

Measuring inequalities in higher education: a politics of science

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At a time when rankings and the production of data on higher education systems multiply, this article questions the actors' configuration linked to the transformation of statistical indicators into frames used to read the inequalities of access to higher education. Who says what and with what results? Who is responsible for making social facts become things? The comparison and characterisation of the available inequality indicators regarding access to international databases (UNESCO, OECD, EUROSTAT) and national ones (Germany, France, Switzerland and the UK) question the tensions between the various discourses and the indicators produced and interrogate the deep national inscription of these indicators.

Keywords: higher education; inequalities; measurement; international bodies; statistics

Introduction

From now on, it is upon statistics, upon the reasoned knowledge of social facts, that peaceful revolutions aimed at improving peoples' condition will rest...¹ (Heuschling X., 1847, *Manuel de statistique ethnographique*, 206)

The characterisation of higher education systems is nearly contemporaneous with the birth of 'modern' higher education systems. It emerged at the beginning of the twentieth century thanks to a twofold impetus originating from America: on the one hand, Cattell, a psychologist (Cattell 1906, 1910), developed a measure of excellence to characterise academic departments, based on the number of 'great male scholars' they employed. On the other hand, in the 1920s, Carl Brigham, an American psychology professor, developed an admission test to universities aimed at objectivising access to higher education. That test replaced an admission process adopted by 23 universities in 1901.

Cattell intended to use statistics to influence higher education policies, in particular to preserve the autonomy of faculty members by weighting on the organisation of higher education (Cattell 1912). For Brigham, the aim was, due to the increase of the student body, to organise access by making students' skills comparable through the rationalisation of the measure of their knowledge. In both cases, the premises involved in the measure of higher education's characteristics constituted the aftermath of Alfred Binet's research, who was the first to develop a test to measure intelligence in 1905. While the use of these tests is based on the democratic ideal that intelligence is a good randomly distributed across society, i.e., independently from social, economic or cultural variables, the characterisation of individuals underlines differences in academic results depending on collective belongings.

For Cattell as well as for Brigham, the quantitative measure of individual characteristics was designed to help objectivise the political decisions made in higher education. However, none of these measures are free from ideological stakes and interpretations. Data production contributes to a specific construction of reality. The history of statistics is full of such tensions between

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the management of human beings (politics) and the management of things (science) (Desrosières 1989). As a consequence, differences in results were read differently. Brigham first interpreted ethnic differences in test results as expressing a biologically-inherited trait (*A study of American intelligence*, 1923), before questioning the very notion of universal intelligence quotient (*A study of error*, 1932).

The measure and evaluation of higher education systems is intertwined with the characterisation of the individuals composing the systems. This characterisation, based on academic skills or professional activities, is always analysed later on in terms of groups' memberships, be it the geographical, social or ethnic origin of individuals. This determination to characterise the specificities of higher education through a measure aiming at being 'objective' increases when the size and the differences within higher education systems are on the rise. The tension between these two sides of the characterisation – the measure of objective competences and the analysis of the latter when applied to collective belongings – ran through the twentieth century.

At a time when rankings and the production of data on higher education systems multiply, this article questions the actors' configuration linked to the transformation of statistical indicators into frames used to read the inequalities of access to higher education. The first part of this article identifies the discourses produced among the main international institutions (OECD, UNESCO, World Bank, EUROSTAT) about the inequalities in access to higher education and confronts them with the indicators they produce. It aims at grasping the discrepancy between words and actions: the indicators produced by the international organisations do not meet the questions those address in their various statements. This gap between the recommendations they make and the tools they produce raises questions: Why such a contrast? What are the mechanisms at play? Is it due to a technical problem?

A second part questions this discrepancy through the history of these international bodies and the national production of statistical data and what they reveal of national specificities in the building up of social inequalities. A comparison between the German, the French, the British and the Swiss cases will illustrate that point.

Lastly, the conclusion interrogates the processes through which the indicators revealing the inequalities of access to higher education are produced by articulating the international, national and local spaces within which frames of reference are elaborated, as part of 'a vision of the world' (Muller 1995).

International bodies: discourses and practices

Discourses between ethics and politics

Since the end of the 90s, the question of inequalities in higher education has featured prominently in the statements and projects of international bodies (UNESCO, World Bank, OECD, European Community). This trend emerges from the 'World declaration on higher education for the twenty-first century', initiated by UNESCO and adopted by the World Conference on Higher Education (1998). The third article of this Declaration is devoted to the issue of equity in access. Two paragraphs of that article particularly come into sight that represent two characteristics of the equality principle that are potentially in contradiction with each other:

- (a) In keeping with Article 26.1 of the Universal Declaration of Human Rights, admission to higher education should be based on the merit, capacity, efforts, perseverance and devotion, showed by those seeking access to it, and can take place in a lifelong scheme, at any time, with due recognition of previously acquired skills. As a consequence, no discrimination can be accepted in granting access to higher education on grounds of race,

gender, language or religion, or economic, cultural or social distinctions, or physical disabilities.

- (d) Access to higher education for members of some special target groups, such as indigenous peoples, cultural and linguistic minorities, disadvantaged groups, peoples living under occupation and those who suffer from disabilities, must be actively facilitated...

These two points underline both the principle of non-discrimination (or 'identity-blind' selection process) associated with the idea of a meritocratic selection (point (a)), and the principle of affirmative action (point (d)) towards some categories of individuals. This second goal was developed in 2000 by the World Bank as well as UNESCO in the report entitled *Higher education in developing countries: Peril and promise*, that underlines the necessity to offer access to higher education to students 'from disadvantaged backgrounds'. This necessity to reduce inequalities so as to reflect diversity in higher education, as well as the goal of achieving participative equity are a recurrent dimension of the European reports. They can for example be found in the Berlin Communiqué (2003), Bologna Process Follow up Group (2005) or the London Communiqué (2007), etc.

In 2006, the Commission of European Communities even went further in a communication on 'efficiency and equity in the European education and training system', stating that higher education institutions 'should be encouraged to develop comprehensive outreach and access policies, which could include the introduction of bridging programs and earmarked places'. This clearly states the necessity to take identities into account in the organisation of access to higher education.

The same year, the meeting of OECD Education Ministers in June 2006 was entitled 'Higher education. Quality, equity and efficiency' (Athens, 27–28 June). One of the goals to be addressed concerned:

[a] more equitable education: access to higher education needs to be widened to benefit all social groups. This is a real challenge for school systems, as well as for higher education. Comprehensive actions are therefore needed in education systems to tackle the problem.

Ministers reached the following points of agreement in particular: they 'affirmed their commitment to widen higher education participation to promote social inclusion and expand lifelong learning' and 'accepted that a wider diversification of institutional profiles is needed to meet the full range of national needs and individuals' aspirations'.

The necessity to diversify not only higher education systems but also the student body emerges from these discourses. Behind the general category of 'disadvantaged' individuals, some specific groups are identified such as 'social groups', 'linguistic minorities', 'indigenous communities', or handicapped persons. By doing so, those international bodies thus approve of taking into account collective identities in the organisation of higher education and in the implementation of equity policies. These numerous calls for equity policies underline the increased recognition of the role played by higher education systems in the construction of democratic societies or at least in the affirmation of a democratic ideal.

Nevertheless, when it comes to the production of indicators characterising higher education systems, those same bodies offer few tools allowing to problematise these very inequalities.

As one can see when adopting a historical perspective, at an international level, the UNESCO, World Bank and OECD have, in the 1990s, been precursors in the development of discourses advocating the necessity to monitor inequalities in higher education. This dimension became a key dimension of the European Commission only with the London Communiqué in 2007. For this reason, this article mainly focuses on the analysis of the UNESCO, World Bank and OECD and does not provide a systematic analysis of the European level, as it is too early to assess the impact of these new discourses on national policies.

Statistical indicators: of things and men

The OECD, UNESCO and EUROSTAT (UOE²) joint research aims at ‘providing internationally comparable data on key aspects of the education systems, specifically on the questions of access to and success in education programmes but also about the costs and the sort of resources allocated to education’ (UOE 2007). This research constitutes the basis for the production of independent online databases and documents that reveal the elaboration of indicators specific to each international body. These indicators constitute as many ways of reading higher education systems. The exhaustive spectrum of these indicators, realised through a work of matching,³ also takes into account the available and shared⁴ indicators presented in the OECD publication *Regards sur l'éducation* (2008), as well as in the EUROSTAT Newchronos database and its main publication *Les chiffres clés de l'enseignement supérieur en Europe* (2007), jointly produced with EURYDICE. This allows to identify the focus of each international body, and from then on, to infer the legitimated categories of reading inequalities through the available indicators.

Regarding EUROSTAT, indicators such as the proportion of women in higher education, in scientific fields in particular, the share of students with European mobility and the share of male and female graduates in science seem to make up the core issue. In terms of reading social inequalities, this type of indicators reveals a focus on one specific individual inequality, that of gender, analysed through institutional inequalities (mobility, field of study). The OECD is concerned with providing information, through rates, about success in higher education by country, about the wages earned by university graduates in the tertiary sector by gender and about the financial resources dedicated to higher education systems. Here the focus is placed on access, success and professional integration, but also on output, efficiency and performance of the higher education systems.

As far as UNESCO is concerned, at first sight no importance seems to be given to one or the other of these factors: all indicators provided in the database are also represented in the pre-established tables that eventually correspond to an exhaustive presentation of all indicators available for all countries.

In order to obtain a synthetic view of the available indicators regarding access, two main categories of indicators have been identified: those related to individuals, i.e., identities (gender, age, social origin, nationality, etc), and those linked to the structure of the higher education systems (type of institution, field of study, etc).

Table 1. Comparative framework of inequalities indicators regarding access to higher education for UNESCO, OECD and EUROSTAT.

	Structural characteristics	Individual characteristics
UNESCO	Level of studies	Gender
OECD	Program orientation (general/professional)	Age
EUROSTAT	Field	
UNESCO	World region of the institution	
OECD	Institution status (public/private, subsidized, private independent) Attendance mode: full-time/part-time program	Foreigner Father professional status
EUROSTAT	Institution status (public/private, subsidized, private/independent) Institution's regional location Attendance mode	Foreigner Nationality

Regarding structural characteristics, the three organisations allow us to differentiate students depending on their level of studies, their field of education and the program orientation, general or professional. Individually, they also offer the possibility of setting apart the students depending on the status of the institutions, but also according to their region of origin, be it at the worldwide level or within a given country.

Concerning individual inequalities, indicators used by the three organisations are gender and age. Individually, they diffuse indicators that reveal student access depending on nationality.

As far as access is concerned, available indicators thus characterise things (the systems' structures) and men. Joining these two types of indicators, questioning the 'who' and the 'where' in access to higher education, produces a reading of inequalities.

Besides the inherent problematic to each international body that influences the production of indicators, the shared indicators illustrate the issues now legitimated in the reading of identities: gender, age and demographic variables translating ascribed identities are, in this context, barely controversial. Moreover, we note that inequality indicators used in other contexts (see Goastellec 2008a) such as social, ethno-racial or geographical origin, are almost absent here. The indicator 'father socio-professional status', presented in the OECD database, only entitles to distinguish between the two broad categories (manual occupation/non manual). The same observation can be made when it comes to secondary analysis such as the one provided by the EUROSTUDENT report (2005): if this report is characterised by an attempt to use inequality indicators, it reveals the difficulty to obtain comparable data from European countries: 11 countries are analysed in the report, and 4 indicators of inequalities addressed: parental work status, parental occupational status, parental level of education, and parental income. But when looking at the definition of these indicators, they only allow for a very broad categorisation, and even then, not all 11 countries provide data. For example, the work status distinguishes between 'economically active', 'unemployed', 'vocationally inactive' and 'retired', and data are provided for nine countries. As for the parental occupational status, it only provides information on the percentage of students with blue-collar parents. As well, the parental level of education differentiates between those who have a higher education certificate and the others (10 countries provide information). Lastly, the parental income opposes the upper and lower half of students' parental income, but here only two countries provide information. The very same analysis can be made of other reports such as the EUROSTUDENT–EUROSTAT report, entitled *Bologna Process in higher education in Europe. The key indicators on social dimension* (2009), that is explicitly dedicated to analysing this 'social dimension' of higher education, as is called at the European level the accessibility issue.

Such an assessment contrasts quite strongly with the official discourse of the international bodies we have previously analysed. This discrepancy between recommendations and available tools begs the following questions: Why such a contrast? What are the mechanisms at play? Is it due to a technical issue or is it a political one?

Constraining histories

International education statistics: conflicting rationales

The role played by UNESCO in the production of normative discourses relative to inequalities in higher education stems from a long history. As early as 1968, UNESCO developed a section dedicated to the comparative study of education by taking in another international body, the International Bureau of Education. This Bureau had been created in 1925 in Geneva and designed for the production of knowledge in the field of comparative pedagogy (United Nations 1968). It was the first organisation to try and organise international cooperation in education (1929). However, that first effort did not lead to the production of a statistical synthesis but gave rise

instead to a debate within the governing body between Jean Piaget and M. Dottens regarding the degree of data comparability between countries with regard to cultural specificities (Heyneman 1999). This resistance to the production of statistical indicators has been persistent through the history of UNESCO.

De facto, by absorbing the International Bureau of Education, UNESCO inherited both a 'large intellectual and functional autonomy' (United Nations, 1968, article 3) and the imperative to guarantee the organisation of the International Conference on Public Education of which the purpose was 'to adopt recommendations to States on matters of public education and to provide the possibility for an exchange of experiences and of theoretical ideas contributing to the development of education throughout the world' (United Nations, 1968, article 5). R. Cussò (2003) attributed 'the fact that UNESCO has never published rankings or international indicators aimed at measuring countries' performance in terms of education, at least until 2003' partly to this 'intellectual origin of UNESCO, influenced by a structuralist perspective'. UNESCO thus sets great store by the right to education but remains reluctant to measure performance.

The ideological stake involved in the production of statistics in education is thus central. But the creation of normative discourses is not limited to UNESCO. In fact, UNESCO has long been the sole international producer of education statistics, before seeing its role questioned in the 1980s, in a cold war context, by the withdrawal of the US, the UK and Singapore: the US reinvested part of their funding in other bodies such as, in 1988, the Board on International Comparative Studies in Education (Heyneman 1999). The number of institutions producing statistics and international comparisons in education skyrocketed.

The investment by other international bodies such as UNICEF, the World Bank or the OECD in the production of international statistical data on education had a liberating function on 'the approach to the social and political role of education upheld by these institutions' (Cussò 2003). Since the late 1980s, the OECD has developed, with the support of the US, the International Indicators of Education Systems (INES) project, that regroup several networks aimed at designing, negotiation, and collection indicators to be published in the yearly report *Education at a glance*. If initially this project consisted in a reporting scheme of national pre-existing administrative databases, it later evolved into cross-national surveys that led countries to develop shared indicators.

Nevertheless, the original technical problem of data comparability remains. The problem persists because indicators elaborated by international bodies are produced on the basis of data provided by national agencies. And these agencies translate, in the production of statistical indicators, a specific understanding of society and the nation state. Available indicators are thus heterogeneous, which calls into question the indicators' harmonisation *a posteriori* as well as their imposition *a priori*.

National databases

This section analyses the indicators available at the national level and on a recurrent basis in four European countries: the UK, Germany, France and Switzerland.

The analysis of the Swiss context is based on the data produced by the Federal Statistics Office (OFS) and published on its web site through tables and reports such as the *Students' social situation* report (2008). In France, direct access to official statistics regarding higher education is provided by the web sites of the Ministry of National Education (MEN) and the Ministry for Higher Education and Research on the basis of education statistics provided by the Bureau for evaluation, prospective and performance (DEPP). Three sources are accessible online: the publication 'Repères et Références Statistiques' (RER), the 'Tableaux Statistiques' that gather data stemming from many French education institutions, and a publication entitled 'L'état de

l'enseignement supérieur et de la recherche'. These three publications have been analysed to identify the categories applied to reading inequalities in the French context. As far as Germany is concerned, the 'Statistisches Bundesamt Deutschland' constitutes the main data provider. It gives access to three major sources of information: an online database named 'Genesis' and two publications, 'Bildung in Deutschland' ('education in Germany') and 'Internationale Bildungsindikatoren im Landervergleich, Statistische Ämter des Bundes und der Länder'. These three documents have contributed to our analysis of inequalities indicators. As regards the UK, the Higher Education Statistics Agency is the main provider of statistics. In addition to tables available online, several publications are accessible that address the issue of access: 'Students in higher education institutions', 'Higher education statistics for the UK', 'Higher education management statistics' and 'Performance indicators' reports are published approximately once a year. These various sources have been analysed to identify available inequalities' indicators.

Distinctive indicators

With regards to structural characteristics, the reading categories used in the three countries reveal more similarities than differences. In all three cases, it is possible to distinguish the students in relation with the type of institution they enrol in, the institution they enrol at, the geographical location of the institution and the field of study. In France and Germany, it is also possible to characterise the students depending on the type of institution they enrol in (public/private, subsidised, private/independent). This last element underlines the significance of the distinction between the private and public sectors in higher education in France and Germany, which is not the case in the Swiss context. As for the UK, the database provides information on the institutions' location.

Table 2. Comparative framework for reading indicators of inequalities concerning access* to higher education in Switzerland, France, Germany and the UK.

	Structural characteristics	Individual characteristics
Switzerland/France Germany/UK	Type of institution Institution Regional location of institution Level of study Field of study	Gender Nationality**
Switzerland		Age Parental level of education
France	Institution status	Age Educational level of parents Social origin Academic origin (baccalaureate specialty) Parents' place of residence
Germany The UK	Institution status Previous institution attended Location of current institution Full-time/Part-time	Disability Ethnicity Age (young/mature) Socio-economic background Low participation neighbourhood

Notes. * To provide with the broadest overview possible, indicators of access include here both indicators available regarding incoming students and the student body as a whole. ** Nationality is usually measured by the number of foreign students (E) compared with the number of nationals or, in the British case, using the distinction between national other European and non-European students.

Concerning individual characteristics, indicators shared by the three countries are gender and nationality (nationals/foreigners), which underlines the highly polemic dimension of socio-economic indicators. They do reveal domination relationships in higher education between social groups. Divergences appear depending on the countries. In Switzerland and France, indicators are produced that allow distinguishing students' access to higher education depending on their age and parental level of education. Meanwhile, the age factor in the UK case is related to a differentiation between young and mature students linked to program diversification and widening access policies.

In France, it is also possible to read differences among students from their schooling origin, and social background. A national specificity comes here to the fore: the important development of a technology to measure socio-professional qualification (Desrosières and Thévenot 1988; Duriez et al. 1991).

In Germany, none of these indicators seem to be used to read differences between students' access at national level.

The situation in the UK appears to be quite singular: a wide array of indicators is available that openly problematise the inequality issue. Indeed, the 'performance indicators' report in particular consists of indicators aimed at analysing the widening of access to higher education. Five indicators are used: disability, that allows to distinguish among eleven categories, ethnicity, with two main categories, white and ethnic minorities (the latter being subdivided into ten categories that link ethnicity with geographical origin). Regarding socio-economic qualification, the national categories are merged into two main categories allowing only a general approach of inequalities among socio-economic groups. Finally, there is the 'low participation neighbourhood' indicator, which may be resorted to in order to identify students coming from a low participation neighbourhood and having no previous higher education qualification.

Globally, inequalities in access are thus primarily being read in terms of institutional inequalities, i.e., in terms of students' access to and orientation within a higher education system composed of diverse institutions within a national territory. These differences in access are then read in terms of gender inequalities, this dimension being the object of an theoretical international political consensus on both its recognition and its treatment. Meanwhile, all other inequalities linked to individual socio-demographic origins remain deeply linked to national traditions.

Indicators revealing national specificities

Besides a standardisation of performance measurement, the frame used to read institutional indicators always reveals a national understanding of schooling careers, but also an understanding of the role of higher education institutions in the construction of a given society. More generally, we can say along with Desrosières that 'the implementation of statistical systems is linked to the building up of the State' (Desrosières 1989, 226). To this reading of national higher education systems' organisation, national databases add a second level of indicators: indicators of individual inequalities that reveal in their turn the existence of other indicators of institutional inequalities. In fact, two individual inequalities indicators are shared by national databases: gender, that is now part of a consensus, and nationality. Yet the latter is to be manipulated with caution due to the fact that it does not provide enough ground to differentiate students according to their national origin but only distinguishes between nationals and foreigners. Here, the problem is linked to the measure of the system's attractiveness for foreign students, more than to questions of representation in higher education of students who make up part of an immigrant population. Even this measure comes with its share of problems: in Switzerland for example, the migrants' feeling of identification with national identity is weak and conjugates with a very slow naturalisation process in which individuals must be very active. As a consequence,

the 'foreigners' category assimilates students who came to study in the country with students born in Switzerland of foreign parents.

We can see here that it is *a priori* impossible to categorise indicators as inequality indicators. An indicator does not constitute an inequality indicator *per se*, it does so only when it is confronted with other indicators: its visibility depends on the way it is analysed and on its interaction with other indicators.

The comparison of these databases also reveals, through the diversity of individual inequality indicators used, that the measure of individual inequalities remains deeply national. In fact, besides the gender issue, all other individual inequalities indicators are national, which reveals the constraining frame constituted by the nation states and the identities that compose them. Social problematics thus remain largely national.

But what do these databases tell us then about national identities?

Traditionally, French and British databases are singular due to the fact that they link social, cultural and economic capital with school careers. Schooling origin, social origin and the level of parental education reveal the specifically French development of the measure of socio-professional qualification. The available information is even more complex in the UK, where more variables weighing on access, including ethnic identity, disability and geographical environment are taken into account. This specificity of the British case can be linked to a specific understanding of nationhood, as underlined by Krishan Kumar (2003, IX): 'Not exclusion and opposition, but inclusion and expansion, not inwardness but outwardness, mark the English way of conceiving themselves'. Conversely, in the case of Germany and Switzerland, regional origin, associated with the federal structure of the state, is largely resorted to.

Lastly, on the subject of national specificities, institutional indicators are as revealing as individual indicators. In spite of the growing debate (through international bodies and researchers) on the role played by higher education systems in the (re)production of social inequalities, individual indicators remain relatively few and call for continuous attention to and reflection on the creation of inequalities.

Conclusion: the national measure of inequalities between institutional and international incentives

The social construction of inequalities and their problematisation assuredly belong to the Nations, in particular when it comes to the characterisation of a social diversity that is always the product of a history. This link between nation states and the creation of social inequalities comes to the fore at three levels: firstly, social diversity encompasses distinct modes of existence, each society being characterised by a specific kaleidoscope of individuals with diverse belongings. Secondly, each nation state is constructed around one main legitimated identity category, be it ethno-racial, social or geographical origin. This dimension represents the heart of the national reading of social diversity and thus, of inequalities. (Not to mention that each nation state has developed a specific way of addressing diversity, be it 'E pluribus Unum' in the American case, which involves the respect of individual identities in the construction of a social body; 'Liberté, Egalité, Fraternité' in the French case, that translates an ideology focusing on unity, universalism and the assimilation of immigrants into French culture and society, etc.) Thirdly, a very similar indicator can be built in different manners, in which case the same issue can be addressed, but in different ways. For example, social origin is sometimes conceived in terms of parental level of education, or profession, or income. Here again, the measure of the income level potentially differs, with in one case, a distribution in quartiles and, in other cases, a distribution in deciles. To sum up, producing a comprehensive array of individual inequalities indicators constitutes a tremendous task that cannot always be achieved. Furthermore, these

indicators represent the prerogative of the nation states, which guarantee the building up of legitimated inequalities.

Statistical innovation related to the characterisation of inequalities in access to higher education thus cannot be initiated by international bodies, limited to the role of moral and political entrepreneurs.

If the international incentives produced by international agencies are important, another level of action also appears to weigh on the national understanding of social diversity and thus on the legitimacy of new inequalities indicators: the study of students' admission processes in different higher education institutions in the US, South Africa, Indonesia and France (Goastellec 2003, 2004, 2008a, 2008b) reveals a constant reinvention of categories in order to read identities – at the central level, department level or individual level (professors or administrators, whichever is responsible for student admissions) – depending on their position on the academic market and on what makes sense to them. These local frames of reading social diversity sometimes correspond to a political drive and an explicit communication campaign of a given higher education institution, which thus builds up its image on the fact that it takes this diversity into account (for example at UC Berkeley and SciencesPo Paris). It may also come from a discreet, individual or departmental desire to use *ad hoc* categories to weigh inequalities or more generally to characterise a student body and adapt it to a local ideal combining more or less social justice and efficiency.

Taking inequalities into account, and more generally characterising the student body through the production of indicators, articulates three levels of production that are in permanent interaction: the states, legitimating only some identities, limit the production of indicators by international bodies. The latter can only slowly diffuse their own criteria (the gender variable for example) by developing normative discourses addressed to the states in order to orient the type of indicators they produce. As well, the national frames constrain the space of official possibilities for higher education institutions, which in return innovate and can propose, on a bottom up mode, innovations that may be later on used at the national level.

The state, as producer of statistical indicators, is influenced by both international bodies and higher education institutions, which leads the latter to develop some indicators and thus to problematise specific dimensions that would otherwise remain secondary. Those actors have two main functions: they both believe in the paramount importance of some problematics by putting indicators at the centre, the local level being the innovative one. As regards international bodies, by echoing local practices through the diffusion of discourses in favour of taking inequalities into account and establishing the comparability of national data, they greatly rely on comparison to encourage higher education public authorities to steer policies in a converging process.

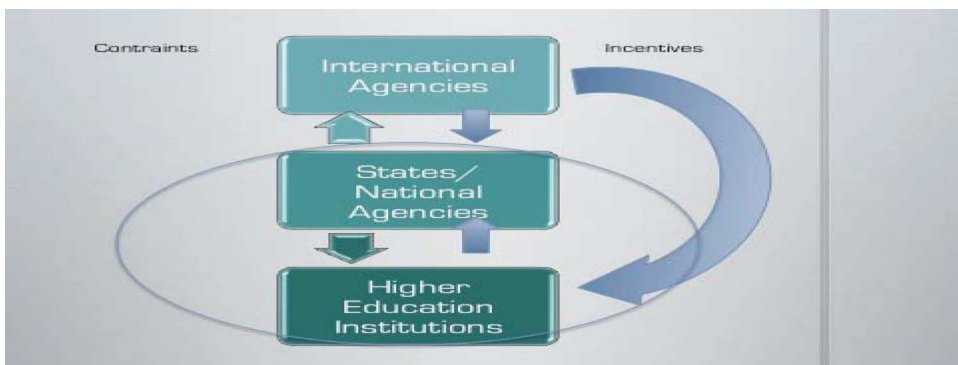


Figure 1. Scheme I: inequalities' indicators between national, international and local actors.

Notes

1. Translated from French by the author: 'C'est sur la statistique, sur la connaissance raisonnée des faits sociaux, que s'appuieront désormais les révolutions pacifiques qui auront pour but d'améliorer la condition des peuples'.
2. The UOE research deals with 60 countries including those from the European Union.
3. The matching was achieved through indicators presented in the tables established by the international bodies, and those that could be obtained through personalised tables (Adangnikou et al. 2009).
4. When indicators are only available for a very few countries, they are considered as unavailable for international comparative purpose.

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