Liberal Arts and Sciences Education as Pedagogy in Central Asia

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ABSTRACT

The aim of this paper is to critically examine Liberal Arts and Sciences (LAS) education as a *pedagogy* (bottom-up approach), particularly in Central Asia. In the literature, LAS education is mainly characterized as an "institutional curriculum design." Similarly, most liberal arts colleges in the region predominantly focus on LAS education's institutional design and curricula map (top-down approach). However, it should be noted that liberal arts and sciences education is not only the institutional design of the programs by providing a wide range of course selection and offering inter- and multidisciplinary courses, but it is also a pedagogy. Therefore, this research offers a new conceptual framework for LAS education. It pays attention to "liberal pedagogues" who apply liberal arts and sciences as a pedagogy in traditional classroom settings and beyond. Unfortunately, more and more universities in the region have started to design liberal arts curricula without liberal pedagogues. In this context, this research attempts to answer the following two questions:

- 1 Why should liberal arts colleges establish Centers for Teaching and Learning (CTLs)?
- 2 How do liberal pedagogues engage students both in and out of the classroom?

CTLs are vital in enhancing the liberal arts and sciences educational experience for both students and faculty, and it is impossible to maintain and sustain liberal arts and sciences education without liberal arts pedagogy.

1 CONCEPTUAL FRAMEWORK(S) AND LITERATURE REVIEW: WHAT IS A LIBERAL ARTS AND SCIENCES EDUCATION?

Liberal Arts and Sciences (LAS) is a higher education approach that integrates the inter- and multi-perspectives of liberal arts education with the analytical and empirical techniques found in the natural and social sciences. While LAS education emphasizes the development of critical thinking, problem-solving, analytical thinking, and communication skills, it also aims to develop students' learning and intellectual academic curiosity beyond traditional classroom settings.

In the literature, LAS education is described by Becker as "a system of higher education that involves curricular breadth as well as depth, student-centered teaching and academic and administrative structures which facilitate learning."

The combination of a "breadth and depth of study allows students to gain broad and interdisciplinary education with a depth of expertise focused on a specific major," according to Cole.² More importantly, LAS education prepares students not only for specific careers in their field of major but also for active, engaged, and responsible citizens, whereby students are able to apply their transferable soft skills and context-based knowledge in diverse and unknown situations.

Historically, LAS education has evolved significantly based on society's educational needs to reflect socio-cultural, political, and economic changes. The literature on/about LAS education primarily focuses on the learning environment and practices (pedagogies), students' competencies, such as convergence and creativity skills, curriculum design, and the integration of interdisciplinary approaches. Regarding the learning environment and practices, LAS education is often characterized by smaller class sizes – usually less than eighteen students – with interactive student-centered classrooms based on the Socratic learning method.

On the one hand, Hur (2022)³ and Li and Li (2024)⁴ highlight the positive contributions of LAS education on students' learning process. They believe that LAS education leads to varying outcomes in students' competencies while LAS pedagogy fosters essential critical and analytical thinking skills. LAS education, subsequently, prepares students to improve their skills in navigating complex, multi-layered global issues. On the other hand, Haberberger (2017)⁵ argues that further research is needed to measure the effectiveness of LAS education. Like Haberberger, TerMaat (2023)⁶ also believes that the positive gains of LAS education might remain "speculative" although it might foster students' ethical reasoning skills.

Nevertheless, preparation for active, engaged, informed, and responsible citizens and integrating social and ethical issues into the core curriculum from inter- and multi-disciplinary perspectives plays a crucial role in LAS education. Davis and Walker (2011)⁷ argue that integrating social issues into the curriculum enriches

students' educational experience and prepares them for real-world challenges. Nathan et al. explore the importance of critical thinking and civic engagement as the main components of LAS education, and they advocate for developing communication and social skills through liberal arts curricula.

The literature, furthermore, examines diverse implementations of liberal arts and sciences education in different political and cultural settings. Although LAS education is often affiliated with the U.S.-led education style, it has been widely adopted by many universities* worldwide. For example, Malcolm et al. (2020) analyze LAS education in Indonesia and illustrate how local education policies reflect utilitarian perspectives, prioritizing economic development over the intrinsic value of liberal arts. Ivanova and Sokolov (2015) examine LAS education in Russia and emphasize the need for a model that addresses civic consciousness and market demands. These studies in the literature highlight the necessity for liberal arts and sciences education to adapt to local contexts while maintaining its core values, such as critical thinking, interdisciplinary learning, ethical and civic responsibility, intellectual curiosity, cultural awareness and diversity, and so on.

In conclusion, the key features of LAS education include an interdisciplinary approach, critical thinking and inquiry-based learning, active and experiential learning, reflective and ethical thinking – not only in the society in which students live but at the global level – communication skills, and lifelong learning beyond the formal education in traditional classrooms. Subsequently, the literature on LAS education reveals a dynamic and multifaceted field responsive to local and global educational needs. Integrating interdisciplinary approaches, paying attention to student competencies, and engaging with social issues are crucial for future generations.

In this research, liberal arts colleges will be used interchangeably for the universities that apply LAS education.

2 THE APPLICATION OF LIBERAL ARTS AND SCIENCES EDUCATION IN CENTRAL ASIA

In Central Asia, several universities have adopted liberal arts education. Some of them are labeled directly as "liberal arts colleges," and some of them have introduced LAS education without naming it. For instance, in 1992, KIMEP University (Kazakhstan Institute of Management, Economics, and Strategic Research) was established in Almaty, Kazakhstan. In Bishkek, Kyrgyz Republic, the American University of Central Asia (AUCA) was established in 1997. Liberal arts and sciences education became popular in the region, and other higher education institutions were established. In 2000, the University of Central Asia (UCA) was founded in Tajikistan, Kazakhstan, and Kyrgyzstan. In 2008, the De Montfort University (DMU) Kazakhstan was established. In 2010, Nazarbayev University (NU) was established

† In this research, those universities are considered as liberal arts colleges.

in Astana, Kazakhstan. More universities have been established and/or changed their curriculum to offer liberal arts and sciences education in Kazakhstan, Kyrgyzstan, and Uzbekistan. In 2019, Tashkent International University of Education (TIUE) was established to promote a liberal arts and sciences education focused on training and educational practices. Other (both state and private) universities, such as the Westminster International University in Tashkent (WIUT) (2002), have attempted to promote liberal arts and sciences education in the country.

Although KIMEP (in Kazakhstan) and AUCA (in Kyrgyzstan) are the first higher institutions in Central Asia that have contributed to the development of liberal arts and sciences education in the region, other universities have also incorporated liberal arts pedagogies into their programs, promoting critical thinking and interdisciplinary curricula. The list of liberal arts colleges in Central Asia is not limited to those institutions, and many other higher education institutions in the region attempt to become a liberal arts college (even sometimes without a proper understanding of liberal arts pedagogy). As a result, liberal arts and sciences education in Central Asia has been introduced and re-introduced, and the higher education institutions in the region (re-)modified their curricula and institutional structure and followed liberal arts pedagogy to be a "Liberal Arts College."

In this vein, the liberal arts colleges in Central Asia mainly focus on the curriculum design of the programs. They have started offering a wide range of options for inter- and multidisciplinary courses across disciplines in the arts, humanities, social sciences, natural sciences, and mathematics. Co-curricular and extracurricular activities support the learning environment beyond the classical traditional classrooms. LAS pedagogy particularly promotes student-centered and democratic classrooms and introduces inquiry-based learning. Active and experiential learning promotes critical reflection by students so students are able to connect scientific ideas to their personal and academic experiences and apply their learning in everyday life.

With similar missions to those universities in Central Asia, liberal arts colleges in the region have attempted to contribute to the "democratic transformation of the region and prepare the future leaders." They successfully promote the core values of civic engagement and social responsibility (CESR) by integrating theory and practice in higher education. "Think Globally, Act Locally" and "Change the World for the Better" became mottos of those universities, which address global challenges by paying attention to the local and regional contexts. Thus, they adopt variations of similar mottos and embody them by focusing on local, regional, and global perspectives in curriculum, community engagement, diversity and inclusion, and civic engagement.

3 LIBERAL ARTS AND SCIENCES EDUCATION THROUGH CENTERS FOR TEACHING AND LEARNING

Similar to how the literature mostly conceptualizes liberal arts and sciences education as an institutional design (top-down approach), liberal arts colleges in Central Asia also consider LAS education as a curricula map. However, it should be noted that liberal arts and sciences education is not only the institutional design of the programs by providing a wide range of course selection and offering inter- and multidisciplinary courses, but it is also a *pedagogy*. This research, therefore, highlights the importance of understanding liberal arts and sciences education as a pedagogy.

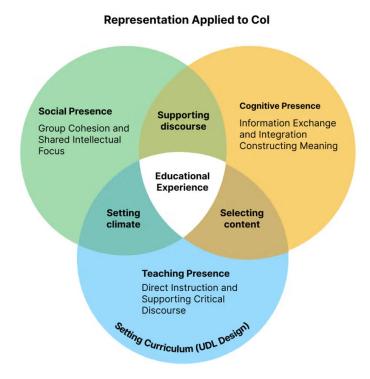
Unfortunately, most liberal arts colleges in Central Asia, including the well-established ones, attempt to provide a liberal arts and sciences education without paying attention to pedagogy and the establishment of Centers for Teaching and Learning (CTLs). However, CTLs are vital in enhancing the liberal arts and sciences educational experience for both students and faculty, and it is impossible to maintain and sustain liberal arts and sciences education without the liberal arts pedagogy that CTLs promote through teaching practices and supportive learning environments.

The primary functions of the CTLs in liberal arts and sciences education can be summarized as follows:

- 1 Faculty Development: CTLs provide professional development and enhance the teaching and learning environment;
- 2 Curriculum Support: CTLs assist faculty in liberal arts pedagogy in designing and developing inter- and multidisciplinary courses and help faculty promote critical thinking, problem-solving, and interdisciplinary learning with engaged pedagogy;
- 3 Student Support in Learning Environment: CTLs develop students' skills in learning;
- **4** Promote Active and Engaged Learning: CTLs encourage the use of active learning strategies in student-centered and democratic classrooms;
- **5** Assessment and Evaluation: CTLs offer strategies to evaluate student learning and improve the quality of education;
- **6** Creating a Community of Learning (CoL): CTLs foster collaboration not only among faculty but also between faculty and students and promote a learning community with the best practices at the institutional level;
- **7** Research on Teaching and Learning: CTLs contribute to the implementation of evidence-based practices in the curriculum;
- **8** Integrative Learning Initiatives for the Promotion of the University's Core Values, such as civic engagement and social responsibility, and encourage faculty and students to connect their academic life with real-world experiences.

Thus, the CTLs play a crucial role in enhancing the educational environment at liberal arts colleges, supporting both faculty development and student success. Without establishing and institutionalizing such centers, liberal arts colleges in Central Asia are unable to promote liberal arts pedagogy. Education is a process and (self-) progress, and the educational experience consists of three vital elements in the 'Community of Inquiry' (CoI) Model:

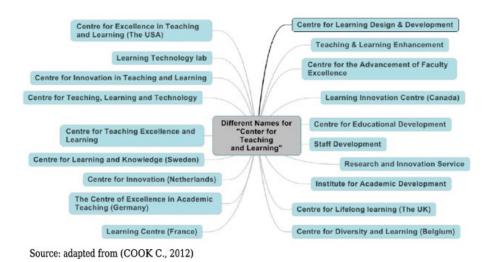
- 1 teaching presence,
- 2 cognitive presence, and
- 3 social presence.



1 Community of Inquiry Model (CoI)

CTLs are transformative agents in higher education¹⁸ helping to establish the Community of Inquiry model. They provide professional development, empower faculty, improve the quality of education, help the university be ranked higher, and support the accreditation procedures of the programs.

Wright (2023) lists the names of such institutionalized centers in various countries as:



2 Different Names for a Center for Teaching and Learning

In Central Asia, not all liberal arts colleges have established such centers. For instance, there is no information on whether DMUK and WIUT have established such centers. On the contrary, at KIMEP, such a center is named The Center for Educational Excellence¹⁹ (CEE), at AUCA²⁰ and UCA,²¹ Center for Teaching, Learning, and Technology (CTLT), at NU, Innovative Learning Hub,²² and at TIUE, Education Center.²³

4 BOTTOM-UP PEDAGOGICAL APPROACH TO LIBERAL ARTS AND SCIENCES EDUCATION

As mentioned, liberal arts and sciences education should be considered a pedagogy that the CTLs actively support to assist faculty and students in teaching and learning environments. In this research, instructors who promote liberal arts and sciences educational practices are called "liberal pedagogues." While more and more higher education institutions in Central Asia have started to claim themselves as liberal arts colleges, it is impossible to promote student-centered and democratic classrooms without liberal pedagogues. Unfortunately, in the literature, there is no agency for the instructors who apply liberal arts and sciences pedagogy.

In this research, the vital role of the liberal pedagogues is considered as a "'bottom-up approach'" to liberal arts and sciences education rather than defining liberal arts and sciences education as an institutional and curriculum design (top-down approach). Liberal arts and sciences pedagogy fosters critical thinking, creativity,

and lifelong learning. It prepares students to think critically and analytically, communicate effectively, and contribute to the development of society rather than a pure institutional and curriculum design.

Liberal arts colleges can only succeed if they also realize the liberal arts and sciences as a pedagogy so that liberal pedagogues provide and promote liberal arts and sciences education. Here are the crucial questions in LAS pedagogy that should be asked: How do instructors who promote liberal arts and sciences pedagogy (liberal pedagogues) engage students both in and out of the classroom? And What do they do pedagogically in liberal arts colleges?

Experiential learning bridges theoretical knowledge with real-world applications. As Beck et al. (2017)²⁴ highlight, experiential learning enriches the liberal arts curriculum and fosters the engagement of students. First, liberal pedagogues promote experiential, active, and engaged learning. Since integrative learning experiences are crucial for students to navigate complex issues and contribute meaningfully to their communities,²⁵ liberal pedagogues design experiential courses to improve students' critical and analytical thinking and promote civic engagement.

Second, the liberal pedagogues assess the learning process in each session and are pedagogically flexible to meet the students' needs. The course design is fundamental, and liberal pedagogues have detailed lesson plans and syllabi. However, liberal arts pedagogues are aware of the responsibility of meeting the needs of students both in and outside the classroom. They might not follow the syllabus for the sake of the class schedule as stated in the syllabus. Instead, they carefully assess the learning process and work on basic transferable skills of students, including but not limited to reading and listening skills, and engage students with the course materials and discussion meaningfully, critically, and logically by presenting, analyzing, and summarizing the ideas from the long and complicated topics.

Third, the liberal arts pedagogues are the instructors who develop themselves professionally. They integrate technology and innovative teaching methods since technological advancements enhance pedagogical practices and student learning outcomes in the liberal arts and sciences curricula. Liberal pedagogues, therefore, implement effective and innovative teaching methodologies to enhance the quality of liberal arts and sciences education and foster a more enriching learning environment. The professional professional pedagogues are the instructors who develop themselves professionally.

Fourth, liberal pedagogues apply collaborative and project-based learning that encourages students to engage actively with course material and develop critical, analytical, and problem-solving skills.²⁸ Liberal pedagogues, thus, work on the team-building skills of students.

Fifth, liberal pedagogues pay attention to the life skills of students. According to them, LAS pedagogy fosters communication, creativity, and empathy for per-

sonal and professional success.²⁹ Liberal pedagogues prepare their students not only for academic growth but also for personal growth. They believe education is a transformative power,³⁰ shaping young generations for a better future.

Finally, the LAS pedagogues play a vital role in promoting social responsibility and ethical reasoning.³¹ They focus on societal needs both at the local, national, and global levels and promote global awareness to engage students with those issues.

Thus, the role of liberal pedagogues is pivotal in liberal arts and sciences education. They are valued for their distinct qualities that are essential for fostering an active and effective learning environment in liberal arts colleges.³² As Pattaguan et al. (2019)³³ argue, the professional development of liberal pedagogues is crucial in enhancing instructional strategies and assessment techniques within liberal arts and sciences curricula. Instructors ensure the pedagogy and assess the learning processes. CTLs are established for the professional development of liberal pedagogues, and without liberal pedagogues, it is impossible to achieve liberal arts and sciences education. Without a deeper understanding of LAS as a pedagogy, the instructors are not able to maintain and sustain the quality of liberal arts and sciences education even if it is institutionally well designed as a LAS curriculum.

5 (MIS-)PRACTICING LIBERAL ARTS AND SCIENCES EDUCATION AS A PEDAGOGY IN CENTRAL ASIA

When/if liberal arts colleges in Central Asia do not consider the LAS as a pedagogy, they will turn into an "economic sector" to gain financial benefits, whereby the liberal arts and sciences education become "the markets"; instructors become the "service providers," and students become "customers." While the university administration usually considers students' and parents' demands, the top-down approach of LAS education neglects the demands and needs of instructors – liberal pedagogues – from below in higher education.

Notably, in the context of the political culture of illiberal regimes (which might be relevant in some cases in Central Asian states), it is challenging for liberal arts pedagogues to maintain and sustain LAS education even at their liberal arts colleges.

Under these circumstances, the liberal arts and sciences education in Central Asia might transform into a "recoiled education" whereby the liberal arts colleges attempt to provide liberal arts and sciences education without liberal pedagogues.

Accordingly, the liberal arts and sciences education might mean something different for them:

- LAS education might become a "market-competition strategy" to attract more admitted students and find partner institutions globally that share minimum educational standards. Nonetheless, the market-competition strategy among different programs might also be seen within the same institution. In recent years, there has been less and less attraction for social sciences programs, and most students prefer studying 'popular' programs such as Business Administration or Software Engineering. The concern is: To what extent do liberal arts and sciences colleges provide LAS pedagogy in those programs? Further research should be conducted on how liberal arts pedagogy is applied in those programs in Central Asia.
- LAS education might become a Facade of the prestigious, modern, liberal, Western/American, and high standard of education featuring wild competition within the country and in the region. Most Central Asian liberal arts colleges adopted the name of liberal arts education to persuade students and parents to claim that they provide a prestigious Western, even American education. For them, liberal arts and sciences education is a label. However, without the liberal arts pedagogy, those institutions will fail to provide the quality of LAS education. Unfortunately, this might be valid for most liberal arts colleges in the region. Further research should be conducted to assess the quality of LAS education in the region.
- LAS education meets "The Necessity of Higher Education in the 21st Century." Liberal arts and sciences education currently meet the three needs (3Ns) of higher education (both from internal and external pressures):
 - 1 Internal Pressures that higher education institutions overtly and covertly set up through "criteria" for their instructors. While inclusive pedagogy becomes more popular, the instructors might feel pressure to establish a liberal arts classroom. Due to the course evaluations, the instructors might also feel that they should be funny and friendly. Otherwise, they might think that students will evaluate them badly and that the administration might weaponize those student evaluations against them.
 - 2 External Pressures are set up globally based on educational trends. It is expected that the liberal arts colleges should offer dual degree programs, ideally with a semester-long exchange opportunity, by a partner university, if possible, in the United States. With the label of a "liberal arts college," Central Asian universities might find a partner in the West for dual degree programs "easier" since they can claim to share similar curricula design and transferability of credits.
 - 3 The Need of the Young Population (Gen Z) is based on the need for the job markets in the 21st century. For many sectors, it does not matter which degree students have; it does matter what type of skills they have and how they contribute with these skills. LAS education ideally meets the needs of students in the job market, at least on paper.

6 CONCLUDING REMARKS

In conclusion, liberal arts and sciences pedagogy fosters critical thinking, ethical reasoning, and social responsibility. Liberal pedagogues design and apply experiential learning and innovative teaching methods and focus on their professional development. Furthermore, LAS pedagogy meets society's needs and equips students with the personal and academic skills to thrive in a globalized and complex world.

This research has three main findings on liberal arts and sciences education in Central Asia.

- 1 Mushrooming of "Liberal Arts" Colleges in Central Asia: Recently, too many Central Asian universities have been established, claiming to be "liberal arts colleges" that applying LAS as a pedagogy. This shows high competition among the liberats colleges, not only in a specific country but also in the whole region.
- 2 Lack of Human Capital as "Liberal Pedagogues" in Central Asia: There is a lack of sufficient instructors liberal pedagogues who can teach liberal arts and sciences pedagogy, particularly in the English language. Although several universities in the region are self-claimed as liberal arts colleges, there are not enough capable faculty who can provide LAS pedagogy. For this reason, all LAS colleges should establish a Center for Teaching and Learning to support evidence-based, innovative, strategic, and sustainable teaching and learning environments.
- 3 The Quality of LAS Education. Liberal Arts and Sciences Education is not only a Curriculum Design but also a Pedagogy.: Some institutions and faculty in the region do not have deep knowledge and/or practice in LAS pedagogy. If CTLs are institutionalized systematically, they will be able to assess the quality of LAS education that they provide and attract more students, not because they are called liberal arts colleges but for the quality of teaching.

On the other hand, this research also highlights the methodological limitations:

Web-based Methodology: There is a lack of information on universities' websites in Central Asia; they are not updated, particularly in English. Further research should be done using on-site fieldwork, and interviews should be conducted with faculty, administration, and students.

- 2 Decentralized CTLs: Similar functional units might serve as the center (such as organizing professional development workshops for the faculty). Sometimes, the functions of CTLs are conducted by library or registrar offices. However, these activities should be institutionalized and structuralized under the function of the CTLs. Even in this case, the research tried to solve this problem by checking and controlling such functions at those institutions.
- 3 Internal and External Validity Problem of Research Findings: Further research should be conducted to identify the issues of liberal arts and sciences education in Central Asia.

NOTES

- 1 Becker, J. (2015)
- 2 Cole, E. (2017)
- 3 Hur, Y. (2022)
- 4 Li, W. & Li, X. (2024)
- 5 Haberberger, C. (2017)
- 6 TerMaat, J. & Williams, K. & Wentworth, C. (2024)
- 7 Davis, J. & Walker, H. (2011)
- 8 Nathan, S. K., Shaker, G., & Janin, P. D. (2020)
- 9 Malcolm, M. & Mangilaleng, J. & Kim, D. (2020)
- 10 Ivanova, Y. & Sokolov, P. (2015)
- 11 For more information, KIMEP University website: https://www.kimep.kz/about/en/kimep-at-a-glance-foundations/
- 12 For more information, AUCA website: https://www.auca.kg/
- 13 For more information, UCA website: https://ucentralasia.org/home
- 14 For more information, DMUK website: https://dmuk.edu.kz/
- 15 For more information, NU website: https://nu.edu.kz/
- 16 For more information, TIUE website: https://tiue.uz/en/
- 17 For more information, WIUT website: https://www.wiut.uz/
- 18 Mary C. Wright, 2023, Centers for Teaching and Learning: The New Landscape in Higher Education.'
- 19 For more information, https://www.kimep.kz/college-humanities-education/en/re-search-and-professional-development/
- 20 For more information, https://auca.kg/en/ctlt/
- 21 For more information, https://ucentralasia.org/schools/centre-for-teaching-learn-ing-and-technology/about-ctlt
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- 24 Beck, V., Boys, S., Haas, H., & King, K. (2017).
- 25 Kilgo, C., Pasquesi, K., Sheets, J., & Pascarella, E. (2014).
- 26 Gui, R. (2022)
- 27 Investigation and Research on the Satisfaction of Undergraduate Liberal Arts Major Students in China with Their Major Courses and Its Influencing Factors under the Background of the "New Liberal Arts", 2023
- 28 Research on the "Task + Project" Driven Teaching Mode of Economics Course under the Background of New Liberal Arts", 2023.
- 29 Nathan et al., op.cit., 2020
- 30 Morales, E. (2012)

- 31 Hill, D., Ainsworth, R., & Partap, U. (2012)
- 32 Bledsoe, R., Richardson, D., & Kalle, A. (2021)
- 33 Pattaguan, E., Surla, R., & Tindowen, D. (2019)

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