THE OER ADOPTION PYRAMID

INTERNALLY DETERMINED

EXTERNALLY DETERMINED

Individual → ← **Institutional**

INDIVIDUALS may be agents of OER adoption

INSTITUTIONS may be agents of OER adoption

Volition
to adopt OER

Availability
of relevant OER of requisite quality (for use or sharing)

Capacity
technical skills for using, creating, finding, uploading OER - personally or with support

Awareness
of OER, the concept, and how it differs from other educational resources

Permission
to use OER (via CC license) or create OER (via institutional IP policy)

Access
to infrastructure: computers, internet connectivity, electricity

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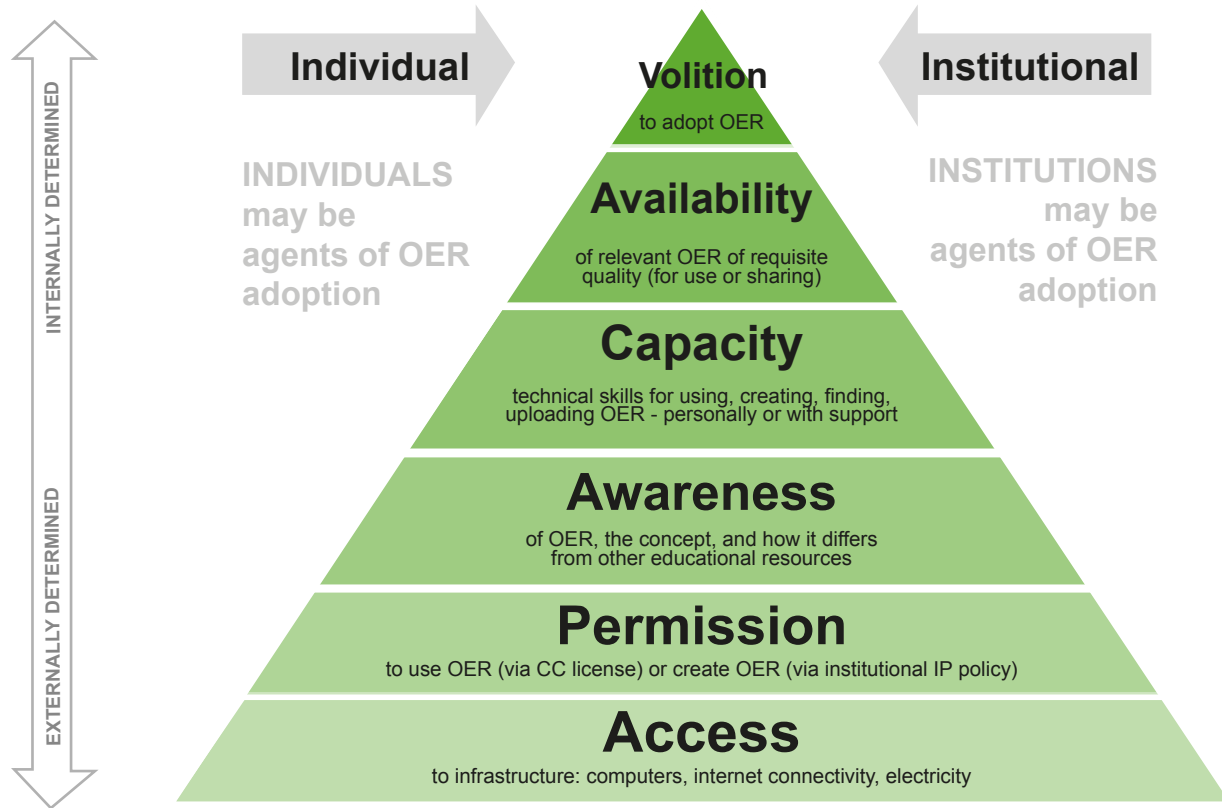## BACKGROUND AND PURPOSE OF THE OER ADOPTION PYRAMID

This Pyramid was developed in the course of a research project focusing on why South African academics adopt OER or not. We understood that numerous factors shaped their choices, but it became apparent that some factors were "essential" to OER activity while others were merely "influential". To clarify which factors were required for any type of OER activity, we developed the OER Adoption Pyramid, which consolidates the factors into six hierarchically related categories: access, permission, awareness, capacity, availability and volition. Under these terms we can place numerous other sub-factors which emerge in the OER literature, such as quality, relevance, localisation, licensing, self-confidence, etc. Going from bottom to top, these categories move from factors that are largely externally defined to factors that are more personally determined. The pyramid reveals that, ultimately, only academics or institutions that possess all six of these attributes at the same time (even if in some modified or attenuated fashion) can engage in OER activity. If even one of these elements is missing, they cannot participate in OER activity.

The six essential OER adoption factors	Questions for potential OER *users*	Questions for potential OER *creators*
VOLITION The 6th factor refers to an agent's motivation to adopt OER. If the agent (educator or institution) enjoys the access, permission, awareness, capacity and availability necessary to adopt OER, then volition becomes the key factor in whether they will do so. This outcome is shaped by the agent's pedagogical values, social context and institutional culture.	**VOLITION** Do you have any desire to use OER?	**VOLITION** Do you have any desire to create and share your teaching materials as OER?
AVAILABILITY The 5th factor refers to the availability of OER for an agent to use or contribute. For users, this is determined by an OER's relevance (content, scope, tone, level, language, format), utility for a specific anticipated use, and quality as judged by the user. For creators, it is determined by whether they feel their educational materials are relevant and of the requisite quality (based on one's pedagogical self-confidence).	**AVAILABILITY** Have you found OER online – of acceptable relevance, utility and quality – that you can use?	**AVAILABILITY** Do you hold copyright over teaching materials – of necessary relevance and quality – that you could license and share as OER?
CAPACITY The 4th factor refers to the technical and semantic skills necessary for adopting OER. This capacity can be held by the educator or found through institutional support. It implies an educator or institution enjoys the technical fluency to search for, identify, use, and/or create (license and upload) OER, or has access to people with those skills.	**CAPACITY** Do you know how and where to search for and identify OER? Do you know how the different CC licenses impact the ways in which you can use an OER? If no to the above, does your institution have personnel you can call on to assist you with this?	**CAPACITY** Do you know how to license your teaching materials so that they can be shared as OER? Do you know where (on which platforms) you can upload your materials as OER? If no to the above, does the institution have personnel who do know this and can assist?
AWARENESS The 3rd factor refers to the fact that a potential OER adopter must have been exposed to the concept of OER and grasped how it differs from other types of (usually copyrighted) educational materials. Educators may inadvertently use OER, of course, but this does not comprise OER adoption per se, which requires a level of OER awareness.	**AWARENESS** Do you have any knowledge of or experience with OER? Do you understand how Creative Commons (CC) licenses differentiate OER from traditionally copyrighted materials?	**AWARENESS** Do you have any knowledge of or experience with OER? Do you understand how Creative Commons (CC) licenses differentiate OER from traditionally copyrighted materials?
PERMISSION The 2nd factor refers to an agent's legal right to use or create OER. For users, the OER license determines permission parameters. For creators, institutional IP policies usually determine whether educators or institutions hold copyright over teaching materials produced at the institution. Only copyright holders can be OER creators.	**PERMISSION** Do you have permission (from your curriculum committee, etc.) to use OER for teaching? Does the desired OER you are considering allow you to use it in your specific context (e.g. no CC-ND licenses on items that will be sold as course material)?	**PERMISSION** Do you possess copyright over teaching materials that have been developed at your institution?
ACCESS The 1st factor refers to the need for agents to have access to the appropriate physical hardware and infrastructure – such as electricity, internet connectivity and computer devices – for engaging with digitally mediated OER.	**ACCESS** Do you have (stable) electricity provision? Do you have (stable) internet connectivity? Do you have the necessary computer hardware for OER adoption?	**ACCESS** Do you have (stable) electricity provision? Do you have (stable) internet connectivity? Do you have the necessary computer hardware for OER adoption?

HOW TO USE THE OER ADOPTION PYRAMID

The Pyramid enables comparison of the factors involved in OER adoption at an institutional site, whether the agent of analysis is an academic or the institution itself. It prompts a series of questions (above) which can help assess the OER readiness of an institution. If the answer is "no" to any of the questions above, then OER activity for the relevant agent (an academic or institution) cannot proceed.

From this analysis, one may then generate OER Readiness Tables (below), which show which factors act as obstacles or opportunities with regard to potential OER activity at an institution. These are useful for multi-institution comparisons or for sharing with stakeholders who want to enhance OER adoption at an institution.

OER adoption = use and/or creation

"only those who possess all six of these attributes at the same time (even if in some modified or attenuated fashion) can engage in OER activity"

OER READINESS TABLES
an example

With the help of the pyramid, we assessed the OER readiness of three South African universities. Presented here anonymously, the assessments generated the following tables which highlight which factors stand as obstacles to OER readiness at each institution, depending on who is the agent of analysis (academic or institution) and which element of adoption we are focusing on (use or creation).

University profiles

	#1	#2	#3
Student access	Residential	Residential	Distance
Student numbers	26 000	11 000	400 000+
Location	Urban	Rural	Dispersed
Approach	Traditional	Traditional	Comprehensive
Institutional culture type	Collegial	Bureaucratic	Managerial
Copyright holder over teaching materials	Lecturer	University	University

OER Readiness: academics as users

	#1	#2	#3
Volition	High	Low	High
Availability	High	Medium	High
Capacity	High	Low	Medium
Awareness	High	Very Low	Medium
Permission	Very High	High	High
Access	Very High	Medium	Very High

OER Readiness: academics as creators

	#1	#2	#3
Volition	High	Low	Medium
Availability	High	Medium	High
Capacity	High	Low	Medium
Awareness	High	Very Low	Very Low
Permission	Very High	Very Low	Very Low
Access	Very High	Medium	Very High

OER Readiness: institutions as creators

	#1	#2	#3
Volition	Very Low	Very Low	Very High
Availability	Low	Medium	High
Capacity	High	Low	High
Awareness	High	Very Low	High
Permission	Very Low	Very High	Very High
Access	Very High	Very Low	Very High

Level of OER Readiness

- Very High
- High
- Medium
- Low
- Very Low

READING THE TABLES

Based on the data gathered at these universities, we allocated them a colour-coded readiness value to each of the factors: very low, low, medium, high and very high. They show that university #1 is "OER ready" if academics are potential users or creators, but not if the institution is. University #2 is marginally OER ready if academics are users, but not if they are creators, and not if the institutions is for either. And university #3 is moderately OER ready if academics are users, not ready if academics are creators, but quite ready if the institution is the creator. The tables visualise the areas of opportunity and concern for any future OER engagement at an institution.

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IDRC | CRDI — International Development Research Centre · Centre de recherches pour le développement international

Centre for Innovation in Learning and Teaching

ROER4D — Research on Open Educational Resources for Development

SUB-PROJECT 4: Attitudes of Academics to OER adoption in South Africa