IDB Digital Credential Framework

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About the Framework

The IDB Digital Credential Framework (the Framework) is the key reference tool and roadmap deployed by CredencialesBID to recognize knowledge building and continuous learning with digital credentials for the IDB Group, partner organizations and citizens of the Latin America and Caribbean (LAC) region.

The Inter-American Development Bank (IDB, in Spanish: Banco Interamericano de Desarrollo or BID) is the leading source of development finance for Latin America and the Caribbean. It helps to improve lives by providing financial solutions and development know-how to public and private sector clients.

CredencialesBID works with BIDAcademy¹, other IDB departments and external partner organizations to develop digital credentials for IDB and its partners that are supported by quality processes and tools to ensure trusted recognition of professional learning, competencies, and achievement. It operates via two main platforms, namely CredencialesBID Factory powered by OBF and CredencialesBID Passport. CredencialesBID Factory is responsible for publishing and issuing digital credentials. CredencialesBID Passport is the credentialing hub for professional education and development at IDB. CredencialesBID provides a series of services to end users (earners of IDB digital credentials) and clients, who partner with CredencialesBID to create and issue digital credentials.

The IDB Framework was deliberately developed outside an academic context, although it has been informed by academic frameworks from several jurisdictions, in addition to the standards and practice frameworks of professional bodies and other organizations. At its core, it is also the best avenue to establish relationships with academic institutions through possible micro-credentialing initiatives and other forms of collaboration.

The Framework includes a set of guiding principles (Manifesto), followed by a detailed description of framework elements within a coherent badge taxonomy. Other components of the Framework include a Glossary, References, and a proposed Critical Information Summary, to be used for more formal badges, such as those that seek evaluation for academic credit.



¹ BIDAcademy is the centralized development knowledge hub for IDB Group.

The Framework is the central authority for the creation and issuing of badges in the IDB digital credential ecosystem. It is a living document that will evolve over time based on needs and opportunities and will be maintained by CredencialesBID.

Overview

FRAMEWORK



Manifesto: guiding principles and goals



Bologna Open Recognition Declaration (BORD)

Figure 2: "IDB Manifesto": Guiding Principles and Goals





MISSION

opportunities

(Comms policy)

Based on UN SDGs

Manifesto

These principles and goals will guide the IDB Digital Credential Framework.

• Mission

The mission of the Framework is to support the fundamental mission of the Inter-American Development Bank (IDB) for an empowered Latin America and Caribbean with equal opportunities, based on the <u>United Nations Sustainable Development Goals (SDGs)</u>. Digital credentials aligned to the Framework will support learning, development and performance initiatives to expand opportunities and accelerate social and economic progress for citizens and stakeholders in LAC.

Principles and values

Our Core Values

At the Inter-American Development Bank, it is essential that we maintain the

public's trust in us to achieve our mission effectively. Our actions and decisions as international civil servants align with and support our core values of Integrity, Loyalty, Equity, Inclusion, Impartiality, and Discretion. These core values are part of our <u>Code of Ethics and</u> <u>Professional Conduct</u> and apply to all of our dealings throughout the institution.

CredencialesBID is committed to building a vibrant community of recognition and connection between individuals and organizations, in an atmosphere of mutual respect and tolerance of diversity. By default, communications within this community will be guided by the <u>Communications policy adopted by various platforms</u>.

Principles for Digital Development

The IDB Group has endorsed the <u>Principles for Digital Development</u>, which guide effective and inclusive use of digital tools for improved outcomes in international development. They are a set of living guidance intended to help practitioners around the world succeed in applying digital technologies to development programs.



For the Framework, IDB highlights three key principles that are most relevant to its purpose:

"<u>Design With the User</u>"

Use human-centered design principles and work with learners directly whenever possible.

"<u>Be Collaborative</u>"

Work with partners and share information, insights, strategies and resources across projects, organizations and sectors.

"<u>Understand the Existing Ecosystem</u>"

Ensure that technology tools and systems will be relevant and sustainable and will not duplicate existing efforts.

Principles for social responsibility

CredencialesBID also believes that <u>ISO 26000 — Social responsibility</u> provides useful guidance to IDB's commitment to operate in a socially responsible way, recognizing that respect for society and environment is a critical success factor for the organization and the region.

Principles for learning and recognition

CredencialesBID will ensure that the Framework also aligns to global principles and goals that support inclusive and accessible learning and recognition, including:

- The UNESCO <u>Recommendation on Adult Learning and Education (RALE)</u>, which declares that learning is a lifelong endeavor that can occur in formal, non-formal and informal settings. The ultimate goal is to ensure that adults can participate fully in societies and the world of work.
- The <u>Cape Town Open Education Declaration</u>, which declares that everyone should have the freedom to use, customize, improve and redistribute educational resources without constraint and calls on educators, authors, publishers and institutions to release their resources openly.
- The <u>Bologna Open Recognition Declaration (BORD)</u>, which calls for a universal open architecture for the recognition of learning outcomes throughout life and in all fields.



• Goals of the Framework

Empowered learners

BIDAcademy is focused on developing self-directed lifelong learning professionals who can apply their learning in meaningful work to enhance the performance of their organizations as they advance their careers. CredencialesBID supports this effort through the recognition of learning.

Portability, transfer, and connection to opportunity

IDB badges will enable social connections to help build **communities of learning and professional practice and** will connect to new opportunities for lifelong learning and career advancement wherever appropriate.

IDB badges will be relevant to the mission of the Bank and, where appropriate, will be robustly constructed to support portable recognition and transferability through accepted academic practices such as Recognition of Prior Learning, credit transfer as well as relevant recognition practices in industry. Methods and tools such as Endorsement and Critical Information Summaries will be employed to enhance the portable value of badges.

Learning organizations

CredencialesBID supports the development of learning organizations that are "skilled at creating, acquiring, and transferring actionable knowledge, and at modifying their behavior to reflect new knowledge and insights", as defined by the Harvard Business Review.

Learning region for development

CredencialesBID firmly believes that supporting the mission, principles and goals of this Framework can enable IDB, its partners and the broader community to enable sustainable digital transformation and foster the growth of a *learning region for development* in Latin America and the Caribbean (LAC), in an increasingly collaborative ecosystem that encourages and recognizes knowledge building and professional development for international development in LAC.



Continuous improvement of outcomes in LAC

IDB is committed to fostering economic growth, helping reduce poverty and inequality, improving governance, enabling climate change mitigation and adaptation, promoting gender equality and inclusion, and responding effectively to crises, natural disasters and other socioeconomic challenges within the overall framework of the United Nations <u>Sustainable</u> <u>Development Goals (SDGs)</u> for 2030.

Framework as a living document

BIDAcademy welcomes and encourages other organizations to endorse and adopt this Framework and to partner with IDB to continuously improve it.

Framework Elements

Definitions and terminology

IDB digital credentials are based on the Open Badges standard. In this framework, the term badge will be used interchangeably with credential.

The terminology used in this document is drawn from multiple international sources. A Glossary is provided for greater clarity.

Formality, context and purpose

CredencialesBID supports the Open Badges standard for portable digital credentials, because of its flexible scope for recognizing skills and achievements and global acceptance of the standard. CredencialesBID strongly believes that an inclusive understanding of digital credentials based on Open Badges can support a flexible continuum of recognition, from more formal <u>micro-credentials as defined by UNESCO</u>, to less formal credentials whose criteria will vary widely according to context. The IDB credential taxonomy is designed and continuously improved to reflect a broad range of recognition and fitness for purpose and context.



Taxonomy

The current badge taxonomy for IDB credentials is displayed below. These badges have specific content requirements that are detailed in the Appendix - Critical Information Summaries by Badge Type and form part of Badge Requirements for organizations issuing badges through BIDAcademy.



Figure 3: Badge taxonomy

Badges issued to individuals

The first badge types are more formal, and therefore require some form of assessment:

• Assessment Badge

Assessment Badges are typically based on courses or programs that ensure the learners' achievement of the intended learning outcomes of the course or program. They should only recognize learners who meet the performance, proficiency or passing standard, based on rigorous summative assessment. An Assessment Badge may also recognize a particular skill or capability independent of a course or program, if criteria and assessment are well-defined and rigorous.

Assessment Milestones are larger collections or programs of assessment badges, based



on pre-defined "stacking" criteria. Assessment Milestones may include other types of badges as long as a significant proportion of the badges in the collection are Assessment Badges.

• Performance Badge

Performance Badges are based on a robust learning experience and summative assessment of the knowledge, skills, and/or competencies required for competent performance of an occupational or professional role or work-related tasks and responsibilities. Performance badges represent a more complete form of recognition than Assessment Badges. They can comprise multiple skills and describe the capability to perform a workplace role that may include several tasks and activities. They are typically based on a combination of courses and learning events and experiential or work-based activities to apply the learning. Assessment must be rigorous, authentic and comprehensive, supplementing basic assessments such as quizzes with authentic methods such as workplace demonstration, extended observation, evidence portfolios, reflective learning logs, assigned deliverables and capstone examinations.

Performance Badges will often have a continued competence requirement through maintenance, re-certification or renewal.

The less formal badges below do not require summative assessment but can also encourage and demonstrate engagement and achievements in lifelong and "life wide" learning. These badges may also be combined in Milestone Badges as appropriate.

• Completion Badge

Completion Badges are awarded for courses and other learning experiences with structured learning objectives, such as introductory and compliance courses, where the assessment is less rigorous and more formative, such as "knowledge checks" that allow many attempts at the same questions.

• Participation Badge

Participation Badges recognize participation in a course or learning event (e.g., webinar or workshop) that may include discussion and interactivity but does not feature a rigorous summative assessment.



• Community Professional Badge

Community Professional Badges are a special badge type recognizing the achievements and contributions of individuals who engage in communities of practice in diverse ways, including developing personal awareness, documenting and promoting the practice, applying the practice, training practitioners and adapting and improving the practice and its body of knowledge. These badges will most likely align with those used for Community Organization Badges issued to organizations (see below).

• Flexible Recognition Badge

This badge type is intended to support emergent and customizable ways to recognize a wide variety of achievements, such as (not an exhaustive list):

- Specific achievements that have an impact in IDB or the region
- Experience events, projects, missions, or years of experience
- Service to a community, educational, professional, or other, in ways not covered by the Community Practitioner badge above. Typically voluntary, this can be provided in an event, throughout a project, or over time (e.g., "lifetime service")
- Expertise informally recognized within a community, unlike a formal certification.
- o Awards for specific competitions or for lifetime achievement
- Quests or other special achievements; informal recognition beyond simple participation (e.g., makerspace/bootcamp achievement)

• Learner Issued Badge

The CredencialesBID Passport permits learners to issue badges to themselves and to peers for a variety of purposes, including the recognition of personal skills, achievements, and goals and to build interpersonal and community connections.

These badges, issued outside of conventional courses and standardized assessments, can also provide useful signals of achievement and capability. (Since it is not issued through CredencialesBID Factory, this type of credential is not represented in the taxonomy)



Badges issued to organizations

• Community Organization badges

These badges recognize organizations (or groups or communities) as distinct actors who, in collaboration with other organizations, engage in community of practice activities and achievements toward socio-economic policy goals that are important to IDB and the LAC region, such as the United Nations Sustainable Development Goals. These activities can include the formation of partnerships, the development of plans and other commitments, collaborative projects and other activities, and ongoing tracking of progress and sustainable renewal.

The badges are issued to an official email address at the organization (e.g., info@organization.org), and will include evidence of the achievements being recognized. Community Organization badges may be complemented by Community Professional badges earned by individual employees of the organization.

These badges will normally be aligned to a taxonomy of collaboration types:

• Knowledge creation

Producing, expanding, or adapting research and knowledge products (data, publication, etc.)

• Knowledge exchange

Dissemination, activation via events, platforms, networks

• Knowledge transfer and learning

Workshops, education, training, courses, programs, Work Integrated Learning

- Internal (staff, students)
- External (community, global)

• Knowledge adoption

Implementation, application, deployment (projects, consulting, other knowledgebased services)

• Partner Organization badges (TBA)

Over time, Credenciales BID plans to explore other flexible ways of encouraging and recognizing the learning and achievements of organizations with badges. As they emerge and solidify, these badge types will be captured here.



Stewardship and control

CredencialesBID will maintain stewardship of the digital credentials issued by the IDB Group and may revoke issued credentials on occasion for justifiable cause. Recipients of IDB credentials will have free access to the credentials they have been issued and full control over their display, curation, sharing and dissemination in wallets, backpacks, passports, and portfolios of their choice.

Verifiability and integrity

Open Badges are verifiable documents whose verifiability can optionally be enhanced through methods and technologies such as blockchain transactions and protocols for supervision of assessment and verification of identity. Current CredencialesBID practice does not normally include these verification methods, but they may be used if specific situations warrant their deployment.

CredencialesBID's continued alignment with the Open Badges standard as it evolves to version 3.0 will drive the adoption of Decentralized Identifiers (DIDs) and Verifiable Credentials as default verification tools. The Framework will be updated to reflect IDB's verification as they evolve.

Transparency and clarity

IDB credentials will clearly communicate how they meet the criteria of the Framework, using appropriate content, supporting evidence and visual design.

Issuer

Currently, IDB is the single "issuer of record" of all badges issued in the CredencialesBID ecosystem. IDB partners with other organizations to issue badges on their behalf.

In the future, other "issuers of record" may emerge in the CredencialesBID ecosystem.

Badges issued externally may be imported by learners into their badge portfolios on CredencialesBID Passport.



Relevance and alignment

To maximize potential career impact, IDB badges can recognize competencies and other useful learning currently relevant to the labor market. Relevance can be achieved through active consultation and partnership with stakeholders such as employers, industry, professional and community organizations, educational organizations, and government bodies and through other means, such as the use of relevant Labor Market Information (LMI).

Where appropriate, badges will adhere to harmonized skills and competency language and will align with widely shared competency frameworks to enhance their recognition value and portability.

Other forms of alignment may be used, such as knowledge domains, industry standards and social goals, such as the UN SDGs.

Labor market relevance and alignment are particularly important for more formal badges. Less formal badges may be issued for recognition purposes beyond immediate market relevance and career advancement.

The Framework itself is a mandatory source of alignment. All IDB badges will be issued in alignment with the Framework.

Outcomes

To better support transferable value, more formal IDB badges will focus on recognizing knowledge, skills, attitudes, behaviors, and competencies that support effective performance and will include demonstration of actual application whenever feasible and relevant.

Learning experience, activities

IDB badges will clearly describe their learning experience and assessment modalities.

Course-based badges may recognize a variety of course modalities including on-site, online, and hybrid formats.



Badges may also be earned through experiential and work-based learning engagements at varying levels of formality. IDB will seek ways to increase the role of authentic workplace learning and recognition.

Badges may also be awarded by assessment that is independent of pre-designed courses and programs, via methods such as Recognition of Prior (and External) Learning (see below).

Flexible Recognition badges may be awarded for a variety of experiences and activities, as its name implies.

Notional learning effort

To better describe the "volume of learning", IDB badges will provide an estimate of the notional workload of the learner in estimated hours of learning, when appropriate. This comprehensive total will include all estimated learning effort, including learning delivery, readings, assignments, assessments, etc.

Some exceptions may apply, such as for Work Integrated Learning or some types of Performance badges, where total effort is impossible to estimate.

• Levels of learning and skill

More formal badges such as Assessment badges and Performance badges may optionally align to levels of learning that may be internally formulated or externally sourced.

Internally formulated levels should reflect two things:

- The complexity of learning or skill being recognized
- The type of assessment used for evaluation

The diagram below captures these two dimensions and provides a guide to the levels to be used for IDB badges when appropriate, for better distinction of what is being recognized, especially when progression is part of the badge design.



| Levels of Learning and Skill | | | | | | | | | | |
|------------------------------|--------------------|---------------------------|--------------------------|---|--|--|--|--|--|--|
| | ASSESSMENT TYPE | | | | | | | | | |
| COMPLEXITY | | Diagnostic & Formative | Formative & Summative | Systematic, Criterion-based, Authentic | | | | | | |
| | Know / Understand | | | | | | | | | |
| | Apply | | | | | | | | | |
| | Analyze / evaluate | | Professional | Expert | | | | | | |
| | Create / Transform | | | | | | | | | |

Figure 4: Levels of Learning and Skill

Assessment and Evidence

Assessment badges and Performance badges will include clearly described assessment activities that are well aligned to intended learning outcomes, to provide confidence the learner has achieved the learning outcomes at the appropriate level.

As appropriate, direct evidence of learner achievement may be included in the credential.

Badge recipients may also add further evidence after receipt of the badge, as active learners and practitioners in the learning and recognition community. This capability leverages the affordances of the CredencialesBID Passport platform and supports learner control over the display, curation, sharing and dissemination of badges they receive.

Participation Badges, Completion Badges, Community Professional Badges and Flexible Recognition Badges are exempt from the requirement of summative assessment.

• Quality Assurance

IDB badges will be developed, approved, and periodically reviewed through quality assurance processes that are aligned to the different types of badges in the taxonomy, which can include



criteria of relevance, coherence, validity, outcomes-based design, assessment, evaluation of impact and opportunities for continuous improvement.

Quality Assurance for Assessment and Role Performance badges will specifically ensure that adequate attention is paid to elements such as assessment and evidence to maximize the portable value of these credentials and the reputational value of the framework.

Quality Assurance is administered through a set of Badge Requirements, which are aligned to the types of badges in the taxonomy. These Badge Requirements and the badge creation and issuing processes they guide will be monitored and periodically reviewed and updated.

Endorsement

To add authentic value to its credentials, IDB issuers may seek endorsement by employers and other stakeholder organizations. Endorsements can confirm relevance and alignment and other elements of quality, describe collaboration or partnership, or act as less formal recommendations. As appropriate, an endorsement may be formalized as a type of accreditation by a professional or industry body, or another organization.

"Pre-issue" (badge class) endorsements by organizations may be embedded in the credentials using the Endorsement property of the Open Badges standard.

The CredencialesBID Passport platform also supports endorsements of specific badges as earned by individuals (badge assertions). These custom endorsements may be made by organizations or individuals as a form of personalized recommendation of the badge earner. Endorsement of badge assertions after issuing can add further value for individuals, employers, and communities.

Stacking

As an example of the functionality of Open Badges, IDB credentials may be aggregated or "stacked" with other credentials to form larger credentials. These are sometimes known as Milestone Badges or "meta badges."

Stacking IDB badges into Milestones does not imply stacking for academic qualifications, although such recognition may be awarded by some academic institutions.



• Accessibility, learner access and support

IDB digital credentials will align with <u>IDB's Accessibility policy</u> and the service aims to achieve high levels of accessibility, in a continuous process of fixing accessibility issues that might remain.

IDB digital credentials will be supported with sufficient services and technology to encourage widespread learner access.

• Recognition of prior and external learning

IDB is committed to the principles of open recognition and will actively explore sustainable methods of recognizing knowledge and skills, without regard to how they were acquired, guided by effective international practices for the Recognition of Prior (and External) Learning, including the recognition of badges developed outside the IDB ecosystem.

In addition, more formal IDB badges will be robustly designed, and quality assured to maximize their portable recognition value for other organizations such as professional bodies and academic institutions.











Glossary

Assessment - formative

Learning assessment, often informal and conducted periodically, that emphasizes the use of feedback for guiding teaching and learning.

Source: https://learningportal.iiep.unesco.org/en/glossary/formative-assessment

Assessment - diagnostic

Assessment aimed at identifying a learner's strengths and weaknesses with a view to taking necessary action to enhance learning. Also used prior to the teaching and learning process to appraise the learner's readiness or level of achievement.

Source: http://www.ibe.unesco.org/en/glossary-curriculum-terminology/d/diagnostic-assessment

Assessment - summative

Assessment of learner's achievement at the end of a term, stage, course or program usually, although not necessarily, involving formal testing or examinations. Summative assessment is most commonly used for ranking, grading and/or promoting students, and for certification purposes. Source: <u>http://www.ibe.unesco.org/en/glossary-curriculum-terminology/s/summative-assessment</u>

Blockchain

A type of Digital Ledger Technology (DLT) that consists of a growing list of records, called blocks, that are securely linked together using cryptography. The timestamp proves that the transaction data existed when the block was created. Blockchain transactions are irreversible in that, once they are recorded, the data in any given block cannot be altered retroactively without altering all subsequent blocks.

Source: https://en.wikipedia.org/wiki/Blockchain

Badge Alignment

The use of Linked Data to map a badge to an external reference: "the canonical identifier for an objective targeted by a Badge Class, such as an element of an educational standard, or a competency



definition used by multiple organizations."

Adapted from: https://www.imsglobal.org/sites/default/files/Badges/OBv2p0Final/faq/index.html

Badge Assertion

A BadgeClass awarded to an individual Recipient.

Adapted from: <u>https://www.imsglobal.org/sites/default/files/Badges/OBv2p0Final/faq/index.html</u> <u>https://openbadges.org/about/faq</u>

Badge Criteria

Detailed information about what must be done in order to be recognized with an assertion of a particular BadgeClass. Potential recipients may use criteria to understand what they must do; consumers may use criteria to understand what recipients did in order to earn the badge. Adapted from: <u>https://openbadges.org/about/faq</u>

Badge Class

A specific data object defined by the Open Badges standard that describes a particular defined achievement and points to the Badge Issuer who defined it. Many Badge Assertions may be issued corresponding to one Badge Class.

Adapted from: <u>https://www.imsglobal.org/sites/default/files/Badges/OBv2p0Final/faq/index.html</u> <u>https://openbadges.org/about/faq</u>

Badge Earner (Recipient)

Someone who receives an Open Badge by meeting the criteria for earning the badge, often after submitting evidence of learning or acquiring a skill. Source: https://openbadges.org/about/fag

Badge Issuer

A person or organization who creates, manages, and awards Open Badges. Adapted from: <u>https://openbadges.org/about/faq</u>

Badge Consumer (Viewer)

Someone who evaluates and may verify an Open Badge and the information contained in the badge, either as a Badge Class or a Badge Assertion.

Adapted from: <u>https://openbadges.org/about/faq</u>



Competence

The level of ability required to perform a task or activity. Source: IEEE 1484.20.2 (Pre-release draft)

Competency

The set of skills and behaviors required in the performance of a task or activity within a specific context.

Source: IEEE 1484.20.2 (Pre-release draft)

Critical Information Summary

A framework for prospective Earners and Consumers to evaluate and compare micro-credentials and other badges from different Issuers. May consist of Requirements and Recommendations. First proposed by Oliver (2019), began emerging in national and regional frameworks in 2021. Adapted from: <u>https://www.education.gov.au/higher-education-publications/resources/national-microcredentials-framework</u>

https://dteach.deakin.edu.au/wp-content/uploads/sites/103/2019/08/Making-micro-credentialswork-Oliver-Deakin-2019-full-report.pdf

Digital badges

Digital badges are as old as the web, showing status within online communities. Anyone who's used an online forum has seen this in action through the various privileges unlocked through the number of posts members make (or upvotes they receive). While digital badges can be an extremely effective way to 'gamify' user experience, they lack transferability. Adapted from: https://badge.wiki/wiki/What Are Open Badges%3F

Digital credentials

The digital equivalent of paper-based credentials. Open badges are a form of digital credential that indicate an accomplishment, skill, quality or interest.

Adapted from: https://en.wikipedia.org/wiki/Digital credential

Decentralized identifiers (DIDs)

A W3C recommendation for a type of digital identifier for people, organizations and any other entity, where each identifier is controlled independently of centralized registries. The proposed Open Badges 3.0 specification supports the use of DID URLs. Adapted from: <u>https://www.w3.org/TR/did-core/</u>



https://imsglobal.github.io/openbadges-specification/ob_v3p0.html#decentralized-identifiers-andself-sovereign-identity

Endorsement

Detailed information about third-party claims of support that can be associated with any Open Badges Issuer profile, badge class, or assertion. Adapted from: <u>https://openbadges.org/about/faq</u>

Evidence - direct

Direct evidence includes anything that you yourself have produced. Some examples include reports you may have written, garments you may have sewn, drawings you may have created, engines you may have repaired, spreadsheets you have produced – anything that is the direct result of your effort.

Source:

https://wikieducator.org/Assessing for Prior Learning/A4PL Course Modules/RPL Evidence

Evidence - indirect

Indirect evidence includes anything about you that tells or describes what you have done. Some examples include newspaper articles about your accomplishments, letters from past or current employers or associates, photographs of a piece of furniture (or anything else) you may have built, certificates from previous training courses, etc.

Source:

https://wikieducator.org/Assessing for Prior Learning/A4PL Course Modules/RPL Evidence

Learning organization

An organization skilled at creating, acquiring, and transferring knowledge, and at modifying its behavior to reflect new knowledge and insights.

Source: https://hbr.org/1993/07/building-a-learning-organization

Learning city

A city that effectively mobilizes its resources in every sector to promote inclusive learning from basic to higher education, revitalizes learning in families and communities, facilitates learning for and in the workplace, extends the use of modern learning technologies, enhances quality and excellence in learning; and fosters a culture of learning throughout life. In doing so, the city enhances individual empowerment and social inclusion, economic development and cultural prosperity, and sustainable



development.

Adapted from: https://uil.unesco.org/lifelong-learning/learning-cities

Learning region (territoire apprenant)

The vision of putting in motion, in a coherent way and for all, the possibilities of evolution of everyone in the region, at the service of the individual and the region at the same time. Adapted from: <u>https://www.reseaurural.fr/les-territoires-apprenants</u>

Linked data

Structured data which is interlinked with other data so it becomes more useful through semantic queries. It builds upon standard Web technologies such as HTTP, RDF and URIs, but rather than using them to serve web pages only for human readers, it extends them to share information in a way that can be read automatically by computers. Part of the vision of linked data is for the Internet to become a global database.

Source: https://en.wikipedia.org/wiki/Linked data

Micro-credential

Typically, a subset of Open Badges, defined by the educational sector as a record of focused learning achievement verifying what the learner knows, understands or can do. It includes assessment based on clearly defined standards, is awarded by a trusted provider and meets appropriate quality assurance requirements. Micro-credentials have stand-alone value that is focused on workplace relevance and may also contribute to or complement other micro-credentials or other credentials such as certificates and diplomas, including through recognition of prior learning processes. (Adapted from UNESCO)

Notional learning effort / volume of learning

The estimated duration of all activities required for the achievement of the learning outcomes specified. This estimate of hours should include contact time with educators, contact time with peers, with teaching staff, engagement with asynchronous online content and other resources and time spent on assessment.

Adapted from: <u>https://www.dese.gov.au/higher-education-publications/resources/national-</u> <u>microcredentials-framework</u>

Open Badge

A specific type of digital badge that conforms to the Open Badges standard. Open Badges are verifiable and contain detailed information about the achievement and what the recipient did to



earn the badge.

Source: https://openbadges.org/about/fag

Outcomes - Learning

Statements of what a learner is expected to know, be able to do and understand at the end of a learning process. Sometimes "Intended Learning Outcomes." Adapted from: <u>https://www.cedefop.europa.eu/files/4156_en.pdf</u>

Outcome - Theory of Change

A state, or condition that must exist for an initiative to work and does not currently exist. An outcome may represent a change in a group of people, organizations, or places. Outcomes are the building blocks of a Theory of Change. Except for the long-term outcome, all outcomes on a change framework are also preconditions which are necessary for other outcomes.

Adapted from: <u>https://www.theoryofchange.org/what-is-theory-of-change/how-does-theory-of-</u> change-work/glossary/

Quality assurance

Systematic administrative and procedural activities taken to insure that requirements and goals for a product, service or activity will be accomplished, including performance, design, reliability, and maintainability expectations. Quality assurance includes two principles: "fit for purpose" (the product should be suitable for the intended purpose); and "right first time" (mistakes should be eliminated).

Adapted from: https://en.wikipedia.org/wiki/Quality_assurance

Open Recognition

Open Recognition is an approach born from the practice of Open Badges that explores and promotes practices, tools and policies that enhance and broaden opportunities for everyone, individuals and communities, to be recognized and contribute to the recognition of others. The focus of Open Recognition may be for lifelong learning and development, or it may be for other goals that benefit society. Its principles are described in detail in the <u>Bologna Open Recognition Declaration</u>. Adapted from: <u>https://mirva.openrecognition.org/wp-content/uploads/sites/3/2020/08/O1-Open-Recognition-Framework-2.pdf</u>

Recognition of Prior (and External) Learning (RPL)

Recognition of Prior Learning refers to the principles and processes through which the prior knowledge and skills of a person are made visible, mediated and assessed for the purposes of



alternative access and admission, recognition and certification, or further learning and development. External learning extends this definition to include current and future learning activities that take place external to an educational institution or program.

Adapted from: https://hr.saqa.co.za/glossary/pdf/NQFPedia.pdf

https://credentialasyougo.org/wp-content/uploads/2022/03/CAYG-Definitions-Working-Draft-March-13-2022-PDF.pdf

Self-directed learner

A learner who is responsible for organizing and managing his or her own learning activities and needs. SDL encourages individuals to become responsible for their own learning, identify gaps in their knowledge gaps and critically appraise new information.

Adapted from: https://medical-dictionary.thefreedictionary.com/self-directed+learning

Stackability

Stackability refers to the ability to combine two or more credentials (badges) into a larger credential or component of learning.

Source: <u>https://news.gov.bc.ca/assets/releases/2021aest0060-001869/micro-</u> credential_framework.pdf

Verification

A technical process defined in the Open Badges standard that enables consumers to determine an Open Badge's authenticity.

Source: https://openbadges.org/about/faq

Verification - identity

"Supervision and identity verification during assessment" is a criterion for evaluating a more formal badge based on summative assessment. This criterion can form part of a Critical Information Summary. Options may include "unsupervised with no identity verification", "supervised with no identity verification", "supervised online or onsite with identity verification" Adapted from: <u>https://microcredentials.eu/wp-content/uploads/sites/20/2021/05/D3_3_MicroHE-</u> Users-Guide.pdf

Verifiable Credentials (VCs)

An open standard for digital credentials that holds the status of a W3C Recommendation. VCs can be used to publish a limitless variety of claims about a subject, person or other entity, typically through



a cryptographic proof. The proposed Open Badges 3.0 specification aligns with the conventions of the <u>Verifiable Credentials Data Model v1.1</u>.



APPENDIX: Critical Information Summaries by Badge Type



APPENDIX: Critical Information Summaries by Badge Type

<u>Oliver (2019)</u> first suggested the concept of a Critical Information Summary as a framework for prospective Earners and Consumers as a type of checklist or rubric to evaluate and compare microcredentials from different Issuers and to set standards for their development.

This concept has been adopted by frameworks such as Australia's <u>National Microcredentials</u> <u>Framework</u> ("Critical information requirements and minimum standards") and EU's <u>Recommendation on a European approach to micro-credentials for lifelong learning and</u> <u>employability</u> ("European standard elements").

IDB's Critical Information Summary is informed by those contained in academic micro-credential frameworks, but has dropped, added and transformed elements to better fit the overall context of international development and to accommodate the broader vision of recognition in the IDB Framework. In addition, IDB's Critical Information Summaries are explicitly with the Open Badges standard, including its mandatory and optional fields.

Key for Transparency: Critical information Summary (CIS)



EMERGENT INTERNATIONAL PRACTICE Quality assurance checklist, designed to improve portability

Adapted from academic and industry sources for the IDB ecosystem

BUILT ON THE OPEN BADGES CREDENTIALING STRUCTURE

Fields for all badges: Mandatory | Optional-recommended | Optional

By badge type: Specific criteria requirements





INTERNAL GUIDE, EXTERNAL DECLARATION

Administered within IDB via badge requirements and templates for creators

All IDB badges to contain an alignment to a web-accessible version of the CIS, to act as a reference guide for portable recognition



• Mandatory Open Badges fields for all badge types

- Issuer: Organization that issues the badge.
 Normally Interamerican Development Bank (In Spanish: Banco Interamericano de Desarrollo)
- Name: Title for the badge, unique to each issuable badge (badge class)
 Maximum 128 characters (plain text)
- Issue date: Default value is date of issue by the platform. Can be adjusted at time of issue, if appropriate.
- Description: Written for each badge
 Includes declaration of badge type Maximum 1000 characters, plain text
 (Recommended: 10 20 words)
- Criteria: See below Criteria Information Requirements by Badge Type

• Optional Open Badges fields for all badge types

Optional - recommended

• Tags: Keywords and phrases embedded in the badge as summary descriptors to improve scanability and search.

(Recommendation: 1-5 tags from a standard vocabulary. Join-words-in-phrases.)

- Language: Not recommended for monolingual badges. For multilingual badges, conforms to ISO 639 standard, using the language selection capabilities of the platform.
- Alignment: Linked Data that maps a badge to an external reference, such as a widely shared standard, competency or social goal. Alignment may be targeted at different levels: the entire website or framework, a subsection or an individual element.

Formatted as: Name, URL and (optional) Description All IDB badges will be aligned to the IDB Digital Credential Framework, starting 2022-10-01. Adding more alignments can help enhance the value and usefulness of the badge.



 Endorsement: Detailed information about third-party claims of support that can be associated with a badge class (issuable badge). These can be more formal "accreditations" or less formal recommendations and messages of support from peer organizations.

Optional

- Expiration date: Date after which the badge can no longer be validated using an Open Badge validator.
- Evidence: Direct (primary) evidence that supports a badge assertion (a badge issued to an individual). Examples include an approved badge application included at time of issue, or evidence added after issue by the earner, which may or may not be later validated by the issuer, using the capabilities of the Passport platform.



• Criteria information by badge type

| Individuals | | | | | | Organizations | | |
|---|------------|--|------------------------------|---------------|---|--|---|--|
| Criteria | Assessment | Performance | Completion | Participation | Community Professional | Flexible Recognition | Community Organization | Partner Organization |
| Learning objectives /outcomes | MANDATORY | MANDATORY | MANDATORY | MANDATORY | MANDATORY "Achievement or contribution type" | MANDATORY "How this badge was earned" | MANDATORY "Achievement or contribution type" | MANDATORY "Details of partnership" |
| Why this is significant | N/A | N/A | N/A | N/A | N/A | OPTIONAL RECOMMEN- DED | N/A | N/A |
| Level of engagement | N/A | N/A | N/A | N/A | N/A | N/A | MANDATORY | OPTIONAL RECOMMEN- DED |
| Detailed criteria | N/A | N/A | N/A | N/A | N/A | N/A | MANDATORY | N/A |
| Staff participation | N/A | N/A | N/A | N/A | N/A | N/A | OPTIONAL RECOMMEN- DED | OPTIONAL RECOMMEN- DED |
| Sectors | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL |
| Level | OPTIONAL | OPTIONAL | OPTIONAL (COMPLEXITY) | N/A | N/A | N/A | N/A | N/A |
| Learning experience and activities | MANDATORY | OPTIONAL RECOMMENDED (e.g.custom program) | MANDATORY | MANDATORY | MANDATORY "Description of contribution" | N/A | N/A | N/A |
| Content / Topics | MANDATORY | OPTIONAL | OPTIONAL RECOMMEN- DED | OPTIONAL | N/A | N/A | N/A | N/A |
| Assessment description | MANDATORY | MANDATORY | MANDATORY | OPTIONAL | MANDATORY "Review" | N/A | MANDATORY "Evaluation" | MANDATORY "Evaluation" |
| Estimated learning effort | MANDATORY | OPTIONAL RECOMMENDED | MANDATORY | MANDATORY | OPTIONAL "Contribution effort" | N/A | OPTIONAL "Contribution effort" | OPTIONAL "Contribution effort" |
| Further information | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL |
| Badge type | MANDATORY | MANDATORY | MANDATORY | MANDATORY | MANDATORY | MANDATORY | MANDATORY | MANDATORY |
| Additional Criteria (addendum criteria) | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL |
| Alignments | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL |
| Endorsements | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL |
| Duration of validity | OPTIONAL | OPTIONAL | OPTIONAL | N/A | OPTIONAL | OPTIONAL | OPTIONAL | OPTIONAL |



Adapted from:

AACRAO. (2022). Alternative Credentials: Considerations, Guidance, and Best Practices.

American Association of Collegiate Registrars and Admissions Officers. Retrieved from https://www.aacrao.org/docs/default-source/work-groups/alternative-credentials-considerations-guidance-and-best-practices.pdf

Council of the European Union. (2022). Proposal for a Council Recommendation on a European approach to micro-credentials for lifelong learning and employability (adopted 2022-06-22) Retrieved from https://data.consilium.europa.eu/doc/document/ST-9237-2022-INIT/en/pdf

DESE. (2022). National Microcredentials Framework. Australian Government Department of Education, Skills and Employment. Retrieved from https://www.dese.gov.au/higher-education-publications/resources/national-microcredentials-framework

McGreal, R., Olcott, D. (2022). A strategic reset: micro-credentials for higher education leaders. Smart Learn. Environ. 9, 9. <u>https://doi.org/10.1186/s40561-022-00190-1</u>

Oliver. 2019. Making micro-credentials work for learners, employers and providers <u>https://www.researchgate.net/publication/335109512 Making micro-</u> <u>credentials work for learners employers and providers</u>



APPENDIX: References

• Comparative matrix

These sources have been captured in this comparative matrix to inform the Framework: <u>Reference Frameworks and Standards - IDB (Industry focus)</u>

• Key sources - annotated

AACRAO. (2022). Alternative Credentials: Considerations, Guidance, and Best Practices. American Association of Collegiate Registrars and Admissions Officers. Retrieved from <u>https://www.aacrao.org/docs/default-source/work-groups/alternative-</u> <u>credentials/alternative-credentials-considerations-guidance-and-best-practices.pdf</u> *This advisory report from the US National Association of Registrars openly acknowledges the contribution of Open Badges. Used as a source for the Critical Information Summary.*

ASTM. (2018). E2659-18 Standard Practice for Certificate Programs. ASTM International. Retrieved from <u>https://www.astm.org/e2659-18.html</u> *This industry standard for course certificates helps balance the academic perspective. A source for Assessment badges. (Paywalled)*

CICan. (n.d.). National framework for microcredentials. Colleges and Institutes Canada. Retrieved from <u>https://www.collegesinstitutes.ca/policyfocus/micro-credentials/</u> *A high level framework for colleges and institutes (not universities), largely based on (Oliver* 2019).

CAYG. (2021). Incremental Credentialing Model and Framework. Credential As You Go, Phase One. Lumina Foundation. Retrieved from <u>https://credentialasyougo.org/incremental-</u> credentialing-framework/

This recognition framework for "Prior and (Current/Future) External Learning", which spans academic and industry needs. It currently provides the foundation for a multi-state funded initiative currently underway in the US.



Council of the European Union. (2022). Proposal for a Council Recommendation on a European approach to micro-credentials for lifelong learning and employability. Retrieved from https://data.consilium.europa.eu/doc/document/ST-9237-2022-INIT/en/pdf

This proposal, submitted in May 2022 based on several other papers (Shapiro 2021 and Orr et al 2021), was adopted 2022-06-22 by the Council of the European Union (EU). The document contains several useful definitions and principles and includes a set of standard mandatory and recommended elements to describe a micro-credential. Used as a source for the Critical Information Summary.

DESE. (2022). National Microcredentials Framework. Australian Government Department of Education, Skills and Employment. Retrieved from https://www.dese.gov.au/higher-education-publications/resources/national-microcredentials-framework

This Australian national higher education policy document establishes a national definition for micro-credentials, a collection of unifying principles and a list of required and recommended Critical Information Requirements to set a minimum standard for micro-credentials that will sit on the Microcredentials Marketplace currently in development. Used as a source for the Critical Information Summary.

Diaz, C., Brimo, A. (2022). OpenCreds - A lifelong learning micro-credentialing framework. Version 2.0. OpenLearning Limited. Retrieved from <u>https://696603.fs1.hubspotusercontent-na1.net/hubfs/696603/OpenCreds%20-</u> %20Australia/OpenCreds%20Micro-credential%20Framework v2.pdf

eCampusOntario. (2020). Micro-credential Principles and Framework. Retrieved from <u>https://www.ecampusontario.ca/wp-content/uploads/2020/11/Micro-credentials-en1.pdf</u> Version 2 of a high-level infographic that has been leading the way toward a working microcredential framework in Canada.

International Organization for Standardization (ISO). (2012). ISO/IEC 17024:2012 Conformity assessment — General requirements for bodies operating certification of persons. International Organization for Standardization. Retrieved from <u>https://www.iso.org/standard/52993.html</u>

The dominant industry standard for defining certified professionals. A key source for the Performance badge.



MAEST. (2021). Micro-Credential Framework for B.C.'s Public Post-Secondary Education System. Ministry of Advanced Education and Skills Training. Retrieved from <u>https://news.gov.bc.ca/assets/releases/2021aest0060-001869/micro-</u>

credential framework.pdf

Working document for the province of British Columbia in Canada; due for updating, based on further research in several areas in early 2022.

Malaysian Qualifications Agency. (2020). Guidelines to Good Practices: Micro-credentials Retrieved from <u>https://www2.mqa.gov.my/qad/v2/garispanduan/2020/GGP%20Micro-</u> <u>credentials%20July%202020.pdf</u>

Standard academic approach to digital credentials. Included here as an alternative perspective beyond North America and Europe.

McGreal, R., Olcott, D. A strategic reset: micro-credentials for higher education leaders. Smart Learn. Environ. 9, 9 (2022). Retrieved from <u>https://doi.org/10.1186/s40561-022-00190-1</u> Secondary research paper included for its balanced perspective and list of "Micro-Credential Information and Validation Elements". Used as a source for the Critical Information Summary.

NZQA. (2020). Guidelines for applying for approval of a training scheme or a micro-credential. New Zealand Qualifications Authority. Retrieved from

https://www.nzqa.govt.nz/assets/Providers-and-partners/Micro-credentials/guidelinestraining-schemes-micro-credentials.pdf

Early national framework cited by many as a way forward. Now less useful, compared to other sources, such as Australia and Europe.



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