

DIFFERENTIATION IN ACCESS TO, AND THE USE AND SHARING OF (OPEN) EDUCATIONAL RESOURCES AMONG STUDENTS AND LECTURERS AT KENYAN UNIVERSITIES

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Differentiation in Access to, and the Use and Sharing of (Open) Educational Resources among Students and Lecturers at Kenyan Universities

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Who Am I?

- PhD Researcher at the Open University Netherlands (OU NL)
- Member of Global Open Educational Resources Graduate Network (GO-GN)
- Lecturer and Research Coordinator at Tangaza University College, Nairobi Kenya
- Africa Co-ordinator for ROER4D project 2

OE Global Conference Cape Town, South Africa
8--10 March 2017



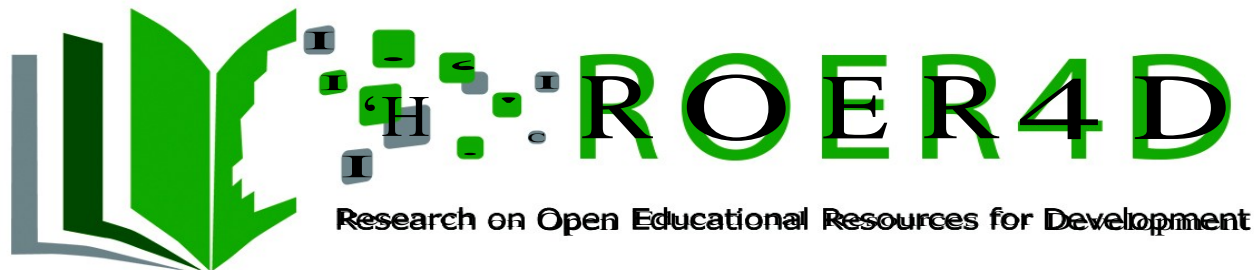
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- ROER4D is a large-scale study carried out to get a fair 'OER Picture' for the Global South.
- South America, South East Asia and Sub-Saharan Africa.
- KENYA – Sub-Saharan country surveyed

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Sample

- 798 students
- 43 Lecturers
- Maseno, Great lakes, Tangaza and Jomo Kenyatta University

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Research Questions

- What is the state of connectivity and digital proficiency?
- What kind and level of use, re-use, creation, and sharing of educational resources (ER)?
- What is the level of awareness of licensing related to open educational resources (OER)?
- How do they perceive the value of openness in educational resources, its implementation opportunities, and its institutional context?

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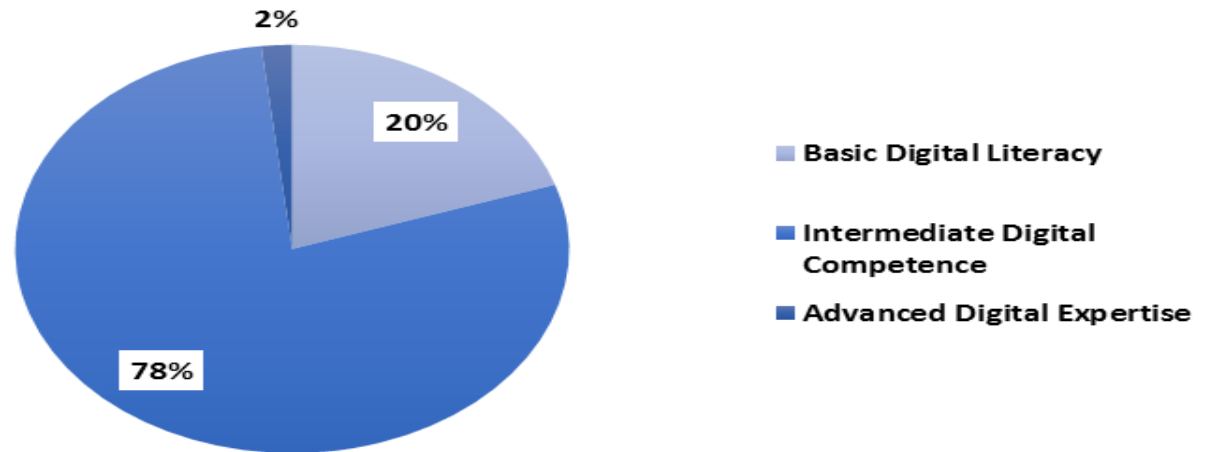


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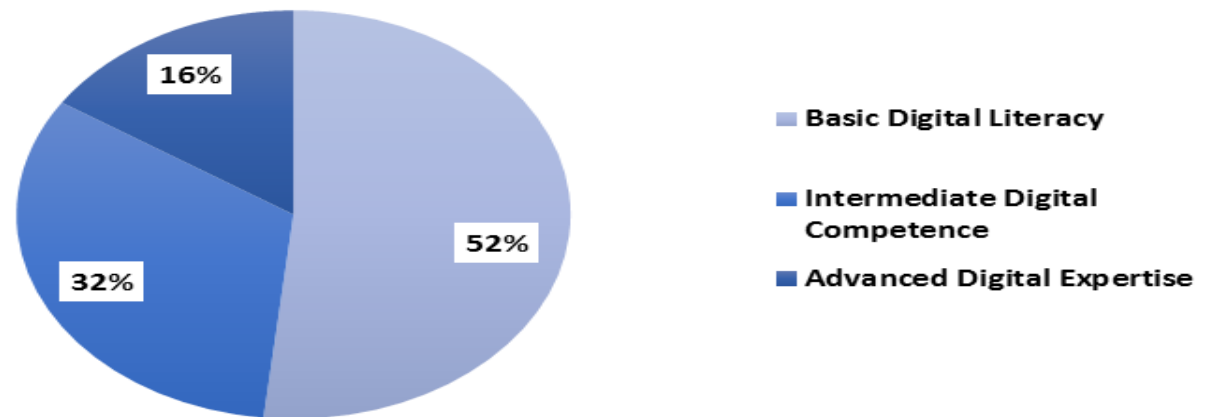
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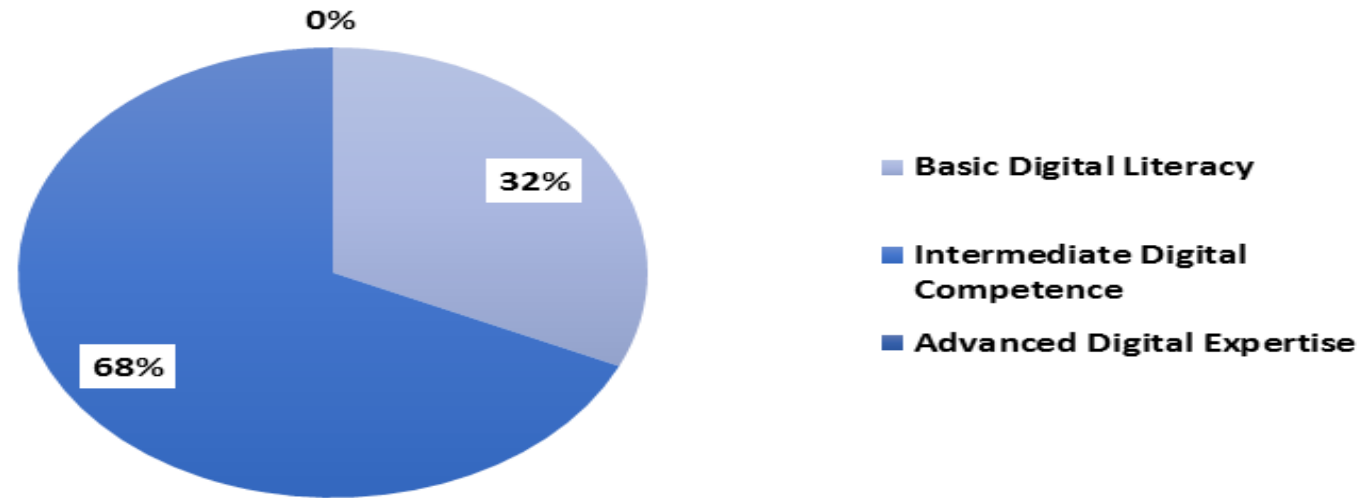
Digital Proficiency - Rural Students



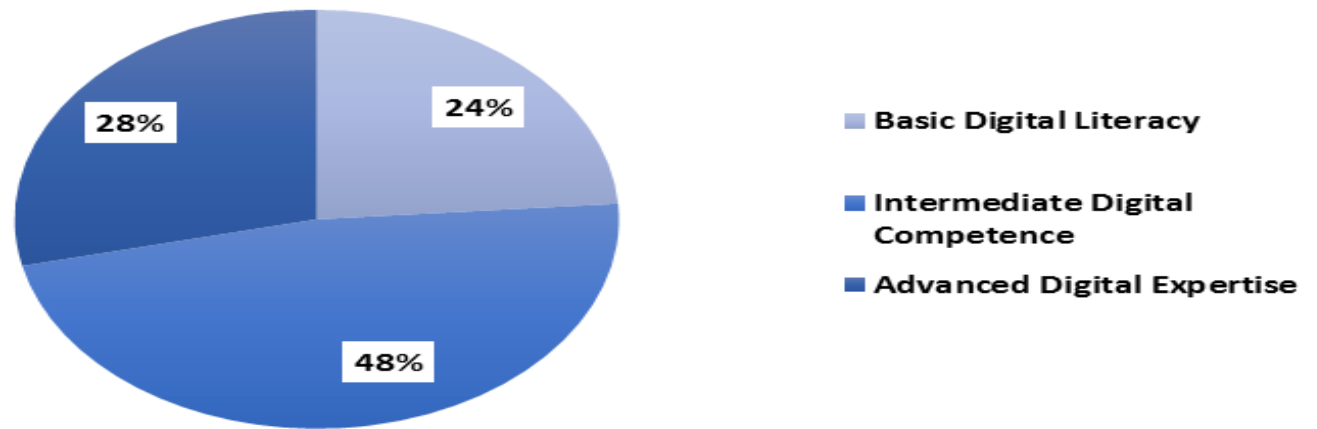
Digital Proficiency - Urban Students



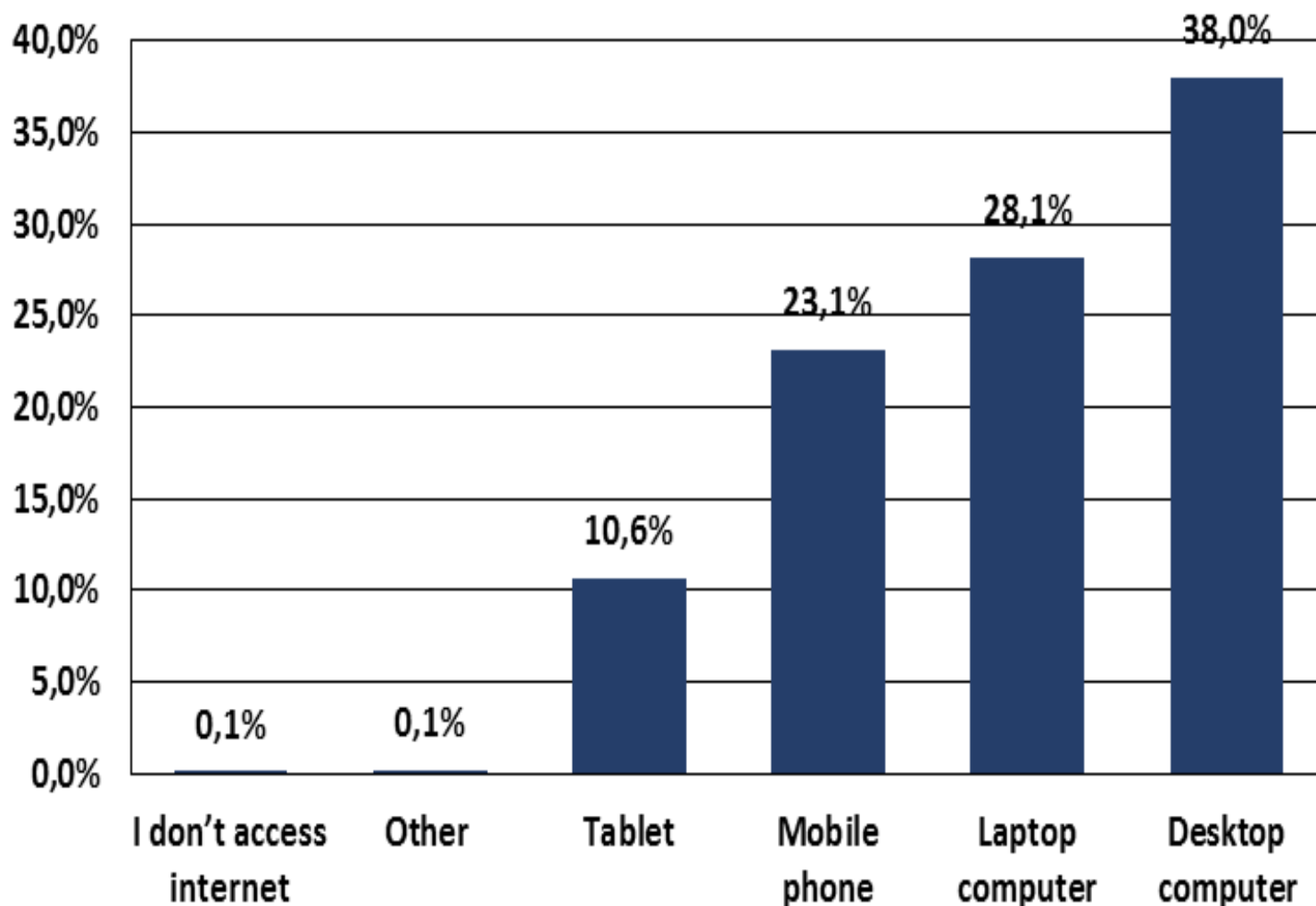
Digital Proficiency - Rural Lecturers



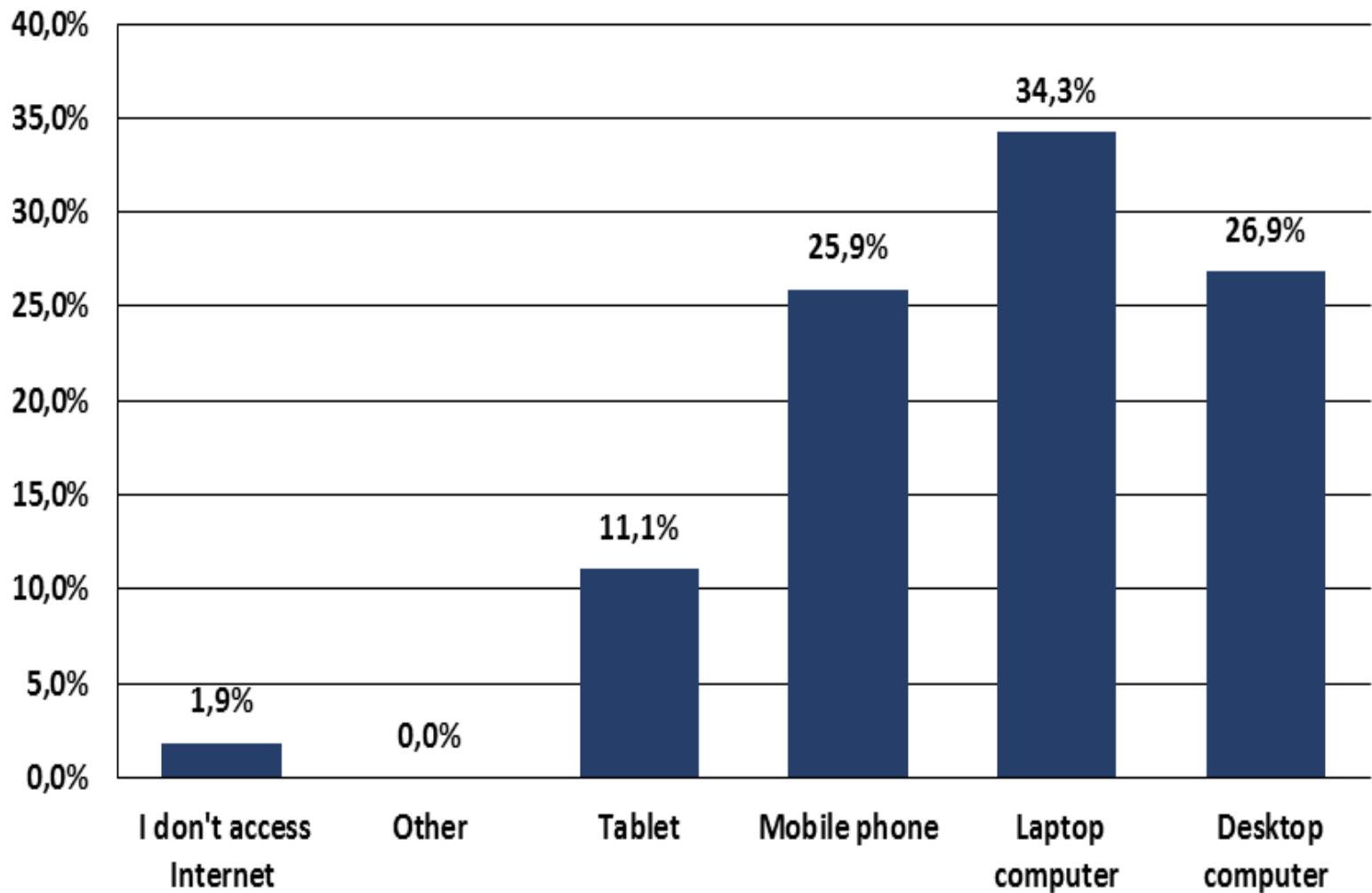
Digital Proficiency - Urban Lecturers



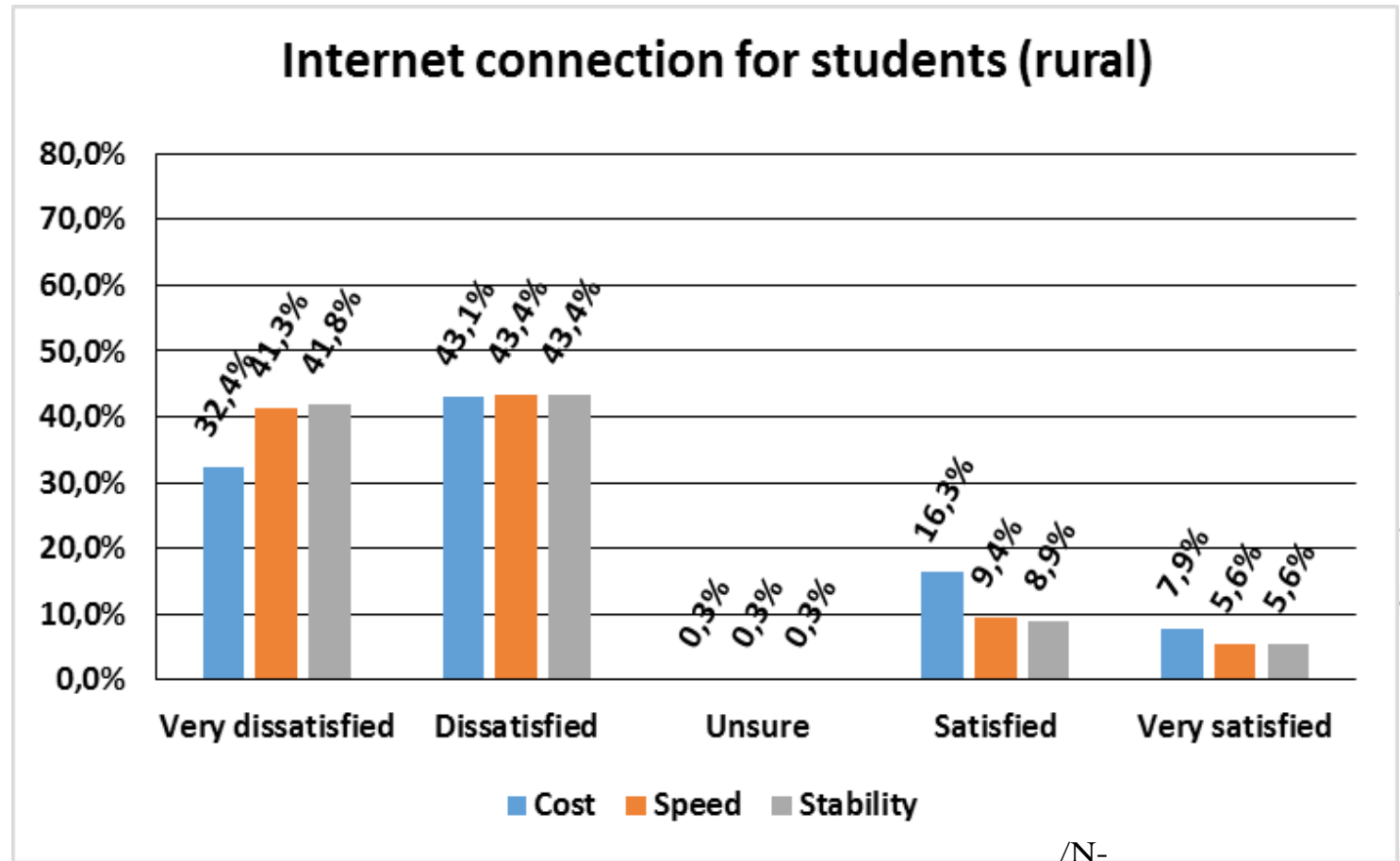
Student's devices for Internet access



Lecturer's devices for Internet access

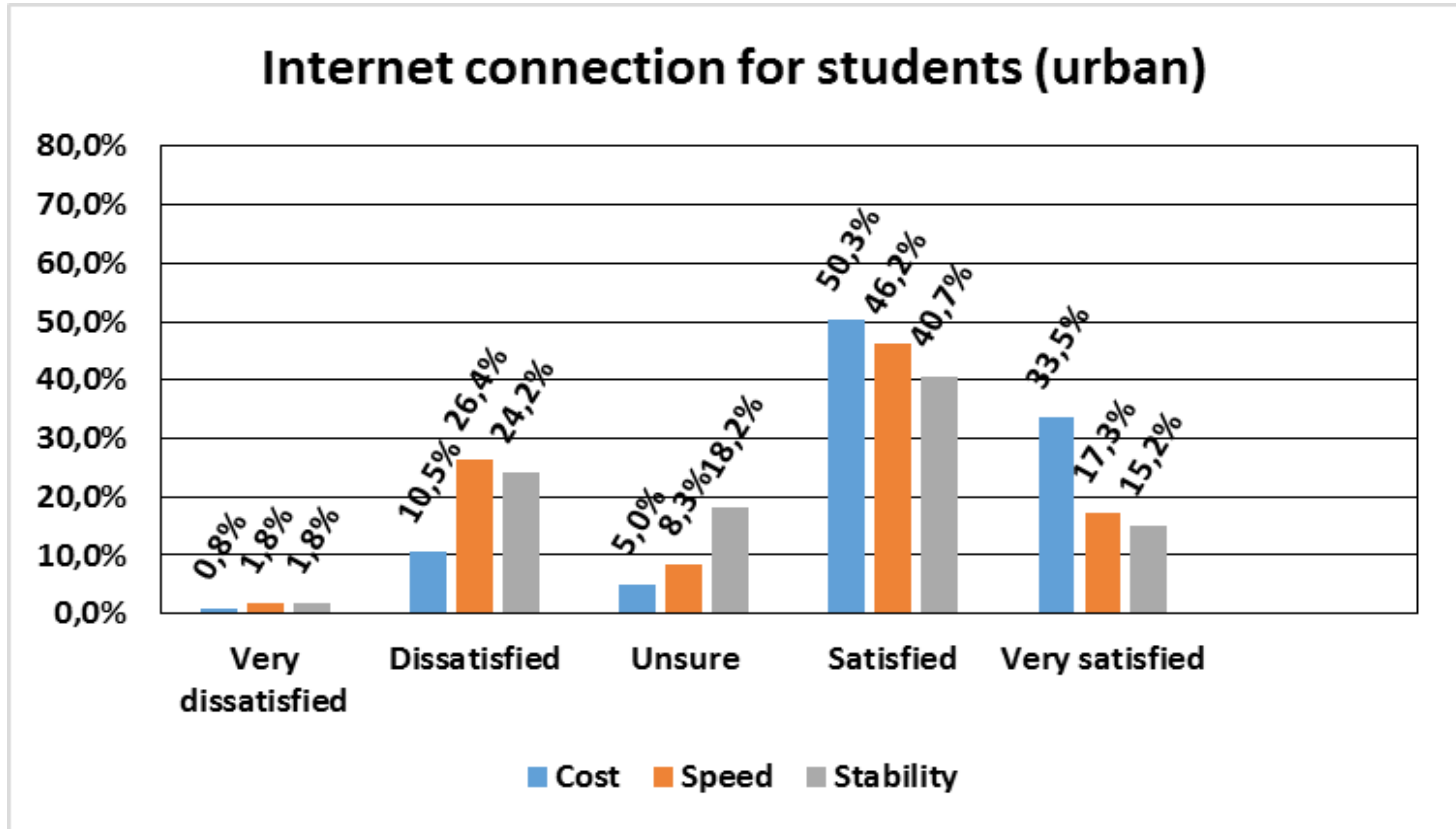


Satisfaction with internet connectivity



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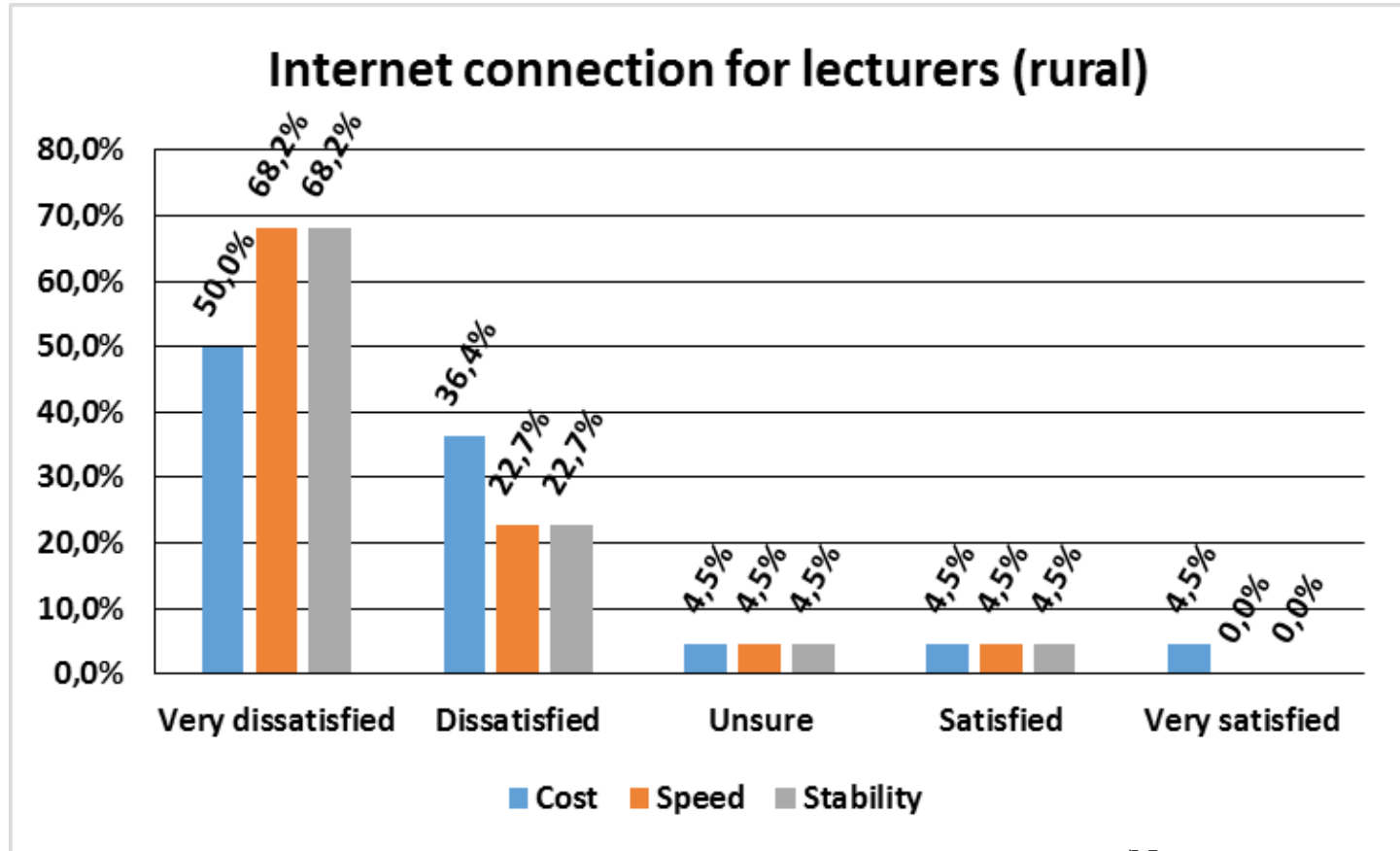


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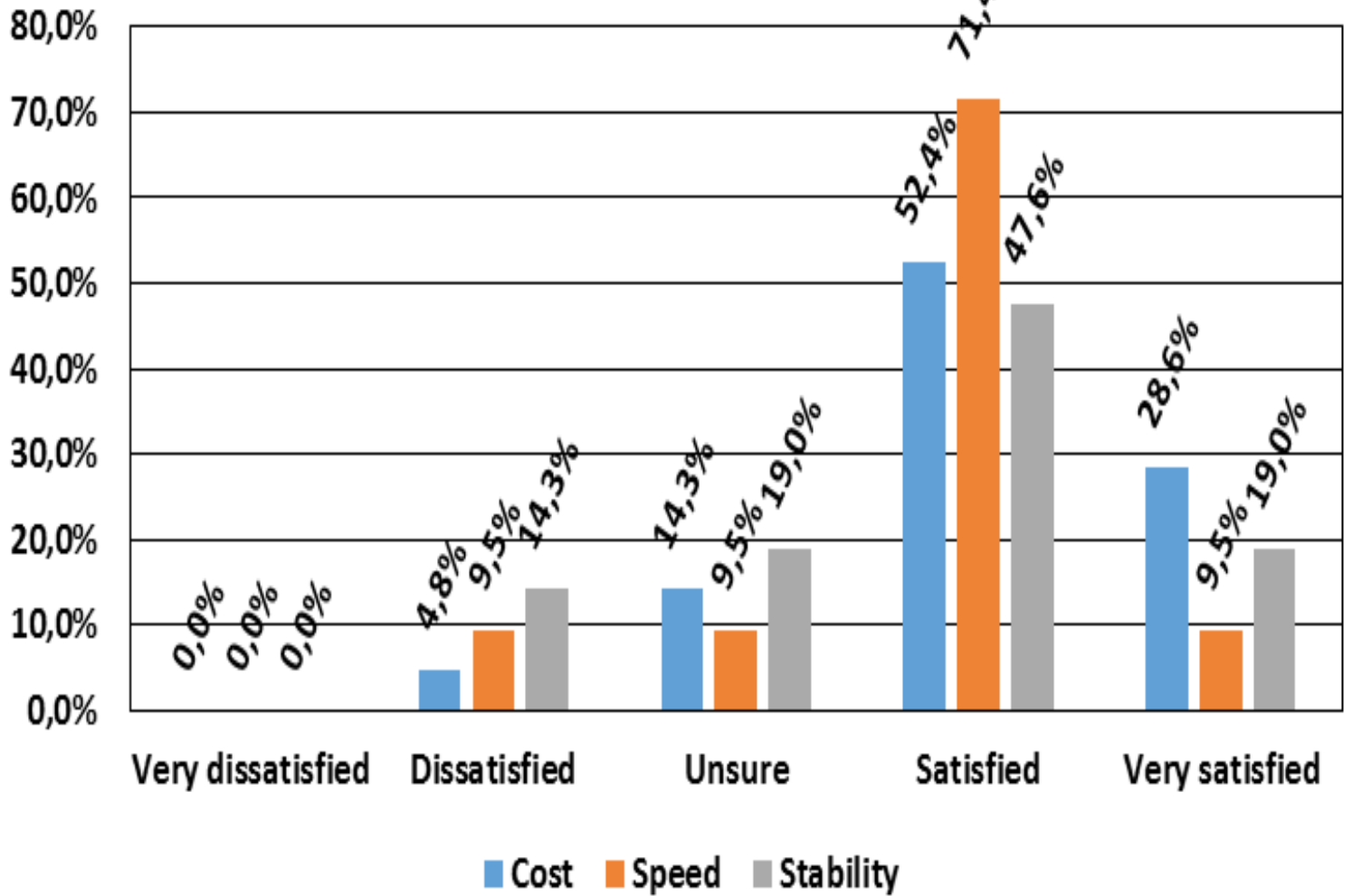
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Lecturers

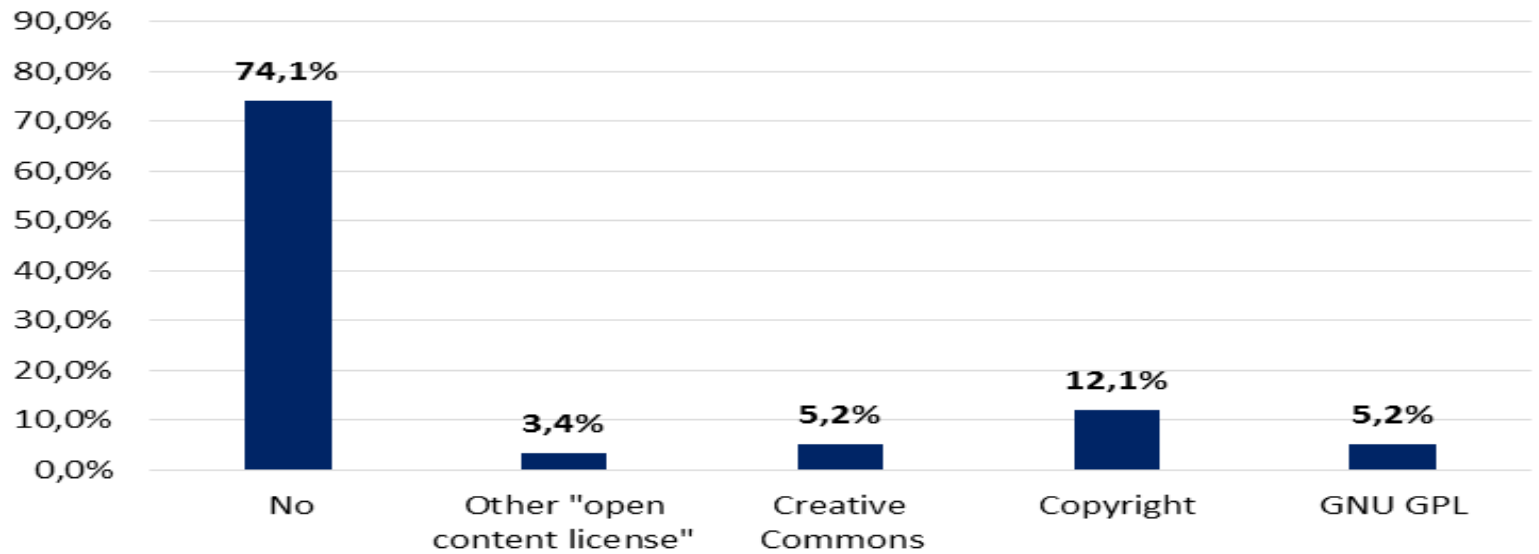


Internet connection for lecturers (urban)

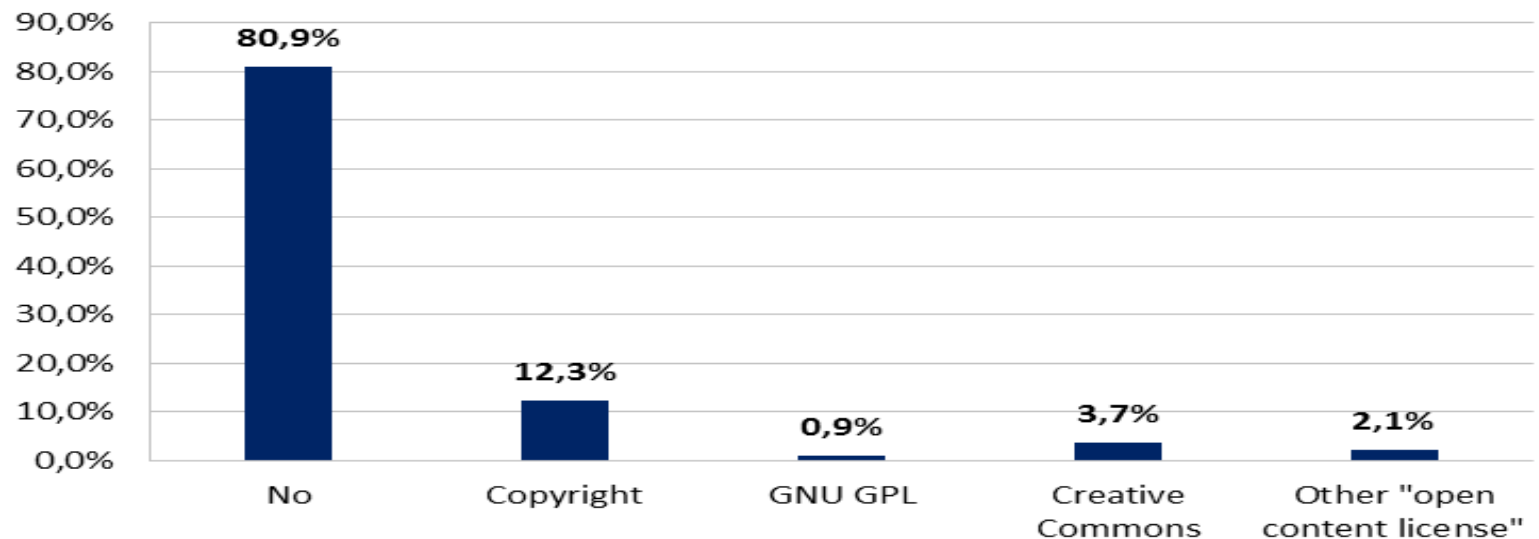




Lecturer's assignment of licenses



Student's assignment of licenses

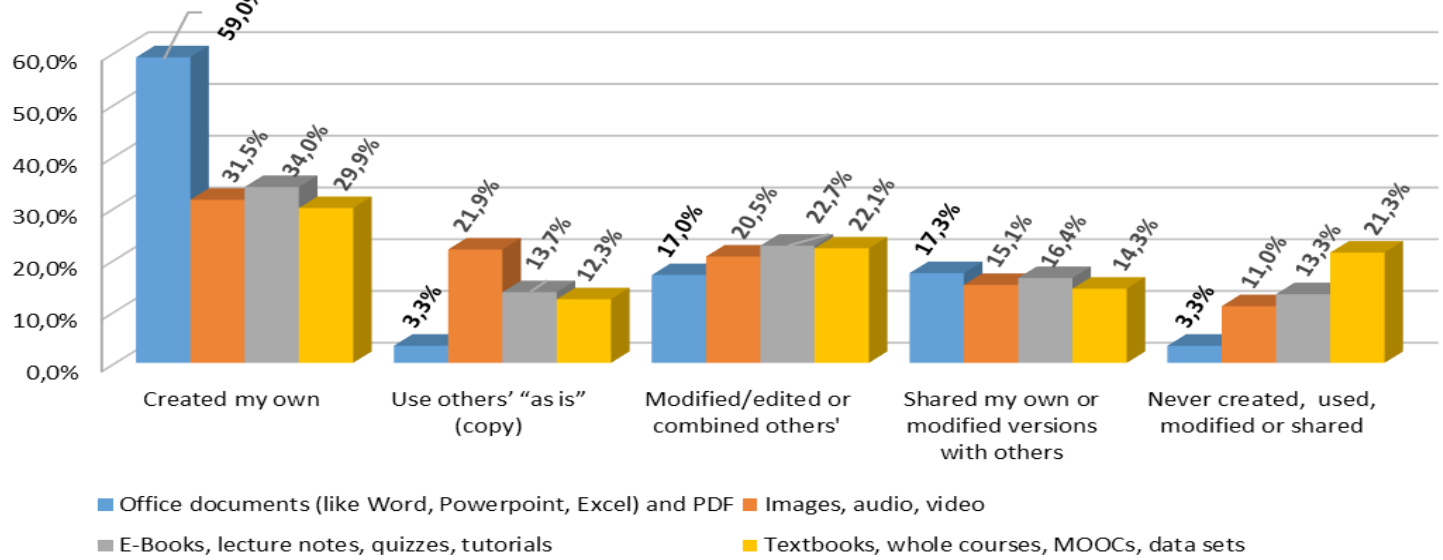


Use of OER with an Open License or in the Public Domain (in percentages)

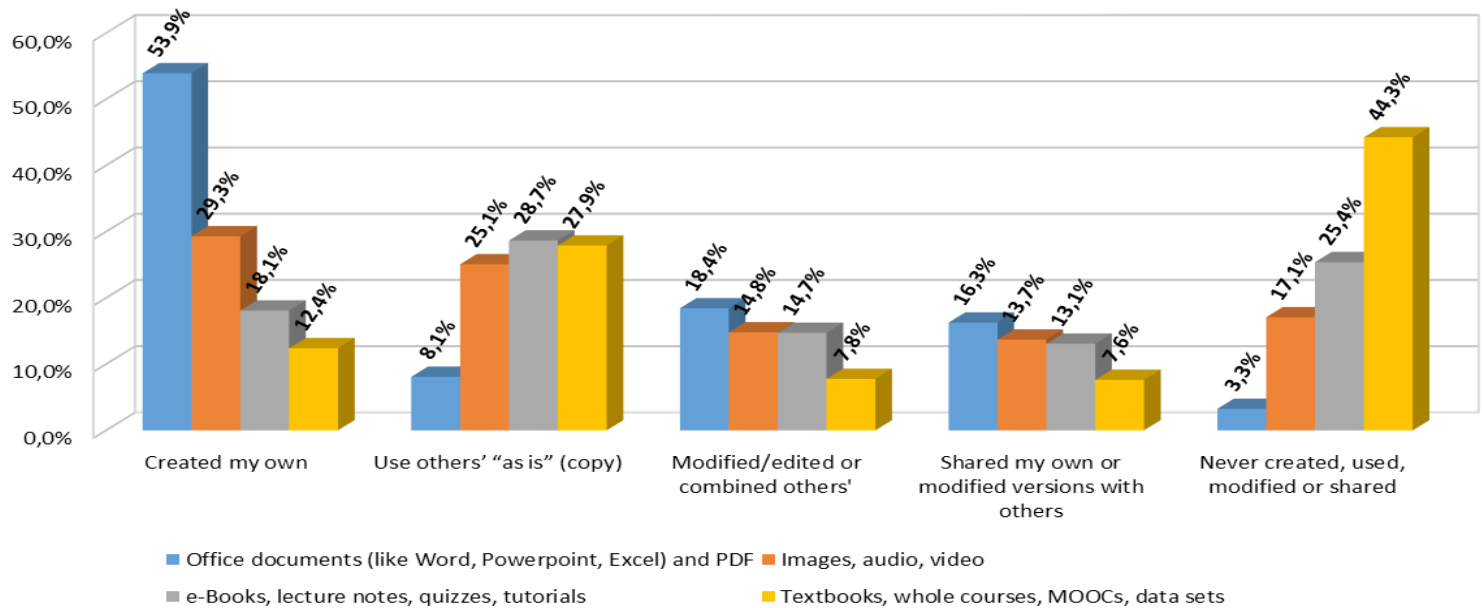
	<i>Lecturers</i>		<i>Students</i>	
	Rural	Urban	Rural	Urban
Yes	41	43	45	35
No	27	28	25	20
Don't know whether the resource I have used is in the public domain or has an open license	32	29	30	45



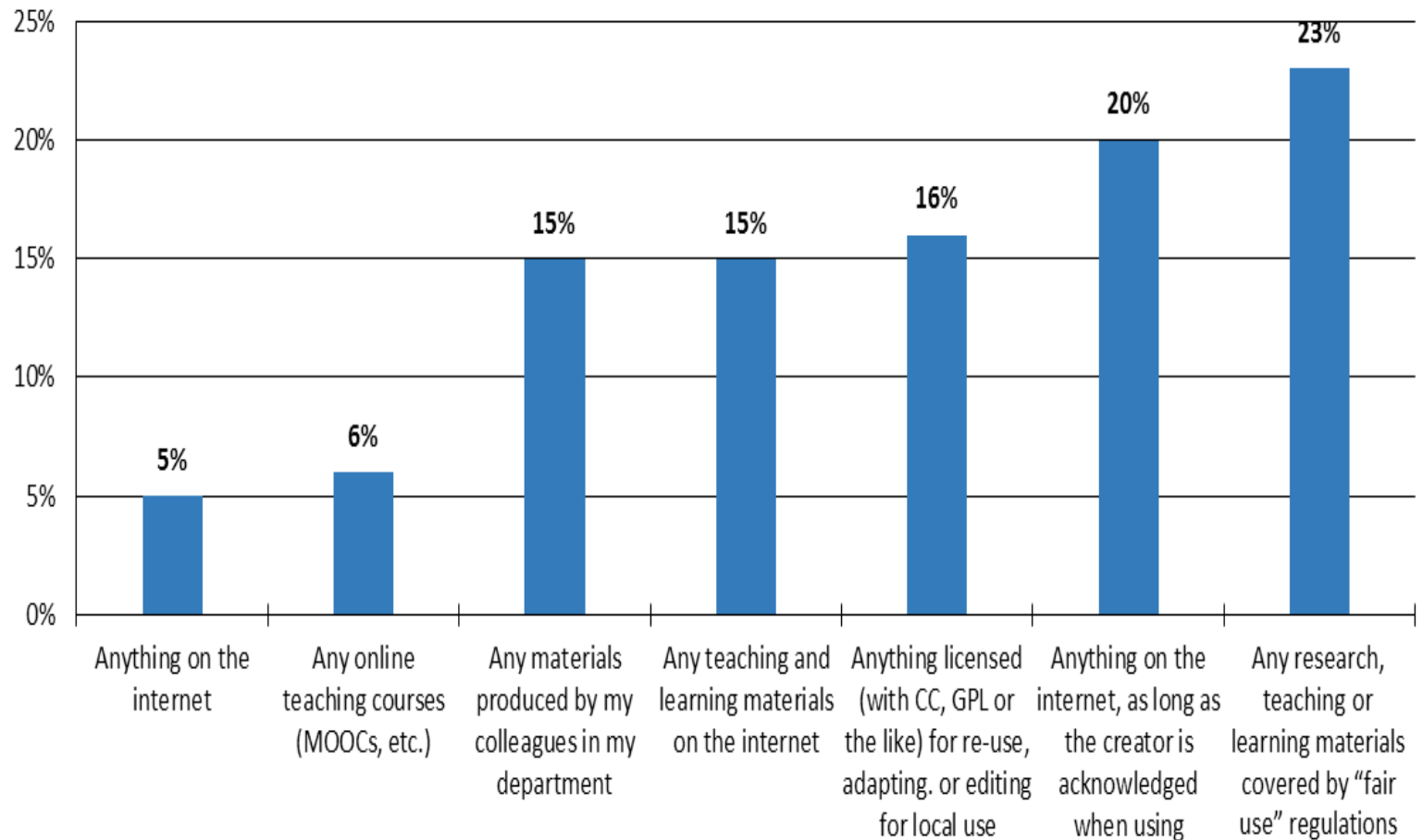
Spectrum of processing of educational resources (ER) by the Lecturers



Spectrum of processing of educational resources (ER) by the students



Sources from which lecturers would feel free to use



Potential motivators for the use and reuse of ER

> from 'very unimportant' to 'very important' <
(average on a 5 pt. Likert scale)

	<i>Lecturers</i>	<i>Students</i>
Bringing down costs for students	4.7	4.4
Helping other educators/students	4.6	4.4
Bringing down costs for course development for the institution	4.6	4.2
Knowing that other educators/students may use my materials, improves the quality of my materials	4.6	4.2
Following normal practice in my discipline	4.5	(4.0)
Enhancing my reputation amongst my peers	4.2	(3.9)

Potential barriers for the use and reuse of ER

> from 'not at all' to 'extremely' <
(average on a 5 pt. Likert scale)

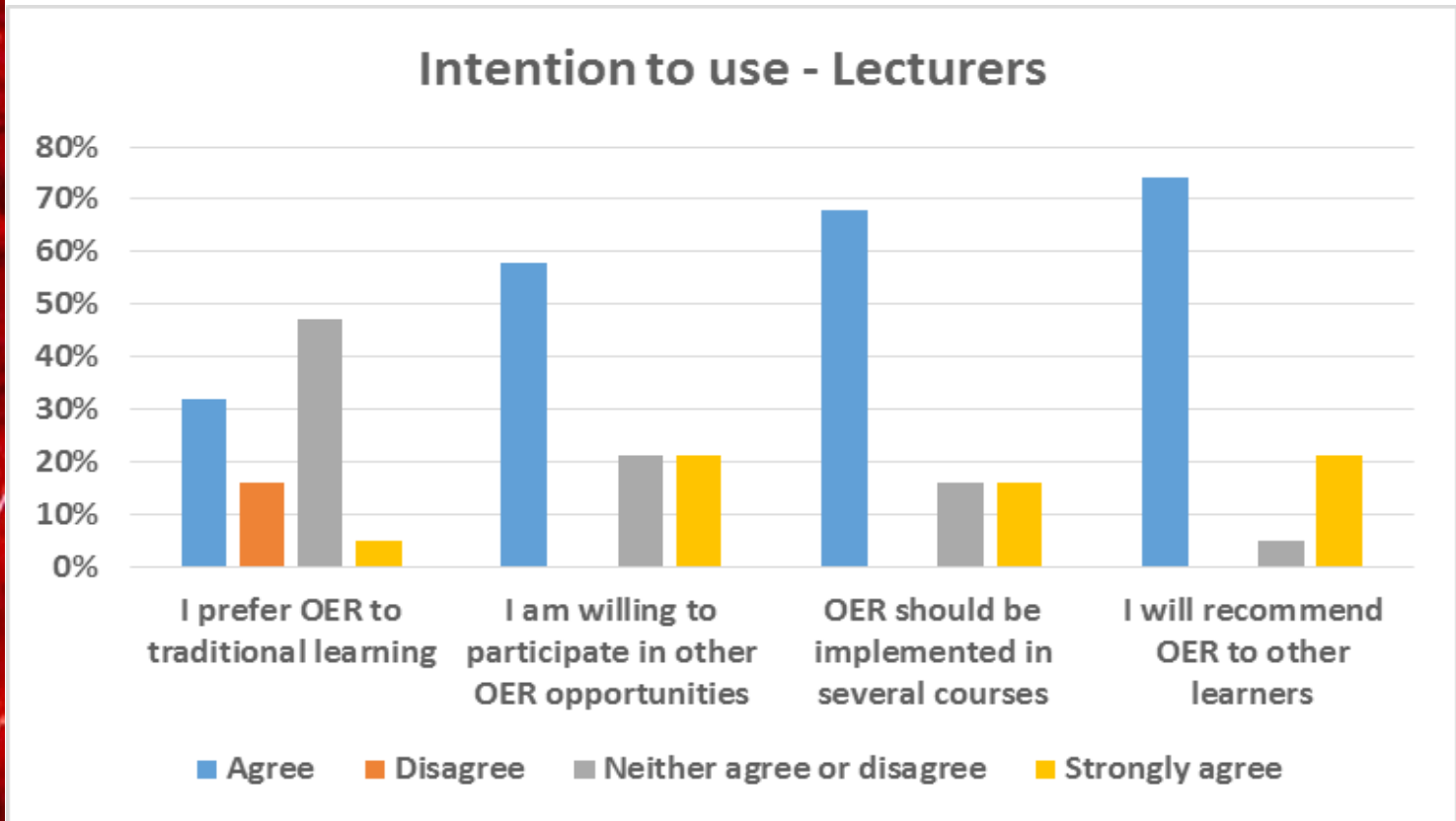
	<i>Lecturers</i>	<i>Students</i>
Lack of access to the internet	3.6	3.7
Lack of time	3.6	3.4
Lack of training	3.6	3.4
Lack of hardware	3.5	3.4
Lack of software	3.3	3.4
I worry about the quality of OER	3.3	3.4
Lack of support	3.3	3.3
Lack of knowledge about alternative intellectual property systems (e.g. Creative Commons)	3.2	3.4
Lack of skills	3.2	3.3
Lack of interest	3.2	3.1
No reward system for devoting time and energy	3.1	(3.1)
No compensation for use/reuse of the resource	3.1	(3.0)

Lecturer's opinions on OER in their educational institution

> from 'strongly disagree' to 'strongly agree' (average on a 5 pt. Likert scale) <

Policies adopted by my institution support the use of OER	3.6
My institution has reliable infrastructure to store and preserve access to teaching and learning materials (OER)	3.6
The OER initiative in my institution provides equal access to educational materials to anyone	3.6
The OER initiative in my institution is able to sustain the maintenance through internal funding and/or external contributions	3.4
There are ways for handling and utilizing OER in my institution as the main or supplemental materials to support our courses	3.4
The instructors' attitudes in my institution are positive towards OER	3.4
The OER initiative in my institution encourages the development and adaptation of teaching and learning materials in a variety of languages and cultural contexts	3.2
In my institution the instructors have OER support services they need to develop their courses	3.2
My institution has a valid model of OER quality assurance	3.2
My institution has reliable procedures to accredit online studies from other educational institutions (portability of university credit)	3.2

Intention to Use OER



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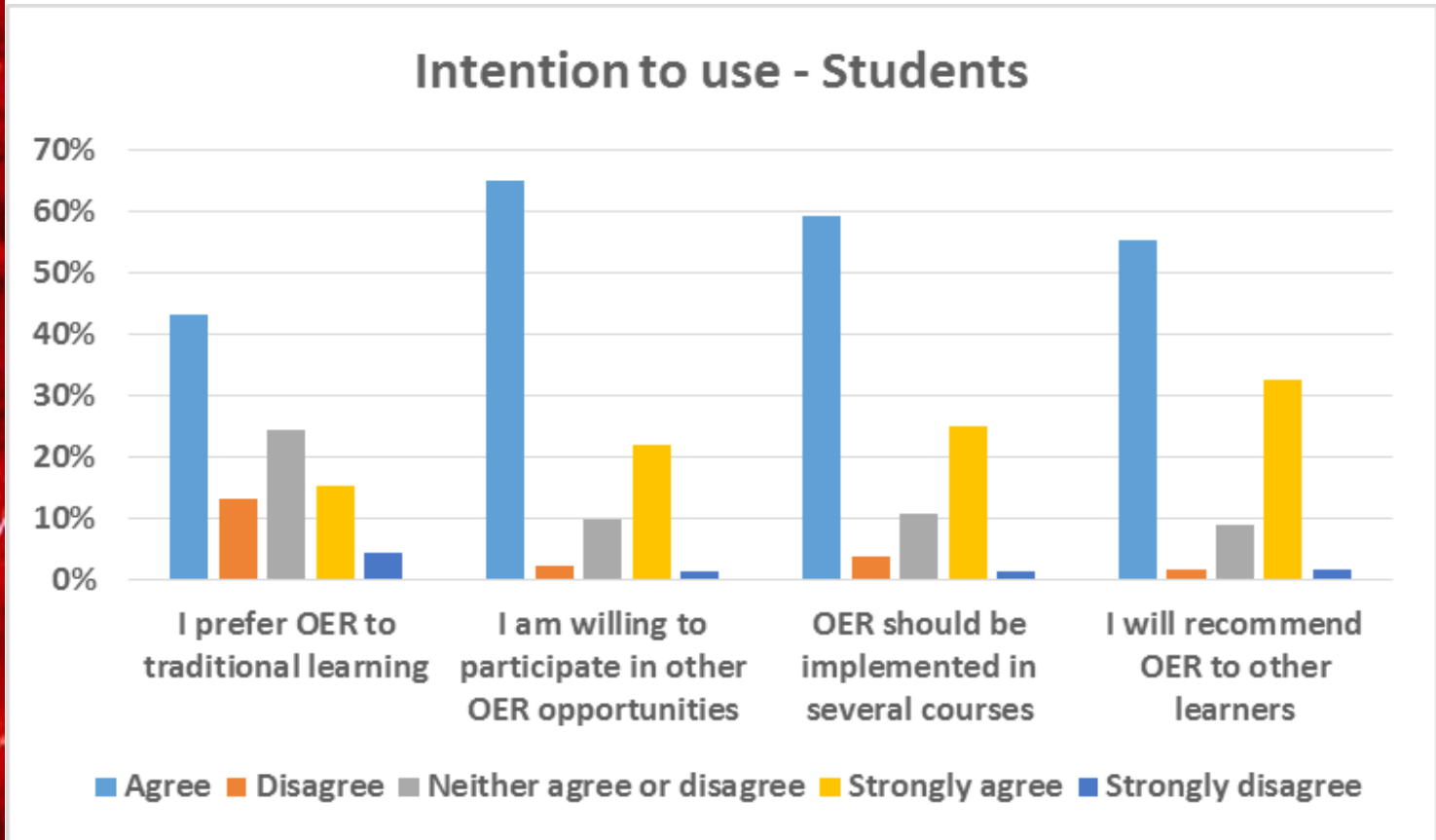


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Concluding Remarks

- Digital proficiency shows various patterns of differentiation. Students at the urban universities rate themselves clearly more 'advanced' than their colleagues at the rural universities. Lecturers at the rural universities score none of them 'advanced' while their urban-based colleagues show a more than 25% 'advanced' share. Finally, urban universities lecturers rate themselves more digitally proficient than their students, whereas - interestingly - at the rural universities this is the opposite.

C. Remarks

- Level of satisfaction with the internet connection a partly alarming outcome comes up. No matter whether this relates to cost, speed, or stability, at the rural universities the dissatisfaction is very pronounced: around 80% for the students, and over 85% for the lecturers. At the urban universities the overall appreciation is reverse: a very high level of satisfaction (over 80%) regarding cost for both students and lecturers. Yes, there is a substantial digital differentiation in terms of internet access and accessibility between rural and urban universities.

C. Remarks

- Open licensing does not receive proper attention. This appears from the question on the application of licenses, on the one hand to be assigned by respondents for their own materials to others, and on the other hand by respondents using open educational resources from others.

C. Remarks

- In practice, & interestingly enough, both lecturers and students appear to act quite frequently with an attitude and behaviour of embracing those key OER attributes.
- The picture among the lecturers seems way too positive and optimistic to be realistic and credible.
- Lecturers (and students) both appear to have strong intentions to participate in OER initiatives, advocate OER-based courses, and recommend OER to others.



Recommendations

- Because a significant part of the lecturers at Kenyan universities does not yet have the required ICT competencies as foreseen in the National ICT Policy, and because there is a significant digital proficiency differentiation (L &S) at urban and rural universities, the implementation of that National ICT Policy (which started in 2006) is at stake and needs a strong government boost.



Recommendations

- The alarmingly substantial digital differentiation in terms of internet access and accessibility and the extremely low level of satisfaction with the internet connection (cost, speed, and stability) at the rural universities as compared to the urban universities, puts a serious challenge on Kenya, in order to countrywide realize the ambition of the 2010 Kenyan constitution and Kenya's Vision 2030. *Move from Dream to Reality**



Recommendations

- The overall awareness and appreciation of open licensing, let alone commitment to this approach, is low and therefore a hindrance in the adoption of the OER philosophy. More positively judged, however, it is not absent either, which may provide a fruitful basis to further increase the teacher's, institutional and national awareness and understanding of OER and open licensing.



Recommendations

- The motivator and barrier sets, formulated for ER and scored by both lecturers and students, can be useful also in the context of how to most effectively further OER in Kenya as a country and at Kenyan educational institutions.



What Next

- What is the future of OER in Kenya?

