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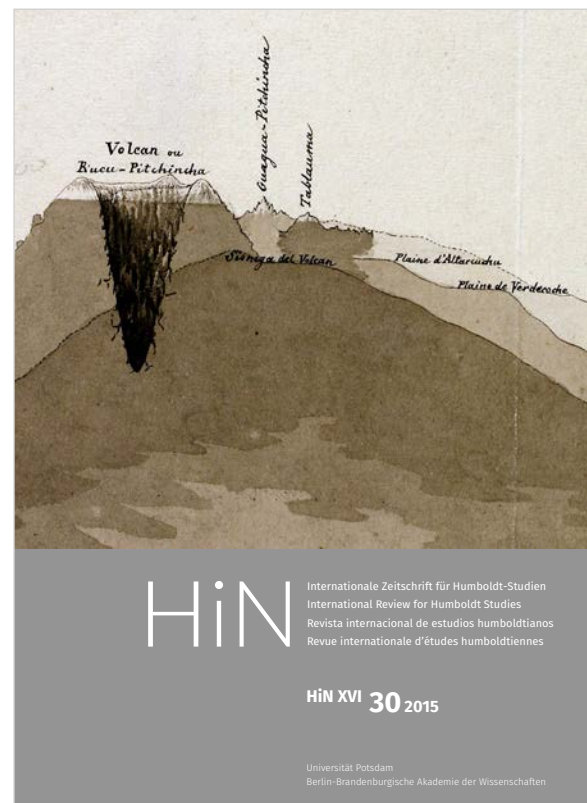
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# Karin Lundberg

## Networking Knowledge: Considering Alexander von Humboldt's Legacy in a New Shared Space in Education

### *Summary*

Global citizenship and diversity are well-represented concepts in today's higher education. Learning outcomes and competencies are designed to sensitize students to the many cultural backgrounds of U.S. learning institutions. Nevertheless, true globality, as represented through diverse discourses and perspectives of the world, still seems neglected in curricula and course assignments. This article explores the possibilities offered through a new shared space in education where different forms of networked knowledge and multifaceted perspectives can build a global platform of exchange in a diverse student population. The universal science concept described by Alexander von Humboldt at the beginning of the 19<sup>th</sup> Century illuminates this intertwined approach to knowledge of the world, which has the potential to positively impact contemporary curricula and course design. Von Humboldt's writings emphasize inclusion and interplay among cultures and natural phenomena. By inviting our students to be active representatives of diverse discourses, these interconnecting links will become more transparent. In turn, productive forms of knowing about the world may enrich current learning objectives and thereby reflect a true global citizenship as it evolves in a new shared space of education. Keywords: global citizenship, plurality, diverse discourses, multicultural education.

### *Zusammenfassung*

Weltbürgerschaft und kulturelle Vielfalt sind überall gegenwärtige Konzepte im heutigen Bildungswesen. In den Vereinigten Staaten werden Lernziele und Kompetenzen geformt, um die Studenten gegenüber den vielen kulturellen Hintergründen, die in den Bildungsinstitutionen vorzutreffen sind, zu sensibilisieren. Trotzdem wird wahre Globalität, wie sie heute in den vielfältigen Diskursen und Perspektiven der Welt repräsentiert ist, immer noch in Lehrplänen und Studienarbeiten vernachlässigt. Dieser Artikel untersucht die Möglichkeiten, die sich heute im Bildungswesen durch den neuen, gemeinsam geteilten, globalen Bildungsraum anbieten, in dem die multikulturelle Studentenbevölkerung verschiedene Formen vernetzten Wissens und facettenreiche Perspektiven der Welt eine globale Plattform des Austausches bildet. Das von Alexander von Humboldt am Anfang des neunzehnten Jahrhunderts beschriebene universale Wissenschaftskonzept, beleuchtet solch einen vernetzten Ansatz an ein Wissen um die Welt, der auf heutige Bildungskonzepte und Kursdesigns einen positiven Einfluss nehmen könnte. Humboldts Schriften unterstreichen die Bedeutung der Inklusivität und des Wechselspiels zwischen Kulturen und Naturphänomenen. Indem wir Studenten mit unterschiedlichem kulturellen Hintergrundwissen dazu einladen, ihre jeweiligen Diskurse des Wissens aktiv zu repräsentieren, werden diese gegenseitig mit einander verknüpften Beziehungen des Wissens transparenter. Auf diese Weise, entsteht die Möglichkeit, heutige Lernziele mit neuen, produktiven Formen des Weltwissens zu bereichern, worin sich ein wahres Weltbürgertum, wie es sich in diesem

neuen Bildungsraum des globalen Austausches hervor-  
tut, widerspiegeln würde.

## Résumé

La citoyenneté mondiale et la diversité figurent au-  
jourd'hui parmi les concepts les plus représentés dans  
les études supérieures. Les résultats de l'apprentissage  
et les compétences sont conçus pour rendre les étu-  
diants sensibles aux nombreuses origines culturelles  
des établissements d'instruction des États-Unis. Néan-  
moins, la vraie globalité, représentée à travers des pers-  
pectives et des discours divers, semble être toujours  
négligée dans les programmes scolaires et les attribu-  
tions de cours. Dans cet article l'auteur explore les pos-  
sibilités offertes par un nouvel espace partagé dans le  
domaine de l'éducation -- une éducation caractérisée  
d'ailleurs par des formes variées de connaissances at-  
teintes dans des réseaux différents et en des perspec-  
tives multiples qui peuvent contribuer à construire une  
plate-forme globale d'échange dans une population  
d'étudiants hétérogène. Le concept de la science uni-  
verselle décrit par Alexander von Humboldt au début  
du dix-neuvième siècle éclaire cette approche étroite-  
ment liée aux connaissances du monde qui a le poten-  
tiel d'avoir un impact positif sur les programmes sco-  
laires contemporains et les conceptions des cours. En  
effet, dans son oeuvre Von Humboldt met l'emphase  
sur l'importance de l'inclusion et de l'interaction en-  
tre les cultures et les phénomènes naturels. En invitant  
nos étudiants à être des représentants actifs de discours  
divers, ces liens d'interconnexion leur seront de plus en  
plus évidents. Par conséquent, il se peut que les objec-  
tifs du savoir puissent être enrichis par ces façons dif-  
férentes de connaître le monde tandis qu'ils reflèteront  
de plus en plus une véritable citoyenneté mondiale qui  
évoluera en même temps en réponse à ce nouvel es-  
pace partagé dans l'éducation contemporaine. Mots-  
clés: la citoyenneté mondiale, la pluralité, les discours  
divers, l'éducation multiculturelle

Educators play a part in the process of defining  
themselves and their roles within a given educa-  
tional setting, discipline and culture. The educa-  
tional landscape, on the other hand, keeps shifting with  
time. Today, U.S. learning institutions are booming with  
a new generation of students representing an unprece-  
dented level of cultural diversity. Students from all parts  
of the globe fill our classrooms, bringing with them a  
rich web of cultures, languages, values, and belief sys-  
tems that represent a variety of perspectives and ways  
of knowing about the world.

At the same time, at an equally overwhelming pace,  
new technology enables a sharing and exchange of an  
unprecedented flow of information, which frees up new  
forms of multimodal literacies we have only just begun  
to tap into (Kress, 2003).

In stark contrast to this somewhat amorphous mass,  
higher education seems to be moving in a diametrically  
opposed direction. Institutions are battling competen-  
cies and learning outcomes, measuring and mapping  
wherever possible and streamlining the academic land-  
scape to satisfy the need for quantifiable and measur-  
able knowledge patterns. But what are we measuring?

To an educator in an urban college of New York  
City, among students from around 80 different coun-  
tries, languages and presumably even more cultures,  
the very idea of measuring presents a challenge. Does  
not the very concept of diversity compromise the idea  
of fixed standards? Does not the prism, which reflects  
these endless combinations of variables, evade possible  
definitions? This incongruity in itself might be the very  
nature of the contemporary teaching and learning con-  
text. Nevertheless, in spite of this intriguing transfor-  
mation, we press forward with learning objectives that  
in fact have excluded the objects themselves from the  
equation: the learners and the world they represent.

Students enter our learning institutions with their  
very own portmanteau, a suitcase rich with unique dis-  
courses and perspectives of the world. Still, its content  
often goes missing. While global citizenship is a well-  
established competency, the very globality in the stu-  
dent population is likely to be overlooked in curricula  
and course assignments. These shortcomings are ad-  
dressed in research and academic discussions through  
pedagogical concepts that seek to include, not exclude,  
culturally diverse values and cultural identities. Such an  
approach is perhaps best represented through Geneva  
Gay's well-developed concept of culturally responsive  
teaching a more multidimensional and inclusive peda-  
gogy that might yield greater motivation and better re-  
sults in a diverse student body (Gay, 2010). The need for  
better teaching tools is further confirmed in projected  
statistics, which speak for an even greater increase in

the diversity of students in the U.S. public school system (Rychly & Graves, 2012).

Whereas cultural values and diverse forms of communicating (Gay, 2012) are essential to the effective learning process, this new shared space of diverse and truly global discourses constitutes a new form of networked knowledge and multifaceted perspectives, and the question remains: How do we come to terms with this phenomenon in our programs and curricula? The question is relevant because although the goals of the global citizenship competency reflect the insights we seek to cultivate in our students, the curricula that are designed to meet this objective often lack the ideal they embrace. It is here that Alexander von Humboldt's vision of the world comes into play.

Humboldt presented a universal science concept that emerged from travels and observations in areas far from his familiar habitat. His idea of globally intertwined phenomena and "truths" about the world, as well as his impact on a universal or "general" education concept, have recently been revived and reinterpreted.

As Ette points out, we are only now fulfilling Humboldt's unfinished project of modernity, as "eine andere Moderne" (Ette, 2002). We seem to have caught up with Humboldt's pluralistic ideas of universal interrelationships and shared forms of knowledge. By revisiting Goya's painting, "El Sueno de la Razon Produce Monstruos", Ette compares Goya's lament to the ambivalence of our own times. The allegory of the sleeping reason as a human contradiction speaks a universal language, the "Ydioma Universal" (Ette 2002). And indeed, while we possess the ability to trade knowledge, goods and ideas by nothing more than a mouse click, we are battling an increasingly baffling world of disorder wrapped up in the Gordian knot of the rational and irrational. Language as a universal tool is failing as we fail to communicate differences while striving towards the safe havens of measuring and mapping what resides in the familiar. In *Kosmos* (1845), Humboldt writes:

Was in einem engeren Gesichtskreise, in unserer Nähe, dem forschenden Geist lange unerklärlich blieb, wird oft durch Beobachtungen aufgehellt, die auf einer Wanderung in die entlegensten Regionen angestellt worden sind. [...] Eine allgemeine Verkettung, nicht in einfacher linearer Richtung, sondern in netzartig verschlungenem Gewebe. (Humboldt von, A. 1845, p.33)

This quote exemplifies Alexander von Humboldt's idea of a universal science in connection with cosmopolitanism (Ette, 2002). Together with the vision of "Bildung" as a manifestation of individual autonomy and "Weltbürgertum" this ideal of the enlightened citizen came to play a pioneering role in the subsequent develop-

ment of general education concepts in the early 19<sup>th</sup> century which are now under scrutiny in U.S. learning institutions.

In order to shed light on the familiar in our immediate environment, in order to be able "to see" (Gesichtskreis), we must venture into the unknown and open ourselves up to "distant regions" that will uncover and help us decode what is strange and foreign. It is through the reflection of ourselves in the foreign that we gain an understanding of our "self" and where and how we fit in a world of interconnected phenomena. This insight can be arrived at, not in a linear fashion, but in an intricate web-like ("netzartig") fabric of the world.

What do educators in the culturally diverse urban universities of today have in common with Humboldt's world view, which he shared in his lectures and his writings almost two centuries ago? Like him, we are in the midst of an exciting and unpredictable rethinking of the world. Like the citizens in Europe at the time, we are experiencing a new wave of globalization and exploration of global networks, socially, culturally, and economically. And just like his colleagues in the generation following the Enlightenment, we are excited about a new flood of knowledge and information exchange, which is reflected in the move from sources such as the 18th century Encyclopedia to our omnipresent, accessible world of cyberspace. The vision of the "cosmopolite", "der Weltbürger", is alive in new forms of global sharing of knowledge, cultures, goods, and idea. At the same time, educators are busy putting together straitjackets of everything quantitative along with test formats and imagined learning outcomes. Is there a more desirable path for us as educators in these times of global communication and information exchange? And what is our role in this complex worldwide web? Humboldt seemed to answer these questions as he expounded on his philosophy of universal science.

Humboldt's *Kosmos*, both as a scientific concept and as a literary work, describes a network of knowledge, along with the attempt to include and not to exclude. While firmly rooted in the Western, Eurocentric sphere of knowledge, Humboldt communicated between cultures and sought to bridge and recognize diverse worlds, both culturally and physically. His concept was built on the interconnectedness in a pluralistic world seen as one (Ette, 2002). The human being was not to be viewed in isolation, separated from the physical world of botany, zoology, or even geology. The arts, the aesthetics, and the human senses were to play a part in our descriptions, observations, and explanations of world phenomena. He spoke of the physical world and the sciences as "painting of the world", "ein Weltgemälde", an interwoven dialog between the inner and outer world, human (aesthetic) perception, observation skills, and the physical, natural environment (Knobloch,

2004). Consequently, his thinking came to be shaped around an interdisciplinary, cosmopolitan, or global approach to a worldwide web of knowledge and the sciences, which in turn was to be disseminated amongst the broader public. In his view, a healthy society rested on broad public knowledge and awareness of the world (Ette, 2006).

It is in the interwoven links between disciplines and cultures and the capacity to make connections that true knowledge transpires and learners can place themselves within the broader scope of a historic time and place. Here, the intriguing link between Humboldt's universal science concept and the current efforts to define and implement improved general education skills becomes apparent. However, whereas the crossing of boundaries of inherited, fixed disciplines into a thinking of cross-disciplinary curricula has become a well-established approach, the inclusion and integration of "the other" and the multifaceted perspectives of a culturally diverse student body seem to go unnoticed.

In observations of and interactions with my own and other subject areas, global themes such as women's rights, environmental, health, and education issues are largely treated through our very own scientific and intellectual lens of Western sensibilities. Against our best intentions, we still seem to unilaterally "teach to" the students as passive receivers, rather than as active representatives of knowledge. For example, a theme as globally urgent as "energy" is often dealt with from the perspective of the American "abuser", whereas the widespread lack of energy in other areas of the world seems to be left out in the discussion. And yet, our classrooms are beaming with well-informed students from Asia, South East Asia and Africa, who could inform on the topic from a different angle and contribute with real-world examples and experiences. Paired with current research, these unique sources would shed light on the global complexity of these issues, broaden the dialogue and add a sense of authenticity to curricula across the disciplines.

Other culturally sensitive, less tangible topics such as gender roles, race, and ethnicity, seem to be treated predominantly from the American perspective, whereas other truths and experiences, available first-hand in our students, are less integrated in classroom discussions. As an example, today's multicultural classroom might represent five to seven different languages and dialects and as many cultures, if not more. Students are often multilingual, multicultural learners, in many cases from former colonies with rich and complex stories to tell. And yet, we seem to cling to domestic variations—Hispanic, African-American, or maybe Asian-American experiences—that paint a world according to one nation and its sociocultural issues. In other words, despite all good intentions, we often treat a less-identified di-

versity as a form of the American minority experience, instead of considering them as active, global participants of knowledge and representatives of diverse cultural know-how.

Similarly, basic science courses in Biology and Chemistry are wide-open areas of globally challenging topics. Epidemics and disease, microbiology, genetics, and general pathology are subjects and disciplines that could be enriched by assignments and discussions from a diverse, global student population with grassroots experiences and culturally diverse approaches.

In this context, Humboldt's idea of willingness "to see" and to discover oneself in the foreign serves as a form of true inclusion. To invite "the object" of our learning goals to be an active producer and contributor of knowledge means to explore and include unfamiliar and diverse discourses into our curricula; these in turn make visible the "intermediate links" between different perspectives and ways of viewing the world. Hence, the interconnectedness of cultures and natural phenomena is uncovered and a seemingly disparate, pluralistic world is turned into a meaningful, intricate web of global exchange (Ette, 2006).

As we free up new perspectives of knowing we are, in fact, beginning to act on Humboldt's moral reflection on "a rational inquiry into nature" and world phenomena. In the introduction to the first volume of *Kosmos* he writes:

Das wichtigste Resultat des sinnigen physischen Forschens ist daher dieses: In der Mannigfaltigkeit die Einheit zu erkennen, von dem Individuellen alles zu umfassen, was die Entdeckungen der letzteren Zeitalter uns darbieten, die Einzelheiten prüfend zu sondern und doch nicht ihrer Masse zu unterliegen, der erhabenen Bestimmung des Menschen eingedenk, den Geist der Natur zu ergreifen, welcher unter der Decke der Erscheinungen verhüllt liegt. (Humboldt, p. 6)

By communicating through inquiry how world phenomena are perceived in a new shared space of knowledge, we are able to grasp new truths hidden under the surface. Thereby, we might have caught up with Humboldt's call for a greater understanding of ourselves through a reflection in the unfamiliar without "succumbing beneath the weight of the whole".

As we make these networked ways of knowing more transparent, we might as a result, contribute to productive and more multifaceted ways of reflecting on our established educational learning goals in order to better match a diverse and multicultural student body. Further, the inclusion of multiple perspectives would help expand the lens through which we wish to measure and



calculate what we deem as desired learning outcomes for the new generation of the multimodal, global learning communities of today. Finally, in reflecting ourselves in the different "foreign" realities, we move closer to transforming Goya's "Ydioma Universal" into forms of universal communication which include, rather than exclude, what seems to fall off our inherited, preconceived maps of knowing.

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