

Appendix 1: Summary of findings and avenues for future research

4.1. Fundamental value: **ACADEMIC FREEDOM**

				<i>For future/more research</i>		
<i>Indicator/tool/measuring exercise/study</i>	<i>Type of tool/measurement</i>	<i>Indirect or direct assessment/measurement</i>	<i>Does it measure this value as defined in the EHEA?</i>	<i>Can it be used in the EHEA effort to monitor fundamental values</i>	<i>If yes, how?</i>	
1.	Academic Freedom Index (Varieties of Democracy -V- Dem Dataset)	Composite Index	Direct	Partially	Yes	Direct applied/technical value. Modifications needed if Afi is to measure AF as defined in EHEA
2.	Changing Academic profession (CAP)	Survey	Indirect	No	Yes	Heuristic value. Provides insights about ways of measuring academic freedom
3.	Freedom in the World (Freedom House)	Report with numerical ratings and descriptive text	Direct	Partially	Yes	Mainly heuristic value. Provides insights about ways of measuring academic freedom
4.	Criterion referenced approach	Numerical assessment of (legal) compliance levels	Direct	Partially	Yes	Potential technical value as an applicable tool as well heuristic value. One off initiative but can be re-used
5.	Measurement of the Right to Academic Freedom	"Multidimensional picture" re legal perspective	Direct (potentially)	Partially	Yes	Heuristic. Insight about the multidimensional nature of AF and relationship with other values.
6.	Assessment of quality of academic freedom protection (UK)	Survey re. self-assessment of institutional <i>de jure</i> and <i>de facto</i> protection of AF	Direct	Very partially	Yes	Heuristic. Insights about comparative measurements at AF at the intuitional level
7.	Survey regarding academic freedom in Germany	Survey	Direct	Partially	No	(It is a more limited version of Afi)
8.	SAR academic self-censorship survey	Survey regarding extreme restrictions	Indirect (inventory of	Very partially	Yes	Heuristic. Insights regarding inventorying extreme infringements of academic freedom

			incidents rather than measurement)			
9.	SAR Academic Freedom Monitoring Project	Monitoring violations of AF and/or human rights of HE communities' members	Direct	Partial	Yes	Defines types of conduct that represent violations of AF and human rights in HE
10.	Magna Charta Universitatum application form	Questionnaire for institutions applying for MCU membership	Indirect	Quite largely	Yes	Heuristic. Insights about how to understand AF and operationalise its measurements

4.2. Fundamental value: INTEGRITY

					<i>For future/more research</i>	
<i>Indicator/tool/measuring exercise/study</i>	<i>Type of tool/measurement</i>	<i>Indirect or direct assessment</i>	<i>Does it measure this value as defined in the EHEA?</i>	<i>Can it be used in the EHEA effort to monitor fundamental values</i>	<i>If yes, how?</i>	
1.	Magna Charta Universitatum application form	Questionnaire for institutions applying for MCU membership	Indirect	Not defined by EHEA (no draft available either)	Minimally	Provide some indication about how to understand integrity
2.	“Core commitments: Educating Students for Personal and Social responsibility” Initiative	Survey (USA)	Indirect		Potentially	Provides indirect and broad insights about how to understand integrity, from the perspective of students, academic and administrative staff
3.	Five core elements of Exemplary Academic Integrity Policy	System-level policy (Australia)	Indirect; rather not even measurement		Potentially	Provide insight about how to design and implement integrity policy, thus potentially helping to operationalize integrity

4.3. Fundamental value: INSTITUTIONAL AUTONOMY

For future/more research

<i>Indicator/tool/measuring exercise/study</i>	<i>Type of tool/measurement</i>	<i>Indirect or direct assessment</i>	<i>Does it measure this value as defined in the EHEA draft?</i>	<i>Can it be used in the EHEA effort to monitor fundamental values</i>	<i>If yes, how?</i>
1. Autonomy scorecard	Multidimensional scoring of systems	Direct	Yes	Yes	Technical tool, immediately applicable
2. Academic Freedom Index (Varieties of Democracy -V-Dem Dataset)	Index	Direct	Partially; different definition (autonomy is part of academic freedom)	Potentially	Can help refine the Autonomy Scorecard and better articulate the relationship with AF?
3. Freedom in the World (Freedom House)	Report with numerical ratings and descriptive text	Direct	Partially	Yes	Adds a little to the EUA scorecard (political pressure and participation)
4. Criterion referenced approach	Numerical assessment of (legal) compliance levels	Direct	Partially	Minimal	May not add to the Autonomy Scorecard
5. Magna Charta Universitatum application form	Questionnaire for institutions applying for MCU membership; not numerical	Direct	Partially	Yes	Heuristic. Insights about how to understand IA and operationalise its measurements. May not add much to the Autonomy Scorecard

6.	Systems approach for better education results in tertiary education (SABER-TE)	System level, comparative benchmarking	Direct	Largely	Yes	Draws attention to at least two dimensions not addressed by the Autonomy Scorecard: overall “governance autonomy” and to the private sector in higher education
7.	Operationalisation of university autonomy in Russia	Theoretical model for potentially developing and adapted measurement tool	Direct (if actual)	Partially	No	A narrower version of the Autonomy Scorecard model
8.	School autonomy, leadership and learning	(New) Research framework	Not a tool yet	Largely, if transformed into a tool;	Yes	Proposes a slightly different definition and operationalisation of IA.
9.	Indicators of university autonomy according to stakeholders’ interests	New conceptualisation to help identify indicators for IA	Not a tool yet	Largely, if transformed into a tool	Yes	Draws attention to groups of stakeholders on the basis of which to identify indicators. May complete in this regard that the Autonomy Scorecard
10.	Procedural university autonomy	(Older) model for identifying indicators	Not a tool	Very partially	No	Old and very narrow model
11.	Campus autonomy	Surveys (US)	Direct	Partially	Yes	Provide insight regarding measures of academic and financial flexibility; relationship to measures of quality and institutional success.

4.4. Fundamental value: PARTICIPATION OF STUDENTS AND STAFF IN GOVERNANCE

					<i>For future/more research</i>	
<i>Indicator/tool/measuring exercise/study</i>		<i>Type of tool/measurement</i>	<i>Indirect or direct assessment</i>	<i>Does it measure this value as defined in the EHEA draft?</i>	<i>Can it be used in the EHEA effort to monitor fundamental values</i>	<i>If yes, how?</i>
1.	Ex-post evaluation of university governance	Survey (Netherlands)	Direct	Yes	Yes	Proposes a model regarding how to operationalize participation and indicators to measure it
2.	Changing academic profession (CAP)	Survey	Indirect	Partially (thematically and in terms of constituencies – does not include students)	Potentially	Heuristic. Provides insight about how to understand staff participation.
3.	Model of student participation in university governance (I)	Comparative study (two universities in Nepal)	Direct	Partially (thematically and in terms of constituencies – students only)	Potentially	Heuristic. Provides insight about how to understand student participation.

4.	Model of student participation in university governance (II)	Case study (Portugal)	Direct	Partially (thematically and in terms of constituencies – students only)	Potentially	Heuristic. Provides insight about how to understand student participation.
5.	Magna Charta Universitatum application form	Questionnaire for institutions applying for MCU membership; not numerical	Direct	Partially	Yes	Heuristic. Insights about balance between student and staff participation
6.	Freedom in the World (Freedom House)	Report with numerical ratings and descriptive text	Indirect	Partially	Yes	Mainly heuristic value. Provides insights about government support with or interference in student participation
7.	Criterion referenced approach	Numerical assessment of (legal) compliance levels	Indirect	Partially	Minimal	Mainly heuristic value. Provides insights about the understanding and operationalisation of participation as self-governance
8.	Assessment of quality of academic freedom protection (UK)	Survey re. self-assessment of institutional <i>de jure</i> and <i>de facto</i> protection of AF	Indirect	Partially	Minimal	Mainly heuristic value. Provides insights about the understanding and operationalisation of participation as self-governance

4.4. Fundamental value: **PUBLIC RESPONSIBILITY FOR HIGHER EDUCATION**

For future/more research

Indicator/tool/measuring exercise/study		Type of tool/measurement	Indirect or direct assessment	Does it measure this value as defined in the EHEA draft?	Can it be used in the EHEA effort to monitor fundamental values	If yes, how?
1.	Toolkit for collecting and analysing data on attacks on education	Toolkit for collecting and analysing data regarding attacks on education	Indirect	Partially	Yes	Mainly heuristic. Provides insights about the understanding and operationalisation/measurement public responsibility for higher education
2.	University Impact Ranking	Ranking	Indirect	Very partially. Implies that public responsibility is about policies to guarantee AF	Possibly	Heuristic. A rare, although limited attempt at operationalising and measuring public responsibility for higher education
3.	Criterion referenced approach	Numerical assessment of constitutional protection of academic freedom	Indirect	Very partially	No	
4.	Systems approach for better education results in tertiary education (SABER-TE)	System-level benchmarking	Indirect	Partially Very partially	Possibly	Heuristic. Provides insight about measurement methodology and benchmarking with regard to c

4.5. Fundamental value: **PUBLIC RESPONSIBILITY OF HIGHER EDUCATION**

For future research

<i>Indicator/tool/measuring exercise/study</i>	<i>Type of tool/measurement</i>	<i>Indirect or direct assessment</i>	<i>Does it measure this value as defined in the EHEA draft?</i>	<i>Can it be used in the EHEA effort to monitor fundamental values</i>	<i>If yes, how?</i>
1. Systems approach for better education results in tertiary education (SABER-TE)	System-level benchmarking	Indirect	Very partially	Possibly	Heuristic. Provides insight about measurement methodology and benchmarking with regard to public responsibility for and of HE
2. “Core commitments: Educating Students for Personal and Social responsibility” Initiative	Inter-campus survey (USA)	Indirect	Partially	Yes	Good insight about operationalising public responsibility for and of HE
3. Measuring social accountability of universities	Thematic literature analysis (social accountability in medical education)	Rather direct if not explicit, although not a tool proper	Largely	Yes	Excellent insight about understanding, operationalising and measuring public responsibility for and of HE
4. Evaluation model of societal and economic engagement of universities	Framework for assessing societal and economic engagement of universities; and for outcome measurements	Model, not a tool. Quite direct otherwise	Partially but, in that, very precisely	Yes	Excellent insight about understanding, operationalising and measuring public responsibility of HE

