the student to create useful and unique solutions to problems or situations ($M = 3.33$). Furthermore, they agree that they assess the students using an out-of-the-box test to monitor the generation of ideas in a resourceful way ($M = 3.28$) and uses few resources in a lesson for the students to find ways to enrich the outcomes ($M = 3.20$).

Guy Claxton, Maryl Chambers, Graham Powell & Bill Lucas (2011) mentioned in their book *The Learning Powered School Pioneering 21st Century Education*, “BLP is definitely not for those who want a quick fix. It demands of schools exactly the same kinds of resilience and resourcefulness that they are aiming to strengthen in their students. “Even some teachers, and indeed some students, may not like it or understand it in the first place. There will most likely be rational skepticism and even reflexive cynicism that will need to be overcome.

9.7. Reflectiveness

Table 7 presents an evaluation of the understanding of building learning power as a learning and teaching practice in terms of reflectiveness. The descriptive statistics showed that the composite mean score was 3.12, with a standard deviation of 0.99. This implies that they agree that they allow students

to recognize differences in peer abilities in reaching learning goals ($M = 3.39$) and to challenge their assumptions and beliefs on certain issues ($M = 3.36$). Similarly, they agree that they make the students aware of the empathy in order for them to see things from different perspectives ($M = 3.20$) and allow the students to make good decisions that foster opportunities for growth in the class ($M = 3.15$).

Evelyn M. Boyd and Ann W. Fales (1983) *Reflective Learning: Key to Learning from Experience* believes that reflective learning is a process of inner examination and exploration of issues of concern triggered by experience, which creates and clarifies meaning in the self, and resulted in a change in conceptual perspective. This process is central to understanding the experiential learning process.

Yayat Suharyat, Ibnu Muthi, Haswani Haswani (2022) *Evaluating A Mid School Program in Bekasi: The Building Learning Power*, the learning capacity building program aims to optimize all abilities of students in terms of cognitive and soft skills, and to design and implement students’ short-term and long-term goals. Situational evaluation showed that the project has a strong need for students to improve their self-competence and soft skills. Achievement programs that build learning skills must continue to improve as the benefits are felt by both students and parents.

Table 7. Assessment of the Understanding of Building Learning Power in terms of Reflectiveness

Indicators	Mean	SD	Verbal Interpretation	Rank
1The teacher let the student reflect on things.	3.14	0.97	Highly Evident	5.5
2The teacher let the student thinks calmly and quietly on task that is challenging.	3.14	0.99	Highly Evident	5.5
3The teacher let the student acknowledges differences in peer abilities in reaching learning goals.	3.39	1.21	Highly Evident	1
4The teacher let the student develops good decisions that foster opportunity for growth for the class.	3.15	0.95	Highly Evident	4
5The teacher let the students think laterally.	3.13	0.98	Highly Evident	7
6The teacher let the student challenge their assumptions and beliefs on certain issues.	3.36	1.24	Highly Evident	2
7The teacher let the student looks for a best solution to a problem.	3.10	0.96	Highly Evident	8
8The teacher let the student be aware of the empathy for them to see things from different perspectives.	3.20	1.33	Highly Evident	3
COMPOSITE MEAN	3.12	0.99	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not at All Evident); 1.51-2.50: Disagree (Not Quite Evident); 2.51-3.50; Agree (Highly Evident); 3.51-4.00: Strongly Agree (Very Highly Evident)

9.8. Reciprocity

Table 8. Assessment of the Understanding of Building Learning Power in terms of Reciprocity

Indicators	Mean	SD	Verbal Interpretation	Rank
1The teacher gives situation to students to practice exchanging of things with others for mutual benefit.	3.24	0.95	Highly Evident	4
2The teacher typically make a point to greet birthdays of each student.	3.08	0.97	Highly Evident	7
3The teacher let the student reciprocates good deeds.	3.14	1.01	Highly Evident	6
4The teacher let the student support each other on difficult and challenging tasks.	3.35	1.24	Highly Evident	1
5The teacher let the student comfort a peer who is struggling and facing difficult family problems.	3.30	0.85	Highly Evident	3
6The teacher let the student practice their coping mechanism in problem solving situations.	3.34	1.25	Highly Evident	2
7The teacher gives enough lesson activities that test the self-regulation and reciprocity in a relationship of the students.	3.16	0.97	Highly Evident	5
8The teacher let the student create more positive experiences inside and outside the classroom.	3.04	1.02	Highly Evident	8
COMPOSITE MEAN	3.08	0.99	Highly Evident	

Legend: 1.00-1.50: Strongly Disagree (Not at All Evident); 1.51-2.50: Disagree (Not Quite Evident); 2.51-3.50; Agree (Highly Evident); 3.51-4.00: Strongly Agree (Very Highly Evident)

Table 8 shows an assessment of the understanding of building learning power as a learning and teaching practice in terms of reciprocity, with a composite mean score of 3.08 and a standard deviation of 0.99. This suggests that the teachers agree that they allow students to support each other on difficult and challenging tasks ($M = 3.35$), as well as allow students to practice their coping mechanisms in problem-solving situations ($M = 3.24$). Similarly, they agree that they allow students to comfort a peer who is struggling and dealing with difficult family issues ($M = 3.30$) and provide opportunities for students to practice exchanging items with others for mutual benefit ($M = 3.24$).

Through Maud Ciekanski (2007) Fostering learner autonomy: power and reciprocity in the relationship between language learner and language learning adviser, researchers believe that “Developments in lifelong learning and learner autonomy have given fresh impetus to the debate about learning without formal teaching. “They The analysis highlights the determinants of counselor education strategies, perceptions of counseling standards, and the maintenance and

evolution of their “professional posture.” The concept of educational reciprocity provides a useful framework for understanding the specific pedagogical relationship of language consultation sessions.

9.9. Pedagogical Practices

1) Sex

Table 9 shows how the assessment of pedagogical practices in relation to developing learning power differs when teachers are divided into gender groups. The analysis of the Mann-Whitney U test revealed p-values that are greater than the 0.05 level of significance for lessons’ content ($U = 5158.00$; $p = 0.754$), soft creativity ($U = 5284.00$; $p = 0.986$), enhancing skills ($U = 5131.50$; $p = 0.707$), and developing attitude ($U = 5213.50$; $p = 0.855$), indicating that the null hypothesis will not be rejected. As a result, regardless of their assigned sex, the teachers’ assessment of pedagogical practices in relation to developing learning power is the same.

Table 9. Difference in the Pedagogical Practices in Relation to Building Learning Power Based on Sex

	U	p	Interpretation	Decision
Lessons' content	5158.00	0.754	Not Significant	Accept H ₀
Soft Creativity	5284.00	0.986	Not Significant	Accept H ₀
Enhancing skills	5131.50	0.707	Not Significant	Accept H ₀
Developing Attitude	5213.50	0.855	Not Significant	Accept H ₀

10. DISCUSSION

This chapter presents the summary of findings, the conclusions and recommendations based on the findings of the study.

Summary of the Findings

1. In terms of sex, 98 respondents were female and 108 were male, accounting for 48% and 52% of the total number of respondents respectively, indicating a balanced gender ratio. In terms of age, the number of respondents between 31 and 40 years old is the largest, with 73, followed by the number of respondents between 41 and 50 years old, the number of respondents between 21 and 30 years old is 42, and the number of respondents over 51 years old is 41. In terms of teaching experience, 65 respondents have worked for 11-21 years, followed by 52 for 6-10 years, 47 for more than 21 years, and 42 for 1-5 years.

2. In terms of teaching evaluation of lessons' content, respondents' curriculum content evaluation of teaching practices related to classroom building practices had a comprehensive mean score of 3.06 and a standard deviation of 0.93, indicating that the practices were highly visible, and they agreed that they always effectively executed planned and evaluated learning activities and created a realistic timeline for the curriculum. In addition, they also agreed that they create engaging content for course tasks and use scaffolding to help students master new concepts. As can be seen from the small value of the standard deviation, the assessment appears to be uniform.

3. In the assessment of soft creativity teaching practice, the comprehensive average score of the respondents' soft creativity was 3.05, and the standardization deviation was 1.05. This means that teachers agree that these practices are highly visible, that negotiation and persuasion are visible in students' communication styles, and that they allow students to create a plan to maximize success in a variety of teamwork tasks.

4. In terms of teaching practice evaluation of skills and curriculum construction, the comprehensive average score and standard deviation of respondents' table were 3.06 and 0.99. The findings show that teachers agree that practice is highly visible, that they allow students to engage with peers in interesting and challenging group related activities, benefit from positive social interactions, and that they always understand difficulties with an intelligent solution. They also agree that they allow students to look for the best solution to a problem and recognize differences in peers' abilities in reaching learning goals.

5. In terms of teachers' attitude towards assessment and

development of learning ability, according to descriptive statistics, the comprehensive average score is 3.08 and the standard deviation is 1.03. This means that respondents agree that they allow students to effectively regulate their emotions, thoughts, and behaviors in a variety of situations, and that students who focus on a task are affirmed by them. In addition, they agreed that they allow students to practice their coping mechanisms in problem-solving situations and provide enough curriculum activities to test students' self-regulation skills.

6. In terms of teachers' attitude towards assessment and development of learning ability, according to descriptive statistics, the comprehensive average score is 3.08 and the standard deviation is 1.03. This means that respondents agree that they allow students to effectively regulate their emotions, thoughts, and behaviors in a variety of situations, and that students who focus on a task are affirmed by them. In addition, they agreed that they allow students to practice their coping mechanisms in problem-solving situations and provide enough curriculum activities to test students' self-regulation skills.

7. In terms of resilience, it produced a compound mean score of 3.12 and standard deviation of 1.09, indicating that teachers agreed that they allowed the student to control his anger when he did not achieve his goal, allowing the student to deal with challenging life experiences in the film. They also agree that they allow students to demonstrate self-motivated understanding under a difficult task and practice emotional and behavioral flexibility in the classroom.

8. In terms of resourcefulness, the comprehensive average score of this project is 3.07 and the standard deviation is 1.00. This means that teachers agree that they allow students to become proficient in practical and usable team-oriented skills and allow students to create useful and unique solutions to problems or situations. In addition, they agreed that they used out-of-the-box testing to monitor idea generation in a resourceful way, and used few resources in the course to find ways to enrich the results.

9. In terms of reflectiveness, the comprehensive average was 3.12 with a standard deviation of 0.99. This means that they agree that they allow students to recognize differences in their peers' abilities as they reach their learning goals and challenge their assumptions and beliefs about certain issues. Similarly, they agree that they make students aware of memories so that they see things from a different perspective and allow students to make good decisions that promote opportunities for growth in the classroom.

10. In terms of reciprocity, the comprehensive average score is 3.08 and the standard deviation is 0.99. This shows that teachers agree that they allow students to support each other on difficult and challenging tasks and allow students to practice their coping mechanisms in problem-solving situations. Similarly, they agree that they allow students to comfort peers who are struggling and dealing with difficult family issues, and provide students with opportunities to practice exchanging items with others.

11. Conclusion

1. The sex proportion of respondents is balanced, with middle-aged teachers accounting for a large proportion, young teachers with little working experience and older teachers accounting for a small proportion, which conforms to the normal distribution.

2. When teachers are divided into gender groups, teachers'

evaluation of learning ability related to teaching practice and development is the same.

3. When teachers are classified according to age and have a medium effect size, there is a significant difference in the assessment of building learning ability by teaching practice. Specifically, those teachers aged 31-40, 41-50 and 51 and older scored higher than those aged 21-30.

4. There are differences in the assessment of teaching practices in building learning capacity, with differences found between 21-30 and 31-40, 21-30 and 41-50, and 21-30 and 51 and older. In particular, soft creativity scores were higher than other teachers at ages 31 to 40, 41, 50, and 51 and older.

5. When teachers are classified according to the length of their teaching experience, it is found that the evaluation of teaching practice and the development of learning ability is different in the course of the teachers' teaching experience sample. It was found that teachers with 6-10, 11-20, and 21 years or more of teaching experience scored higher on lessons' content than teachers with 1-5 years of teaching experience.

6. When teachers were grouped according to their assigned gender, there was no significant difference in the assessment of understanding of building learning power. There is sufficient sample evidence to conclude that assessments of understanding of building learning power vary with age.

7. The study found that teachers aged 31-40, 41-50, 51 and above have a higher resilience score than those aged 21-30.

8. The research finds that teachers aged 31-40, 41-50 and 51 and above are more resourceful than teachers aged 21-30.

9. The study found that teachers aged 31-40, 41-50, and 51 and older were more reflective than those aged 21-30.

10. The study found that teachers aged 31-40, 41-50, and 51 and older were more reciprocal than those aged 21-30.

12. Recommendations

1. Pay attention to the development of young teachers: As young teachers (21-30 years old) have low scores in several dimensions of teaching ability, training and guidance should be strengthened to improve their teaching practice ability and build learning ability. Coaching and mentoring for young teachers and the seasoned ones should be part of the program.

2. Give full benefits and advanced training programs for to the middle-aged teachers: Middle-aged teachers (31-50 years old) score high on several dimensions of teaching ability, and their advantages in teaching practice should be fully exploited, and they should be encouraged to share their experience and teaching methods to drive the development of the whole teacher team.

3. Pay attention to the accumulation of teaching experience: teaching experience has a significant impact on teachers' teaching ability. Teachers should be encouraged to continuously accumulate teaching experience and provided with corresponding career development paths so that they can continuously improve themselves in teaching practice.

4. Pay attention to gender balance: Although gender does not show significant differences in some teaching ability assessments, it is still necessary to maintain gender balance in the teaching team to make full use of the teaching characteristics and advantages of teachers of different genders.

5. Strengthen teaching evaluation and feedback: Teachers' teaching practices should be evaluated regularly to provide specific feedback and suggestions to help them identify and improve their own teaching methods and strategies.

6. Promote communication and cooperation among

teachers: there are differences in teaching ability among teachers of different ages and experiences. Teaching and research activities and teaching sharing meetings should be organized to promote communication and cooperation among teachers to realize resource sharing and experience complementing.

7. Pay attention to teachers' personal growth: Teachers' development is an ongoing process, and their personal growth needs should be paid attention to, and necessary support and resources should be provided to help them achieve professional development and personal improvement.

8. Cultivate teachers' ability to build learning power: In addition to teaching ability, emphasis should also be placed on cultivating teachers' soft skills, such as resilience, resource utilization ability, reflective ability and reciprocity spirit, which are equally important for teachers' career development and teaching quality improvement.

9. BUILDING LEARNING POWER PROGRAM FOR SENIOR HIGH SCHOOL

Rationale: What hampers such lack of persistence and the realization that learning is a struggle could be the students' possible deficiency in suitable habits, skills, and attitudes in which Claxton states are needed for what he termed "learning power". If the students acquire this learning power and if the teachers create and structure appropriate lessons, they can work at noticeably greater levels of learning and achievement. From this rationale, the researcher has come up with this proposed program.

General Objective: From the results of the study, it would then be proposed that teachers have to use a systematic approach to planning and delivering information-packed lessons to students who passively receive the information from the teachers by using "Building Learning Power" (BLP) programme, a programme which according to Claxton, there are two central aspects of educational change, firstly, the world is a changing environment where students will have to cope with uncertainties, the complexities of developing technology and complicated infrastructures. Secondly, Claxton stated that cognitive science suggests most students have the faculty to become better learners if the conditions for learning are appropriately supportive and encouraging. Thus, the proposed output.

References

- [1] Association of Teachers and Lecturers, 2005. London: Association of Teachers and Lecturers.
- [2] Baer, J., & Kaufman, J. C. (2017). The amusement park theoretical model of creativity: An attempt to bridge the domain-specificity/generalizability gap. In J. C. Kaufman, V. P. Glaveanu, & J. Baer (Eds.), *The Cambridge handbook of creativity across domains*. (pp. 8-17). Cambridge University Press.
- [3] Boyd, E. M., & Fales, A. W. (1983). Reflective learning: Key to learning from experience. *Journal of humanistic psychology*, 23(2), 99-117.
- [4] Chen, Jinhui. (2022). Learning Dynamic Design: Components and teaching Strategies. *Digital Education*, 03, 1-9.
- [5] Chen Jinhui. (2019). Building a Learning Power Search Accelerator. *Educator*, 08.
- [6] Chen Rong. (2016). Research on the cultivation of students' independent learning ability in Chinese education. *Chinese Language Construction*, (2):9-10.

- [7] Chen Wenjiao, He Yifei & Yu Wen. (2023). Structural analysis and empirical testing of high school students' research-based learning ability--based on a survey of 28 high schools in W City. *Education Guide* (08), 67-74.
- [8] Chen Ruping. (2013). *Report on the Development of General High School Education in China*. Beijing: Education Science Press.
- [9] Chen Zhilie. (2015). *Research on the diversified development of ordinary high schools from the perspective of visionary leadership*. (Doctoral dissertation). Nanjing: Nanjing Normal University.
- [10] Childs, A., & McNicholl, J. (2007). Investigating the relationship between subject content knowledge and pedagogical practice through the analysis of classroom discourse. *International Journal of Science Education*, 29(13), 1629-1653.
- [11] Claire dickerson, Joy jarvis, & Lewis stockwell. (2016). Staff-Student Collaboration: Student Learning from Working Together to Enhance Educational Practice in Higher Education. *Teaching in Higher Education*, Volume 21(Issue 3), 249-265.
- [12] Claxton, G., (2012). *Schools As An Epistemic Apprenticeship*, Education Section of The British Psychological Society's 32nd Vernon-Wall Lecture.
- [13] Claxton, G. and Lucas, B. (2004). *Being Creative: Essential steps to Revitalize your Work and Life*. London: BBC Books.
- [14] Ciekanski, M. (2007). Fostering learner autonomy: Power and reciprocity in the relationship between language learner and language learning adviser. *Cambridge journal of education*, 37 (1), 111-127.
- [15] Core Competencies Research Group. (2016). Chinese students develop core competencies. *China Education Guide*, (10):1-3.
- [16] David blazar, & Matthew a. kraftview . (2016). Teacher and Teaching Effects on Students' Attitudes and Behaviors. *Educational Evaluation and Policy Analysis*, Volume 39(Issue 1). <https://doi.org/10.3102/0162373716670260>
- [17] Deyoung, C. G., Grazioplene, R. G., & Peterson, J. B. (2012). From madness to genius: The Openness/Intellect trait domain as a paradoxical simplex. *Journal of Research in Personality*, 46 (1), 63-78.
- [18] Elizabeth A. Bennion. (2024). *Teaching Experimental Political Science*. Edward Elgar Publishing Limited. <https://doi.org/10.4337/9781802208795>.
- [19] Feist, G. J., & Barron, F. X. (2003). Predicting creativity from early to late adulthood: Intellect, potential, and personality. *Journal of Research in Personality*, 37(2), 62-88.
- [20] Fu Lujian. (2000). Solve the five policies and discuss the necessary conditions for comprehensive high schools. *Educational Development Research*.
- [21] Gregory J. Palardy, & Russell W. Rumberger. (2008). *Teacher Effectiveness in First Grade: The Importance of Background Qualifications, Attitudes, and Instructional Practices for Student Learning*. *Educational Evaluation and Policy Analysis*, Volume 30(Issue 2).
- [22] Guy claxton, Maryl chambers, Graham powell, & bill lucas. (2011). *The Learning Powered School Pioneering 21st Century Education* (1st Edition). TLO Limited, Bristol.
- [23] Hu Wei. (2010). *Reform of the school running system: diversified educational demands*. Beijing: Education Science Press.
- [24] Jiang Yun. (2011). *Research on ways to cultivate independent learning ability of ordinary high school students*. (Master's thesis). East China Normal University.
- [25] Johnson-Bailey, J., & Cervero, R. M. (1998). Power dynamics in teaching and learning practices: An examination of two adult education classrooms. *International journal of lifelong education*, 17(6), 389-399.
- [26] Ju Cui Mei. (2015). *Investigation into the current situation and methods of independent learning among high school students - Taking Zhangjiagang Shazhou Middle School as an example*. (Master's thesis). Shanghai Normal University.
- [27] Hahn, M. H., & Lee, K. C. (2017). Exploring the role of self-confidence, need-for-cognition, and the degree of it support on individual creativity. *Multilevel analysis approach*. *Current Psychology*, 36(3), 565-576.
- [28] Karl Aubrey and Alison Riley (2019). *Understanding and Using Educational Theories* 2nd Edition, Sage Publications, Ltd. London EC1Y 1SP.
- [29] Kenett, Y. N., & Faust, M. (2019). A semantic network cartography of the creative mind. *Trends in Cognitive Sciences*, 23, 271-274.
- [30] Liang Jian. (2017). *Research on the transformation of ordinary high school education system*. (Ph.D. thesis). Southwest University.
- [31] Lin Shaoqi. (2019). *Research on the cultivation status and promotion strategies of independent learning ability of ordinary high school students*. (Master's thesis). Guangzhou University.
- [32] Li Jing. (2016). *Research on the educational functions of ordinary high schools in my country at the current stage*. (Ph.D. thesis). Liaoning Normal University.