

Research on Online Learning Autonomy of Marxist Theory Students in The New Era

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Abstract

In reality, the participation and autonomy of college students in online learning have been criticized, and the unique theoretical knowledge system of Marxist theory subjects often leads to a lack of learning motivation among students. Therefore, the research will focus on the current situation of online learning autonomy of Marxist theory students in the new era, using quantitative analysis to identify the dimensions and influencing factors of online learning autonomy of Marxist theory students, and provide recommendations. The research results indicate that the online learning autonomy of Marxist theory students in the new era can be reflected in the three dimensions of emotion, cognition, and action, and is influenced by five factors: learning motivation, learning inertia, learning regulation, teacher guidance, and learning environment. It is suggested to improve through three paths: stimulating students' learning motivation, creating a good learning environment, and strengthening teacher guidance.

Keywords

Marxist theory; Autonomy in learning; Online teaching; Teacher student interaction.

1. Introduction

Online learning, accompanied by industrial development characterized by intelligent manufacturing, has ushered in a new era of 4.0 where information technology and education are deeply integrated, becoming an important component of modern education. For the cultivation of students majoring in Marxist theory, there are numerous subjects to study, and the research on students' autonomy in online learning has important theoretical and practical significance. Online learning provides students with more learning resources and opportunities. Students can choose their own learning content and time through the internet, no longer limited by time and location, greatly enhancing learning flexibility and pertinence. However, in reality, due to the disciplinary characteristics of Marxist theory, the learning process is often dull and monotonous, which can easily make students lose their motivation to learn. During online learning, there is a separation of teacher and student spaces, a lack of face-to-face communication, and insufficient interaction. Students' participation and autonomy in online learning have been criticized, and the one-way teaching process of online learning results in a lack of guidance and supervision, making it difficult for students to continue participating in learning. Autonomous learning is the fundamental characteristic of university learning, and the quality of students' online learning depends on their initiative and consciousness. Whether learners can actively participate in online teaching activities will directly affect the learning effect after the online teaching activities are launched. [Wang Zhuli. Alternative Classroom or Beyond Classroom? - Controversy and Reflection on Online Education. Modern Distance Education Research, 2020, 32 (05): 35-45.] Therefore, studying the autonomy of Marxist theory students in online learning can help us better understand students' learning needs and habits,

formulate more effective teaching strategies, improve students' learning effectiveness, and provide useful reference and inspiration for the development of online education in China. This study will be based on the learner's perspective, starting from different dimensions that reflect the autonomy of Marxist theory students in online learning, seeking quantifiable, reliable and effective, and significant influencing factors, in order to provide reference suggestions for effective online teaching..

2. Questionnaire Editing and Survey Implementation

Learning autonomy refers to the psychological tendency and behavioral manifestation of learners' autonomous learning under the stimulation of their intrinsic motivation. After studying the domestic and international learning autonomy questionnaires of Zimmerman, Beck, Jiashu Xie, Chuanwu Xiong, and others, and combining the learning characteristics of Marxist theory students in the new era with online learning features, the researchers designed a pre-test questionnaire for online learning autonomy of Marxist theory students in the new era. The questionnaire consists of three parts: student basic information, self-directed self-assessment scale, and self-directed influencing factor scale. The self-directed self-assessment scale includes four dimensions: learning cognition, behavior, emotion, and environment, with a total of 28 questions. The influencing factor scale includes five factors: learning motivation, learning inertia, learning regulation, teacher guidance, and learning environment, with a total of 54 questions. In order to prevent participants from filling in randomly, a certain number of reverse questions and anti-counterfeiting questions were set up, and all questions were arranged in disorder, with instructions and relevant annotations provided for filling in. The scale section adopts the Likert five point scoring method, which assigns 1 to 5 points positively according to the degree of conformity. After the questionnaire design was completed, relevant experts were asked to verify the scientificity of the questionnaire in terms of the number of questions, structure, and textual expression.

To ensure the reliability and validity of the questionnaire, we conducted a preliminary survey by selecting some universities in six central provinces of China. We imported the pre survey data into SPSS 22.0 and conducted item analysis, factor analysis, and reliability analysis on the two scales. Based on the test results, we revised and retested the two scales. The re examination results of factor analysis showed that the KMO value of the self-test scale was $0.875 > 0.8$, and the KMO value of the influencing factor scale was $0.833 > 0.8$. Both scales are significant at the 0.05 level, and the sampling appropriateness coefficient (MSA) values for all items on both scales are greater than 0.5. Bartlett's sphericity test chi square values and degrees of freedom meet the standard, indicating that both scales have good construct validity. Similarly, the internal consistency reliability coefficients of both scales are above 0.8, and the internal consistency of each element within the scales ranges from 0.706 to 0.811, indicating good reliability. After revision, the self testing scale for online learning autonomy of Marxist theory students in the new era has been adjusted to 25 questions, including three dimensions: affective autonomy, cognitive autonomy, and action autonomy; The scale of factors influencing the autonomy of online learning for Marxist theory students in the new era has been adjusted to 48 questions, with the same naming and quantity of factors.

The survey was conducted through random sampling, with both paper and electronic questionnaires distributed simultaneously, targeting college students from various universities across the country. A total of 2132 questionnaires were distributed, 1853 were collected, and 1659 valid questionnaires were screened, with an effective response rate of 89.53%. The sample covers 28 provinces and cities across the country, with more samples coming from Henan, Hunan, Guangdong, Jiangsu, Zhejiang, and Shandong.

3. Data Analysis and Conclusions

The analysis of research results shows that the self testing results of online learning autonomy for Marxist theory students in the new era are good, and attention should be paid to the evaluation differences between different evaluation subjects; The autonomy of online learning for Marxist theory students in the new era can be reflected in the three dimensions of emotion, cognition, and action, and there are differences in perception in each dimension; The online learning autonomy of Marxist theory students in the new era is influenced by five related internal and external factors, with individual internal factors having a significantly greater impact than external factors.

Through self testing, the total average score of the online learning autonomy scale items for Marxist theory students in the new era is 3.43, indicating good performance. This result deviates from the previous literature review results. After further analysis, we believe that there are three reasons for this difference, but the most important one should be the perception difference of the evaluation subject. Firstly, previous research has mainly been conducted by school administrators or relevant educational research institutions, with most studies based on the perspective of teachers. However, this type of research, which evaluates the subjectivity of the object, is often rigorous, as from the perspective of administrators, the actual performance of the managed is often negative. This can be seen from the various differences in the evaluation of online teaching among school administrators, teachers, and students. [Daguang Wu , Wen Li. Stage characteristics of large-scale online teaching in Chinese universities - empirical research based on questionnaire surveys of students, teachers, and academic staff [J]. Journal of East China Normal University (Education Science Edition), 2020, 38 (07): 1-30.] Secondly, the transfer of traditional classroom teaching to the online space that contemporary college students have been exposed to since childhood and are more willing to use and interested in has to some extent promoted the development of college students' learning autonomy. Although most research results on traditional classrooms show that current college students' learning autonomy is not optimistic, it cannot be ruled out that online learning in universities is already more autonomous than offline learning. The more comfortable teaching environment of online learning provides students with more possibilities for autonomous arrangement, thereby promoting learning autonomy. Thirdly, the subconscious influence of the respondents. Our survey targets college students, who are already a more confident part of the social group. Most students subconsciously tend to believe that their academic performance is excellent and they have good autonomy, which is reflected in the sample distribution of their scores in the questionnaire.

After validity testing and revision, the online learning autonomy scale for Marxist theory students in the new era showed good reliability in both pre-test and formal surveys, with internal consistency alpha coefficient values above 0.72. The extracted dimensions of emotion, cognition, and action can explain 75.94% of the total variation. From the mean values of various dimensions, students perform the best in terms of action autonomy, followed by cognitive autonomy, and the weakest in terms of affective autonomy, with a small gap between the latter two. It is obvious that Marxist theory students generally believe that their autonomy in online learning behavior is slightly better than their autonomy in cognitive and affective aspects. Contrary to secular cognition, people often believe that every move is based on emotional stimulation and is regulated by cognition. As a causal relationship, referring to practical deviations, people's autonomous actions should be weaker than psychological activities. This is the reason why some procrastinators suffer from procrastination. But upon careful consideration, it is not difficult to understand that material determines consciousness, and students' behavior in online learning is not entirely determined by individuals.

Non intrinsic factors such as learning atmosphere and teaching requirements force students to have autonomous behavioral activities to some extent. From the questionnaire items, we found that students' utilitarian needs at the emotional level are stronger than their interest needs, and the simplification requirements in online learning behavior are better than those that require more effort, which explains the reasons for the above differences.

Substituting five influencing factors into the diagnosis of multicollinearity, the results showed that the VIF values ranged from 2.631 to 3.477, with a tolerance of 0.288 to 0.380, indicating the absence of multicollinearity. After conducting multiple linear regression analysis, the output results showed an adjusted R² of 0.742, indicating that five factors can explain 74.2% of the variation in online learning autonomy of Marxist theory students in the new era, and are significant at the 0.01 level. The standardized regression equation is: Marxist theory student online learning autonomy=0.308 x learning motivation+0.280 x learning inertia+0.152 x learning regulation+0.134 x teacher guidance+0.104 x learning environment. It can be seen that learning motivation is the first element that affects students' autonomy in online learning, and the three internal factors have a significantly higher impact than the two external factors. Although the correlation between the five influencing factors varies in strength and has a high or low impact on students' autonomy in online classroom learning, as the five influencing factors with positive correlation, they are inevitably indispensable, and the positive influence exerted by the object should not be underestimated. Unlike traditional offline learning, online learning imposes more comprehensive requirements on teachers' teaching abilities and teaching media. The appropriate teaching pace and comprehensive teaching tools often lay the foundation for promoting students' self-directed learning. Therefore, how to improve the practical manifestation of external factors is still a key point to pay attention to in enhancing the online learning autonomy of Marxist theory students.

4. Research Suggestions

4.1. Inspire self-efficacy, cultivate correct teaching philosophy for online learning teachers and students' learning cognitions

The complete teaching process of a teacher begins with the teaching philosophy. Compared with traditional offline teaching, online teaching requires more flexibility in the use of information technology, which includes understanding new teaching tools and applying them to teaching, and even creating new things. It cannot be denied that some teachers have not yet accepted this rapidly changing "new technology" in their thinking, nor have they clearly recognized that improving student participation in online teaching is the most urgent problem to be solved in online teaching. The autonomy at the emotional level of students leads to the autonomy at the cognitive and behavioral levels, and learning motivation is the most direct manifestation at the emotional level. Online learning motivation, as the first factor affecting online learning autonomy, aims to improve learning autonomy by cultivating the correct learning motivation and even cognition. [Chuanwu Xiong, Junying Chai, Dong Shousheng. Research on the autonomy of middle school students' learning in China. Education Research, 2017, 38 (05): 106-112.]

A survey shows that the majority of students believe that online learning does not require a significant amount of effort, and this lack of autonomy is partly due to a bias in self-efficacy, which requires targeted efforts to establish correct cognition for students. For students with cognitive depolarization, encourage them to actively participate in learning, discover the joy behind knowledge, establish learning confidence and interest, utilize the multimedia advantages in online classrooms, and find more interesting teaching content to drive students to actively explore. For students who are overly confident, help them analyze their own problems, establish a correct and clear self-awareness, use course requirements to promote

their self-directed learning, and assign diverse assignments to stimulate self-directed learning behavior. Therefore, we need to re-examine online teaching, and both teachers and students should establish correct concepts.

One is to view online teaching correctly. Regardless of the nature of the course being studied, online learning still requires effort to achieve results. As a new teaching model, new things without the process of experience and correction will inevitably lead to discomfort in use. Both teachers and students should learn to accept and try to constantly innovate. The second is to learn to reflect and implement it into action. Surveys have shown that students have weak autonomy in reviewing and reflecting after class. In response to this, we suggest that students can clearly recognize this point, use problem orientation to drive learning reflection, and actively solve problems after discovering them, cultivating this thinking activity into a habit; Similarly, we suggest that teachers start with their teaching experience, exert their subjective initiative, and discover the "unreasonable" phenomena that exist in themselves, students, supporting facilities, etc. in online teaching activities. After analysis, the reflection results should be fed back into the practice of online teaching. The third is to cultivate the awareness of independent development and self-management. Teachers should have the awareness of constantly improving their teaching quality, actively participate in teacher training, accept advanced online teaching concepts, proficiently use online teaching tools, and think and prepare lessons from the perspective of students; Students should strengthen self-management, develop more comprehensive study plans, search for suitable learning materials, recognize the value of online learning, and actively cope with their own laziness.

4.2. Improve the evaluation and development mechanism of online resources, strengthen the organization and management of online teaching

Since the development of online teaching, there have been mixed evaluations of its practical role. The most direct reason is that there is still no absolutely convincing evaluation standard for online teaching, and there is a lack of historical data comparison for online teaching. It is a problem to determine where to develop it. Scholar Liying Zhao calls on the state and universities to actively organize experts in various fields such as evaluation, education, and information technology to develop feasible, scientific, comprehensive, systematic, and appropriate online teaching evaluation standards from the perspective of comprehensive quality. [Liying Zhao, Yitong Zhao. Evaluation of Online Teaching Effectiveness and Construction of Quality Assurance System [J]. Higher Engineering Education Research, 2021 (02): 189-194.] Similarly, the effective implementation of online teaching also relies on comprehensive mechanism guarantees. As a carrier of teaching activities, schools that want to strengthen students' autonomy in online learning and ensure the quality of online teaching can start from the following five points.

One is to establish an online teaching supervision team to supervise the preparation and teaching process of each course, assign responsibility to individuals after class, pay attention to observing the performance of learning autonomy during class, record and rectify after class. The second is to regularly conduct online teaching evaluations, identify the main contradictions, provide timely feedback on the quality of daily online teaching, and evaluate and rectify them. Thirdly, the online teaching work should be reported on a daily basis, and problems encountered in daily teaching should be promptly addressed and resolved through teachers' self reflection. The fourth is to make more use of online terminals to carry out teaching and research activities, personally experience the platforms that students use in daily teaching, find real teaching experiences, eliminate potential obstacles in platform design that may hinder students' autonomy in learning, and organize teaching and research more targetedly, such as designing different teaching plans for students with different majors and grades. The fifth is to regularly conduct teacher training to help teachers better use online equipment, update

teaching concepts, master online teaching skills, and if conditions permit, establish professional online information technology support and training groups. In addition, it is necessary to collect teaching materials and form a systematic teaching archive to help practitioners in online teaching better identify, analyze, and solve problems, thereby promoting the improvement of online teaching quality. [Wei Zhao. Quality Management of Online Teaching in Universities in the Post Pandemic Era [J]. Modern Education Management, 2021 (05): 107-112.]

As the carrier of online teaching content, online teaching platforms play an important role in the interaction between teachers and students. The quality of the construction of online teaching platforms has an undeniable impact on students' autonomy in online learning. From the survey results, it can be seen that the current design and development of teaching platforms often focus on the role of managers, lacking a student-centered design concept, and making it difficult to stimulate students' subjectivity when using the platform. Therefore, in order to improve students' learning autonomy, it is necessary to enhance the "gold content" of existing teaching platforms. On the one hand, it is necessary to shape online classrooms with a sense of space, strengthen the layout that reflects the intimacy and distance between teachers and students, and the relationship between students; Strengthen the functionality that is easy for teachers and students to use in the design, provide personalized and more convenient and efficient services for teachers and students in teaching activities, redesign and adjust platforms that have been developed earlier, integrate adaptive learning technology, increase learning grouping and dynamic supervision functions, etc. On the other hand, the construction and maintenance of online teaching platforms, whether they are "public" platforms or "market" platforms, should ensure the stability of the platform during use and pursue high-quality content such as online voice and video. Many teachers and students experience disconnection during online teaching. To eliminate the influence of network signals, the stability of the platforms used also needs to be strengthened. Against the backdrop of the gradual deployment of 5G network construction, many weather beaten platforms also need to be upgraded and replaced.

From the perspective of the ecosystem, a good online teaching ecosystem cannot do without various service supports, including information technology support, psychological support, environmental support, cultural support, and policy support. Although the teaching platform is a part of information technology support, it is also an intermediate medium for other forms of support to play a role. Building a community that supports coordinated operations is what we expect, which requires the joint efforts of all educational activity participants, from learners, teachers, and parents to schools, relevant technical organizations, education departments, and more. [Chunmei Chen, Peng Chen. Exploration of the effectiveness of online teaching in universities during the epidemic period [J]. Heilongjiang Higher Education Research, 2021, 39 (06): 155-160.] The country should quickly introduce practical and targeted documents at the policy and regulatory levels to guide the improvement of the online teaching ecosystem; Relevant technical organizations should delve into the reality of online education, understand the most real needs and difficulties of users of online education tools, and timely modify and improve online teaching technologies; Universities should make every effort to create a good online teaching environment for teachers and students, create a positive teaching atmosphere, and provide comprehensive online teaching conditions; Teachers, students, and parents are the most observers, learners, transmitters, supervisors, and companions in teaching. They should find their own positioning, do their duties well, continuously improve their comprehensive literacy, and provide necessary support for other participants.

4.3. Teachers focus on the effectiveness of online teaching and the dilemma of teacher-student interaction, and enhance students' learning autonomy in teaching details

The ultimate goal of enhancing the online learning autonomy of Marxist theory students is to improve their learning outcomes. Starting from the goal, it helps to grasp the practical effects of learning autonomy. Three suggestions are proposed for the study of teaching effectiveness. One is to promote autonomy through assessment and evaluation, establish a more comprehensive and objective diversified online teaching assessment, and divide students' total scores into multiple assessment stages. Except for the final exam, the results of each assessment are publicly displayed and analyzed among students, calling on them to reflect, appropriately motivate students who have made progress, and provide relevant guidance to promote students' initiative and internalize it as autonomy. Secondly, students should have a clear understanding of the effectiveness of online learning, be aware of the gap between themselves and others, and the previous stage of themselves when learning online. They should have a sense of initiative and strive to achieve learning gains every time. The third is to have a long-term grasp of the teaching process. The strength of autonomy directly affects the strength of self-directed learning ability, and the role of autonomy is long-term and subject to fluctuations. Teachers and students need to observe it at any time under non quantitative indicators and make targeted changes. As a teacher, this is not an easy task and requires long-term experience accumulation. For students themselves, it is important to make good learning arrangements and records, and seek help promptly when encountering problems.

The participation, interaction, and timely feedback of students in online learning are key elements that determine the effectiveness of online teaching, and the learning and emotional communication barriers between teachers and students, as well as between students, are one of the most serious problems found in the survey. We should start with details to address the dilemma of teacher-student interaction, and improve students' initiative from two perspectives: increasing communication opportunities and emotional care. On the one hand, students should respect the teacher's teaching arrangements and actively complete teaching requirements both during and after class; Regardless of whether the teacher requests it or not, they should consciously turn on the camera, apply pressure on themselves, and facilitate face-to-face communication with the teacher; Seizing non classroom time, both before and after class, is also a good opportunity for learning and emotional communication with teachers and classmates. On the other hand, teachers can add more student activities, incorporate more tasks and project-based teacher activities into teaching, and give students more classroom time; Appropriately increase open-ended teaching questions, do not give students too much pressure when answering, guide them patiently, and promote their ability to think independently and solve problems; During class, students are required to turn on their cameras to monitor their learning status and provide timely reminders; Pay attention to the language style during teaching, use non directive language more often, bring students closer to their inner selves, and provide humanistic care for students with different personalities within their abilities.

5. Conclusion

Stimulating learning motivation is the key to improving the online learning autonomy of Marxist theory students. Students should establish a positive online learning cognition, and teachers should cultivate correct online teaching concepts. Creating a good learning environment is an important way to improve online learning autonomy. Educators should establish an evaluation and guarantee mechanism for online teaching, and strengthen the diversified service support for online learning. Strengthening teacher guidance is an effective means of improving online learning autonomy. Teachers should actively engage in teaching

reflection, focus on the teaching difficulties of Marxist theory students, and stimulate students' self-efficacy in details.

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