

"Island Disease" and Its Treatment Through "Interdisciplinary Thinking" in The Educational System*

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The term “island disease” refers to the isolation and fragmentation of academic disciplines, a phenomenon prevalent in Iranian universities and research institutions. Specialization, while enhancing precision and depth within individual fields, often results in limited interdisciplinary interaction, leaving each discipline functioning as an isolated “island.” This fragmentation manifests in curricula that separate related subjects, minimal collaboration among faculty, and disciplinary languages that hinder cross-field understanding. Philosophical perspectives from Rumi, Jaspers, Heidegger, and Ortega y Gasset highlight the importance of holistic knowledge and the university’s role in integrating education, research, and culture. Globally, universities increasingly adopt interdisciplinary, multidisciplinary, and transdisciplinary approaches to address complex societal problems, foster innovation, and prepare students for the demands of the twenty-first century. In Iran, recent initiatives—including the University of Tehran’s College of Interdisciplinary Sciences and Technologies, interdisciplinary engineering programs at Amirkabir University, and national interdisciplinary journals—illustrate growing efforts to overcome the “island disease.” This study examines the origins, manifestations, and consequences of academic isolation in Iranian higher education and argues that interdisciplinary thinking is a necessary remedy for cultivating integrated knowledge, collaboration, and problem-oriented education.

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"The whole of science is nothing more than a refinement of everyday thinking. To solve the great problems of today, we must cross the boundaries of disciplines." Albert Einstein

What is Island Disease?

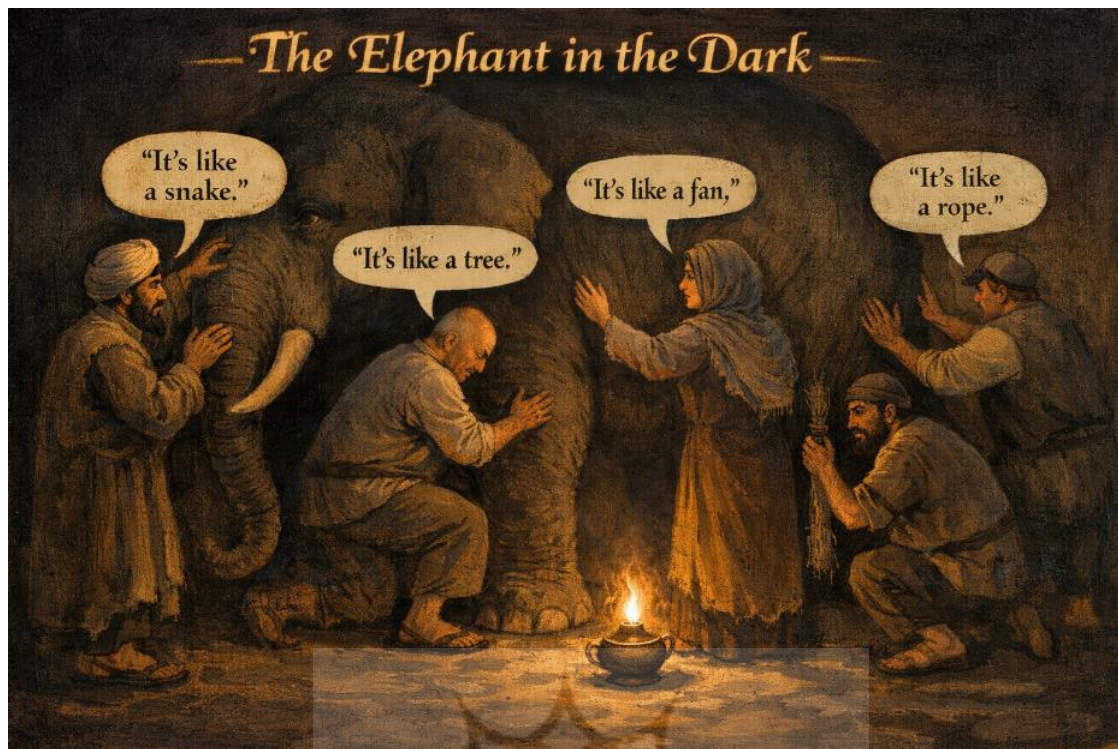
The term "island disease" refers here to the isolation and disconnection of academic disciplines within universities, faculties, research institutes, and universities themselves. It describes a situation that all university graduates in Iran generally agree on: the specialization of sciences leads to fragmentation, separating different fields from each other—a common experience among students and professors. During their student years, students typically only meet and discuss academic matters within the university campus or dormitories, not in joint classes across disciplines. Thus, while specialization has the major advantage of increasing precision and depth of analysis in a given field, it simultaneously isolates that field from other sciences. As a result, "each academic discipline functions like an island."

This "island-like" nature is considered a kind of disease affecting all academic disciplines, especially in Iran. This "disease" becomes even more evident in the curricula offered to students across different university disciplines. For example, in philosophy programs, courses such as mathematics or psychology have often been removed, and conversely, in mathematics or psychology programs, philosophy courses are frequently eliminated. Only in certain basic science programs, such as chemistry, physics, or technical and engineering fields, do we sometimes see the integration of courses from related disciplines.

However, every engineering perspective is inherently connected to ethical and social considerations. For instance, an engineer designing solar panels may not pay much attention to how people with different income levels can access the product or how the product relates to ethical and social concerns in society.

Rumi's parable of the elephant in the dark

Therefore, in the world of specialization, each academic expert tends to "play their own instrument," often without regard for how their work should coordinate and harmonize with that of other specialists. Yet, in reality, the two specialists from different disciplines are working on the same underlying reality. Here, Rumi's parable of *the elephant in the dark* comes to mind (Rūmī, 1924). To easily understand this issue, image number 1 can be enlightening.



Picture 1. *The Elephant in the Dark*

Rumi's metaphor of the elephant in the dark is highly applicable to our university disciplines today. None of the disciplines perceive the whole elephant, whether in education or research. Each claim to have discovered the truth about the elephant. In this analogy, the elephant represents the single reality that different scientific disciplines study from their own specialized perspectives. There are three main reasons that justify undertaking such a research article.

First, the expansion of interdisciplinary research in major universities around the world, particularly in the West and the United States, shows that the question of communication between academic disciplines is a vital concern for these institutions. Therefore, it is necessary to establish genuine connections between the sciences. In other words, the philosophy of science demands that the integration of knowledge be considered within each branch of science. Science, as a whole, is embedded within each individual discipline.

Second, since all sciences and academic disciplines deal with solving human-related problems—whether in nature, culture, society, or industry—it is essential that there be logical and proper connections between disciplines, allowing reality to be perceived as a whole, rather than fragmented parts. Reality cannot truly be broken down into isolated components.

Third, interdisciplinary thinking and its practical implementation in universities through interdisciplinary programs represent a reasonable and logical approach to addressing the "island disease" in academia.

Considering these three reasons, it can be concluded that interdisciplinary thinking has a natural place in universities, educational institutions, and research centers (Klein 1990). Universities are spaces where knowledge, scholars, and thinkers engage with the world around them and conduct research. The image of the world that emerges from the university into society is often very different from the image ordinary people in everyday life have of the same world. Why is the image different? Clearly, scholars view the world through the “lens” of their scientific training, which is different from the lens through which ordinary people see reality. This simple point helps clarify the distinction between scientific and non-scientific perspectives and shows that scientific and philosophical approaches reveal a world that emerges from within these perspectives. This philosophical concern has persisted from Plato to Kant, and from Kant to the present.

For example, the Cartesian paradigm, based on mathematical and logical analysis, approaches the world by breaking objects into parts, analyzing them individually, and thereby gaining knowledge of the whole (See more: Hatfield, 2003). This scientific and philosophical perspective still dominates the thinking of scholars, philosophers, and researchers in universities today. In other words, our universities and educational institutions primarily—and technical and vocational schools secondarily—apply this Cartesian approach, often without explicitly naming it. Up to this point, we have highlighted the scientific and philosophical perspective in universities.

Another, perhaps more critical, issue is that since the late 19th and early 20th centuries, with the rise of positivism and scientism in universities, these approaches have often lacked proper connections with one another, and academic disciplines have frequently functioned in isolation, like islands. Therefore, this research article aims to provide a philosophical analysis of the institution of science in Iranian universities, with a focus on the country’s leading universities. It examines the segregation of academic disciplines and the resulting “island disease,” as well as the issue of interdisciplinary thinking as a suitable remedy for this condition. The study evaluates and assesses the status of interdisciplinary sciences within these institutions.

We know that the primary cause of this problem lies in the positivist thinking that dominated Western universities from the 19th to the late 20th century. Positivism, along with an empiricist approach to reality and the tendency to break reality into discrete elements across different academic disciplines, has led each field and branch of science to focus exclusively on its own specialized task. As a result, scholars often neglect findings from other disciplines, studying their subject in isolation and attempting to present their results as a complete and accurate representation of reality to the scientific community. This article seeks to demonstrate that the lack of a holistic approach among academic disciplines has caused all fields of study to operate in isolation. In this article, we interpret the non-holistic, isolated functioning of academic disciplines in Iranian universities as the so-called “island disease.”

The Philosophical Idea of the University

The university has always been more than just a place of learning; it has long been a subject of philosophical reflection (Newman, 1996). Fundamental questions arise: What is a university? What is its essential mission? How should it relate to the society it serves? These questions call for careful philosophical analysis.

Karl Jaspers, reflecting on the threats to academic life under fascism, emphasized that a legitimate university must pursue three interdependent objectives simultaneously: academic education, scientific research, and cultural life. He argued that these three pillars are inseparable, each reinforcing the others, and together they form the foundation of a vibrant and enduring university (Jaspers, 1965).

Another influential 20th-century philosopher who provided a philosophical analysis of the university is Martin Heidegger. Heidegger viewed the university as a potential site for transformation and development of human existence (Dasein), not merely as a place for the transmission of knowledge or professional training. From his ontological perspective, the university is a space where individuals can cultivate a deeper and more authentic engagement with Being, situating the institution within the horizon of existential inquiry.

José Ortega y Gasset also articulated his vision of a cosmopolitan university in his lectures at the University of Madrid, grounded in the idea of “general culture.” He believed that the mission of the university, alongside its traditional goals, should include social and political dimensions in shaping educated political individuals capable of contributing to good society and government, social justice, and civic responsibility. In other words, Ortega y Gasset identified three main functions or core missions of the university:

- a) Transmission of culture:** The university should educate students in the cultural heritage and general knowledge necessary to become informed human beings and responsible citizens, not merely technical specialists. This knowledge includes history, science, ethics, and social understanding (Ortega y Gasset, 1944, 48).
- B) Professional education:** The university should provide specialized and technical training for entry into professions such as medicine, law, engineering, and others. However, Ortega emphasized that such training must be grounded in general culture and humanistic education.
- C) Scientific research and the advancement of knowledge:** While he acknowledged the importance of scientific research, he warned that teaching and culture should not be overshadowed by research. Ortega strongly opposed what he called “scientific barbarism”—knowledge detached from life and ethics.

The Current State of the University

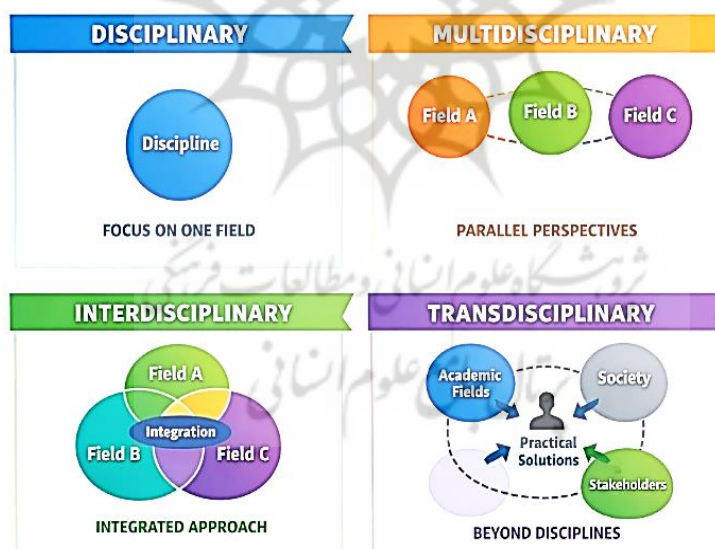
We know that higher education today faces a wide range of challenges. These include financially strained families, declining government support for universities and the push toward revenue generation, economic pressures and the high cost of education for students, uncertainties about the future of research funding, and growing demands for accountability regarding costs, graduation rates, and graduate unemployment. On the other hand, the rising

rate of migration of elites and educated individuals to foreign universities, along with the active recruitment of non-Western students by Western institutions, has raised the question of whether universities lack the overall capacity to adequately nurture and educate students, or whether the problem lies elsewhere. Are academic disciplines as taught in Iranian universities sufficiently responsive to students' needs? Have various fields of knowledge, including theoretical and non-applied sciences, lost their appeal? These and similar questions arise.

Here, however, we do not intend to examine external factors affecting universities, as these belong more properly to sociological and economic studies. Rather, we aim to examine the nature of academic disciplines themselves in order to clarify the place and significance of interdisciplinary studies in this context.

Interdisciplinary Thinking in Universities

Since the 1980s, European—and especially American—universities have increasingly moved toward integrating disciplines through interdisciplinary studies and research, a trend that has continued to accelerate. This approach offers a remedy to the fragmented, silo-like nature of academic disciplines, a condition we refer to here as interdisciplinary thinking. To clarify this discussion, it is necessary to distinguish among four related but distinct concepts: disciplinary, multidisciplinary, multidisciplinary, and transdisciplinary approaches (see the flowing picture 2).



Picture 2. *Four Kinds of Thinking*

Disciplinary: An academic discipline is a branch of knowledge taught and researched at the college or university level. Disciplines are (to some extent) defined and recognized by the academic journals in which research is published, as well as by scholarly associations and academic departments or faculties to which specialists belong.

Academic disciplines are traditionally divided into the humanities (including philosophy, languages, arts, and cultural studies), the natural sciences (such as physics, chemistry, and biology), and the formal sciences (including mathematics and computer science). The social sciences are sometimes considered a fourth category. A discipline may also be referred to as a field of study, research area, research field, or branch of knowledge.

Interdisciplinary: Interdisciplinarity refers to the process of integrating different academic disciplines or fields of study in order to achieve a more comprehensive understanding of a subject or to solve complex problems. It involves combining knowledge, perspectives, and methods from multiple disciplines to address a particular issue or theme. This approach has become increasingly important in research, education, and professional practice because it enables more nuanced and adaptive responses to complex challenges. In interdisciplinary education, for example, students examine issues such as climate change, globalization, or diversity from multiple disciplinary perspectives. The goal is to move closer to solutions or to apply the insights gained to research or pedagogical practice.

Multidisciplinary: Multidisciplinary study refers to examining a topic simultaneously from the perspectives of several different disciplines. These perspectives together provide a broader understanding of the subject. For example, human behavior can be interpreted through psychology, biology, and economics. While disciplinary boundaries are crossed, each discipline retains its own "voice," and the goal is not necessarily to integrate insights into a unified framework. In universities, this approach is often reflected in lecture series where scholars from different fields share their perspectives on a common theme, or in student groups conducting literature reviews on a question from multiple disciplinary viewpoints.

According to *The Essential Guide to Writing Research Papers* at Lakehead University, multidisciplinary juxtaposes disciplinary perspectives in an additive way, meaning that two or more disciplines each contribute their own viewpoints to a problem, with limited interaction between them. Interdisciplinarity, by contrast, integrates two or more disciplines at a deeper level, such that disciplinary boundaries begin to blur. It is no longer a simple sum of parts but a recognition that each discipline can influence the research outcomes of others.

Transdisciplinary: Transdisciplinarity involves not only students or academics but also other (social) partners in researching complex questions. Examples include co-creation between students and municipalities, companies, or other social organizations. This approach brings together knowledge from both science and practice in order to achieve integrated solutions that also impact society. Transdisciplinarity occurs when two or more disciplinary perspectives go beyond their boundaries to form a new, comprehensive approach. The result is fundamentally different from what one would expect from merely adding components together; it produces a novel form of knowledge through deep integration.

Metaphor: Watch What You Eat

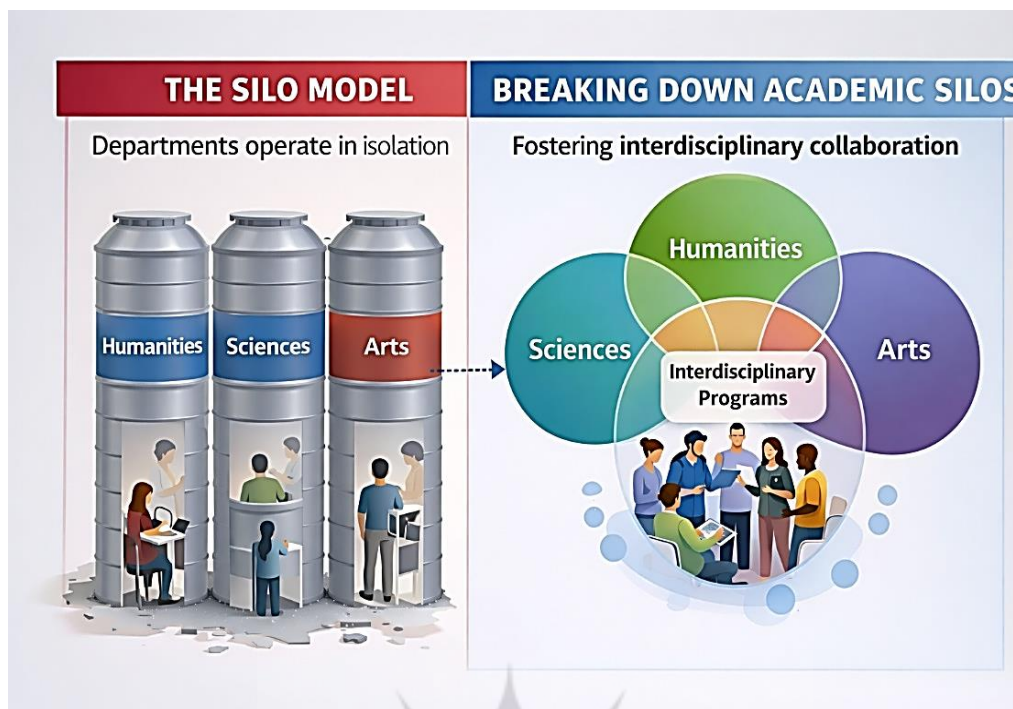
A useful metaphor for distinguishing between multidisciplinary and interdisciplinarity is cooking curry. A multidisciplinary plate consists of potatoes, vegetables, and meat served alongside sauce. The ingredients are grouped together and proportionate, but not yet blended into a new flavor. When you make curry, however, these ingredients are cooked together to create a new whole: potatoes, vegetables, and meat combine to produce a distinct flavor (interdisciplinary). If you want to add a transdisciplinary touch, serve your hot dish with a fresh salad on the side, connecting culinary creation to broader contexts of health, culture, and practice (see the flowing picture 3).



Picture 3. *Metaphors*

The Silo Model: Can We Break Down Barriers in Higher Education?

The term “disciplinary silos” in university contexts refers to the separation and isolation of academic departments and research fields that hinder collaboration and knowledge exchange. This fragmentation can lead to a lack of interdisciplinary innovation and a narrow focus on specific domains, potentially limiting the ability to address complex real-world problems that often require diverse expertise. (see the flowing picture 4: the silo model).



Picture 4. *The Silo Model*

A recent study at Cornell University suggests that solving societal problems such as climate change may require dismantling rigid academic boundaries so that researchers from different disciplines can collaborate through a “non-disciplinary” approach. Rather than focusing on a single mission, it may be more productive to adopt a human-centered perspective and emphasize the process of finding solutions. This study was published on May 16 in *Humanities and Social Sciences Communications*, a Nature journal.

The Practical Value of Interdisciplinarity

Natural scientists have also increasingly embraced interdisciplinarity. In 2004, a committee of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine published a report entitled *Facilitating Interdisciplinary Research*. Similarly, the 2011 official report of the Massachusetts Institute of Technology on the convergence of life sciences, physical sciences, and engineering pointed in the same direction. Perhaps more importantly, interdisciplinarity has become a defining feature of the twenty-first-century university, whose role is increasingly understood as “leveraging scientific wealth” and serving as an engine of economic growth. Interdisciplinarity has also become a touchstone in the humanities, albeit in different ways and for different reasons (Kenney 2003).

Today, university presidents in the West routinely announce multimillion-dollar grants and fellowships for interdisciplinary activities, and interdisciplinary initiatives are emerging in diverse forms across campuses. In fact, interdisciplinarity sometimes appears to have become a goal in itself (e.g., Lattuca 2001, 3–4).

The think tank Institute for the Future, in its 2020 report *Future Work Skills*, emphasizes the importance of skills fostered by interdisciplinarity: “Many of today’s global problems are so complex that they cannot be solved within a single discipline (such as global warming or population growth). These multifaceted challenges require interdisciplinary solutions. Whereas the twentieth century encouraged increasing specialization, the coming century will see interdisciplinary approaches take center stage.” The report describes desirable future workers as individuals who can “speak the language of multiple disciplines,” possessing deep expertise in one or more fields while also being able to communicate across a broader range of disciplines.

Overall, interdisciplinarity equips students with the key skills and intellectual complexity that employers seek in the future workforce, and well-developed interdisciplinary programs in higher education provide unparalleled opportunities for students to cultivate these capacities.

The problem of weak communication, dialogue, and academic, research, and educational interaction among different university disciplines in Iran is a concern acknowledged by many scholars. Addressing this issue requires systematic research into the nature of this disciplinary disconnection, which in this project is described as the “island disease” of universities. Three main reasons justify undertaking such research.

First, the expansion of interdisciplinary research in major universities around the world—especially in the West and the United States—indicates that disciplinary connectivity is considered a vital issue in those academic systems. This makes it necessary to establish genuine and meaningful connections among the sciences.

Second, since all sciences and academic disciplines are ultimately concerned with solving human problems—whether in nature, culture, society, or industry—engagement with reality requires that disciplines be logically and coherently connected, viewing reality as an integrated whole rather than as fragmented parts.

Third, interdisciplinary thinking and its practical implementation in universities through interdisciplinary programs constitute a reasonable and effective strategy for addressing the island disease in higher education.

Interdisciplinary Universities Around the World

In the twenty-first century, many educational and research institutions have moved toward becoming interdisciplinary centers. The recently established London Interdisciplinary School (LIS) prioritizes a mission driven by its innovative curriculum and pedagogy. It addresses a perceived gap in the UK higher education system—namely, the shortage of programs that cut across disciplines and the disconnect between what students learn in classrooms and the problems they may face in their future careers. As its name suggests, LIS adopts a deliberately interdisciplinary approach to teaching and learning, encouraging students to explore issues related to technology, climate change, and other contemporary challenges from multiple perspectives. Notably, the institution distinguishes itself from

liberal arts colleges by emphasizing practices of integration and synthesis. According to Karl Gombrich and Amelia Peterson, LIS students learn how to make disciplines “talk to one another.” Whether graduates will ultimately pursue distinctive careers or simply approach existing professions in innovative ways remains to be seen.

Minerva University offers another example of an institution guided by a distinctive general education program. Like LIS, Minerva is designed to prepare students to engage with—and potentially contribute to solving—complex global problems. As described by Terry E. Cannon and Stephen M. Kosslyn, Minerva’s curriculum achieves this not only by exposing students to multiple academic domains but also through a strong focus on developing specific skills and capacities. Its courses aim to provide students with cognitive tools such as “habits of mind”—critical thinking techniques that become internalized over time. Thus far, its graduates have been highly impressive, though only time will tell whether Minerva will catalyze similar institutions elsewhere.

In addressing the question of “what” universities should offer, curricula and degree programs are not the only answers. Many institutions of higher education—including some with religious foundations—focus on cultivating particular values, principles, and beliefs. What Isaac Froumin and Daria Platonova describe as the socialist model of education was explicitly designed to shape a “new Soviet personality.” In the context of Soviet nation-building throughout much of the twentieth century, higher education aimed to produce individuals with a deep understanding of Marxism and a commitment to the collective good. Although values-based (or “class-based”) education was a central pillar of Soviet education, it can be found to varying degrees in other higher education models as well. As Froumin and Platonova note, the emphasis on character development—or what is now sometimes called “formative education”—has gained popularity worldwide.

Universities are also shaped by where learning takes place—that is, by place. In most cases, a university operates statically within its home country or region. In other cases, institutions deliberately establish campuses abroad, offering students opportunities to learn in new cultural, political, and economic contexts—settings that may be organically connected or intentionally created.

Consider Northwestern University in Qatar (NU-Q). For this institution, geographic location is central to its mission. As Marwan M. Kraidy explains, NU-Q is part of Education City in Doha, Qatar, a multicultural hub with a large expatriate population. Northwestern’s decision to establish a presence in this region was deliberate; the school has a specific mission to develop research and teaching capacity in the Global South—a term referring to economically disadvantaged countries in the Middle East, Latin America, Asia, and Africa. Moreover, NU-Q views the Global South not merely as a geographical region but as an “intellectual space”—one in which forms of scholarship distinct from Western traditions can be developed. This commitment is reflected in other aspects of its mission, such as a curriculum that deliberately includes authors from Arab, African, and Asian contexts.

Notably, NU-Q's mission is supported by its host country. The project emerged from a partnership between Northwestern University and the Qatar Foundation for Education, Science, and Community Development. However, as previously demonstrated in the case of New York University in the United Arab Emirates, the values and goals of an institution can sometimes stand in sharp tension with the agendas of local power holders. Moreover, what it means to serve the "Global South" remains ambiguous, as does the relationship between this constituency and groupings such as BRICS. It also remains unclear how economic development or resistance to Western-developed or democratic values should be understood within such contexts.

"Island Disease" in our Educational System

Iran's educational system is heavily shaped by siloed thinking, such that students at both school and university levels tend to operate strictly within their chosen disciplines, while engagement with other fields is often viewed as a waste of time. Many teachers and professors also value only their own areas of expertise and regard them as superior to other fields. The result is a fragmentation of knowledge and an inability of the education system to cultivate holistic, problem-oriented thinking in the younger generation. Here are a few common issues in Iranian schools and universities that illustrate the problem of academic isolation (sometimes called the "silo effect") in a concise manner:

1. Teachers in schools and university professors often show little willingness to step outside their own areas of expertise and explore other fields, or to seek connections between their own discipline and others. This attitude is directly transmitted to students as well.
2. Collaboration in teamwork or joint efforts among teachers and professors within their own disciplines is very limited. It is rare to see multiple instructors or professors conducting research on an interdisciplinary topic and sharing their scientific findings.
3. The technical language of each discipline often acts like the quills of a porcupine, preventing others from approaching. As a result, each specialist tends to consider their own technical language superior to that of other specialists when explaining a shared topic.
4. Today, collaboration must replace competition; however, this does not mean eliminating scientific competition, as Nel Noddings emphasizes (Mohajel 2025). Rather, collaboration is a necessary condition for realizing interdisciplinary thinking and addressing this "disease" in the educational system.

In recent years, Iranian universities—especially in Tehran—have significantly expanded interdisciplinary education and research. The University of Tehran established the College of Interdisciplinary Sciences and Technologies in 2011, later upgraded in 2023, now hosting multiple faculties, departments, faculty members, and graduate students. Amirkabir University of Technology offers several interdisciplinary engineering programs such as

robotics, mechatronics, energy engineering, and IT. The Research Institute for Cultural and Social Studies has overseen the development of more than 200 interdisciplinary programs nationwide since 2005. Shahid Beheshti University also hosts a Research Center for Interdisciplinary Qur'anic Studies, focusing on computational and applied Qur'anic research. Iran has also developed several interdisciplinary journals. These include journals in ethics, humanities, education, economics, and strategic studies, published by institutions such as Shahid Beheshti University, Farhangian University, Qom University, and the National Defense University. Together, these centers and publications reflect Iran's growing commitment to interdisciplinary research and education across scientific, humanistic, and strategic fields.

Conclusion

Based on the discussion above, it can be concluded that the most appropriate solution to the "island disease" in the educational system, particularly in Iran, is the development and expansion of interdisciplinary studies. This approach can foster academic cohesion, promote collaboration among disciplines, and cultivate holistic, problem-oriented thinking in students and researchers. The phenomenon of "island disease" in Iranian universities highlights the persistent fragmentation and isolation of academic disciplines, a condition that limits collaboration, holistic understanding, and the ability to address complex societal challenges. While specialization brings depth and precision, it often reinforces siloed thinking, discourages interdisciplinary communication, and fosters a hierarchy of disciplinary languages that hinders knowledge exchange. Philosophical reflections from Rumi, Jaspers, Heidegger, and Ortega y Gasset, alongside global trends in higher education, demonstrate that universities must serve not only as centers of specialized knowledge but also as spaces for integrated, problem-oriented, and socially engaged learning. Interdisciplinary thinking—whether multidisciplinary, interdisciplinary, or transdisciplinary—emerges as a vital solution to this challenge. International examples, including the London Interdisciplinary School, Minerva University, and Northwestern University in Qatar, show how integration across disciplines can cultivate critical thinking, foster innovation, and prepare students to solve the complex problems of the 21st century. In Iran, initiatives such as the University of Tehran's College of Interdisciplinary Sciences and Technologies, interdisciplinary engineering programs at Amirkabir University, and national interdisciplinary journals indicate a growing commitment to overcoming academic isolation.

Ultimately, addressing the island disease requires a cultural and structural shift within universities: valuing collaboration alongside competition, integrating curricula across disciplines, and embedding interdisciplinary research and teaching into the core mission of higher education. By fostering connections between fields, Iranian universities can cultivate scholars and professionals capable of understanding reality as a whole, rather than as fragmented pieces—a crucial step toward advancing knowledge, society, and human well-being.

References

- Hatfield, G. (2003). *Routledge Philosophy Guidebook to Descartes and the Meditations*. London: Routledge,
- Jaspers, K. (1965). *The Idea of the University*, The University of Michigan.
- Kenney, L. (2003). *Louis Menand: The Metaphysical Club: A Story of Ideas in America*. 2001. New York: Farrar, Straus and Giroux. 546 pp. *Frontiers: The Interdisciplinary Journal of Study Abroad*, 9(1), 201–204. <https://doi.org/10.36366/frontiers.v9i1.123>
- Klein, J. T. (1990). *Interdisciplinarity: History, Theory, and Practice*. Detroit: Wayne State University Press.
- Lattuca, L. R. (2001). *Creating interdisciplinarity: Interdisciplinary research and teaching among college and university faculty*. Vanderbilt University Press.
- Mohajel, N. (2025). Nel Noddings' Philosophical Analysis of the Relationship between Democracy and Education. *The Quarterly Journal of Western Philosophy*. Vol. 4, No. 2, pp. 123-140. <https://doi.org/10.30479/wp.2025.22157.1172v/> https://wp.journals.ikiu.ac.ir/article_3820.html
- Newman, J. H. (1996). *The Idea of a University*. Edited by Frank M. Turner et al., *Rethinking the Western Tradition*, Yale University Press.
- Ortega y Gasset, J. (1944). *The Mission of the University*. New York: Norton.
- Rūmī. (1924). *The Masnavī by Jalālu'd-dīn Rūmī*, Edited from the Oldest Manuscripts Available, with Critical Notes, Translations and Commentary, ed. and trans. by R. A. Nicholson, E. J. W. Gibb Memorial, New Series, 4, 8 vols (London: Luzac, 1924–40) (In persian)

