



XXVII FIG CONGRESS

11-15 SEPTEMBER 2022
Warsaw, Poland

*Volunteering
for the future –
Geospatial excellence
for a better living*

FIG Education and Academic Community

United Nations Committee of Experts on Global Geospatial Information Management: Americas (UN-GGIM: Americas)

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Comments about:

- Academic Network UN-GGIM: Americas
- Activities- Surveys
- Comments from national members: 12 Session of UN-GGIM
- Some first ideas of how Commission 2 and FIG contribute



ACADEMIC NETWORK UN-GGIM



Some functions of ANA:

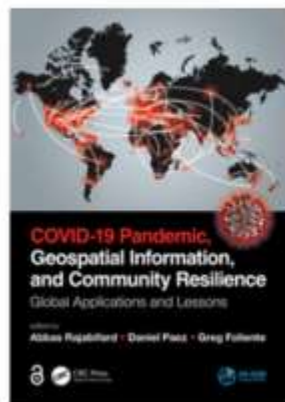
- a) **Provide:**
 - a) **academic advice** - geospatial information management.
 - b) **coordination and dialogue forum for academics and researchers** - activities related to the competencies and qualifications needed for the **administration, management, and use of geospatial information.**
- b) **Undertake activities that foster collaboration** amongst universities and research centers - addressing common research topics and overarching trends.
- c) Elaborate **academic strategies** according to the UN-GGIM Americas Plan of Action.
- d) **Identify the challenges and opportunities** - can promote inclusion and development based on an academic response.

Working Plan UN-GGIM: Americas: 2021- 2025

Current Group	New Denomination
Integration of Statistical and Geospatial Information	WG on Global Statistical and Geospatial Framework(GSGF)
Geospatial Data Infrastructure	WG on Integrated Geospatial Information Framework (IGIF)
Disasters	WG on Strategic Framework for Geospatial Information and Services for Disasters (GISD)
Geodesy	WG on Geodetic Reference Frame for the Americas (GRFA)

Activities:

Books- Articles



Book

COVID-19 Pandemic, Geospatial Information, and Community Resilience

Global Applications and Lessons

By Abbas Rajabifard, Greg Foliente, Daniel Paez



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Outline
Highlights
Abstract
Keywords
Abbreviations
1. Introduction
2. Methodology: towards a regional analysis
3. Results: Ethics in the Americas region
4. Conclusions
Author statement
Author contributions
Declaration of competing interest
References
Show full outline

Technology in Society
Volume 69, May 2022, 101964

Ethics in the use of geospatial information in the Americas

Paloma Merodio Gómez^a, Andrea Ramirez Santiago^{a, b, c}, Gabriela García Seco^a, Rosario Casanova^a, Denise MacKenzie^d, Christopher Tucker^a

^a National Institute of Statistics and Geography, Mexico
^b University of Republic, Uruguay
^c Association for Geographic Information and University of Southampton, UK
^d American Geographical Society, USA

Received 12 November 2021, Revised 5 March 2022, Accepted 7 March 2022, Available online 12 March 2022, Version of Record 14 March 2022.

Webinars – Workshop - eLearning

Cubo de datos: Distintas herramientas para cada necesidad
Data Cube: Different tools for different needs

AmeriGeo Week 2021
23 al 27 de agosto
Fomento de la colaboración y la integración de datos para el apoyo a la toma de decisiones

Ethics in Geographic Information
El uso ético de la información geográfica

The socio-economic benefits of geospatial information

EYES ON NATURE: EARTH OBSERVATIONS FOR THE ENVIRONMENT
VIRTUAL WORKSHOP

THE INTEGRATED GEOSPATIAL INFORMATION FRAMEWORK – IGIIF

Ciclo de webinars
Working Group on Environmental Statistics

GEO VIRTUAL SYMPOSIUM 2021

Date: 5 October 2021
Time: 09:00 AM - 11:00 AM (Mexico time)
Platform Zoom: <https://zoom.us/join/...>

Zoom meeting interface screenshot

AmeriGLO Week 2022
Hosted by the American Association of Geographers

«Enseñanza sobre uso ético de los datos geográficos»

Judges

- Mrs. Jacqueline deCosta – Land Information Council Jamaica
- Dr. Michael Sutherland – The University of the West Indies
- Ms. Sandra Turner – National Geographic Certified Educator
- Dr. Sibum Clarke – Spatial Innovation Limited
- Ms. Khadija River – Independent GIS Consultant

UN-GGIM ANA 2022

STATE OF THE MAP 2022

Instituto Geográfico Agustín Codazzi

Participa en la IFerrianaGeomatica2022 y la firma de la carta de intención con la Plta. de IUN-GGIM-ANA, Rosario Casanova.

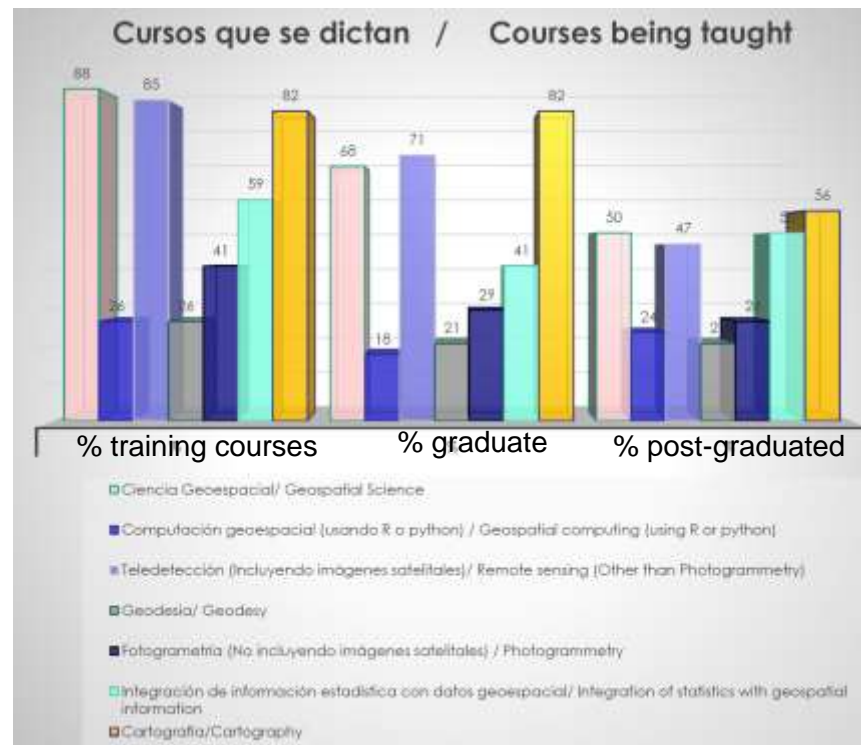
El objetivo de estas alianzas internacionales es generar ideas, aportar a la visión y al intercambio regional de conocimientos para impulsar la investigación.

UN-GGIM ANA 2022 group photo

Capacity Development UN-GGIM: Americas
Rosario Casanova, Chair Academic Network UN-GGIM: Americas

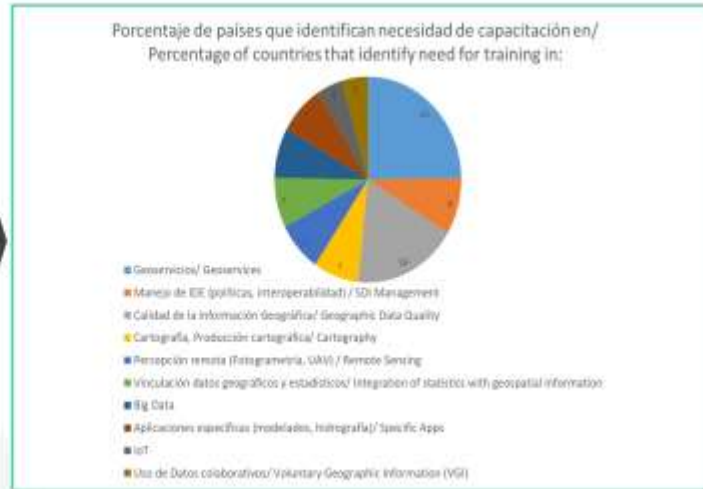


Survey of offers of courses regarding GI



Survey of needs on capacity courses country members

2018



2020



2021



Surveys: ethical use of geospatial data (2021 – 2022)

Americas: national members and academia

**Existence of
National
regulation**

9 questions – 16 responses-
national members

**Existence of
Education**

8 questions – 90 responses

Europe: academia

**Existence of
Education**

8 questions – 40 responses

Survey of status of ethics issues in the use of GI state members

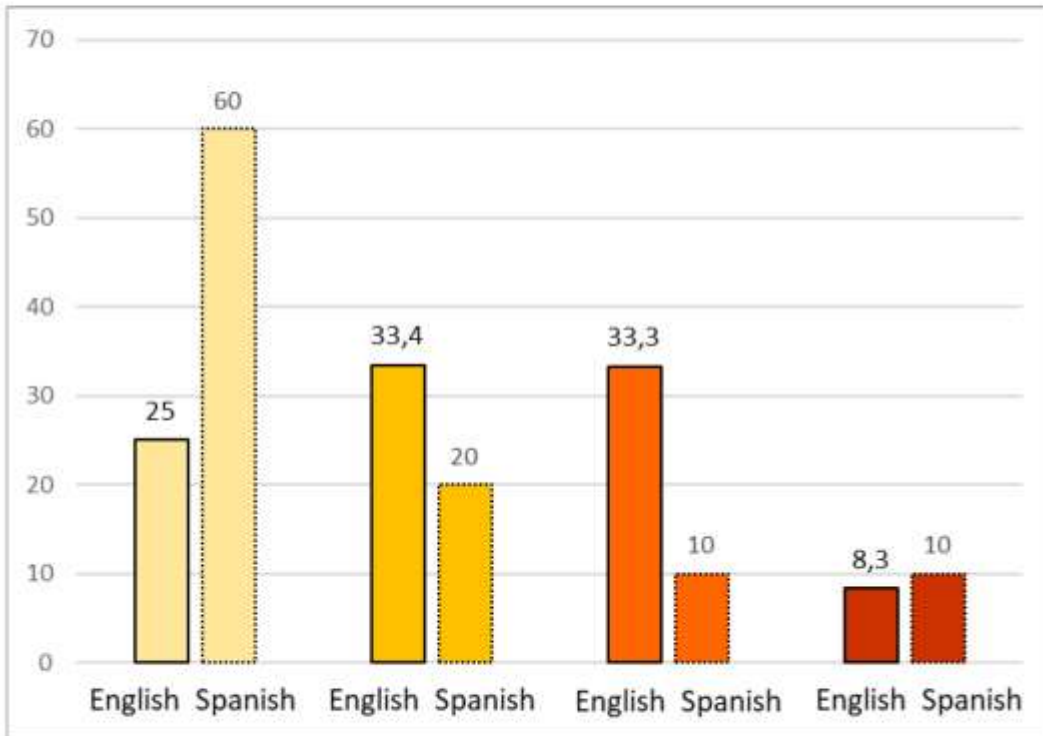
Questions: regulation

- 69%:** the ethical use of data is not controlled by regulations; norms exist as an orientation.
- 54%:** there are no federal or state regulations that penalize the inappropriate use of location data.
- 77%:** government institutions or agencies do not have standards on the ethical use of geospatial data.

Work to be done!!



How do you include this thematic?



I include the topic in brief general comments but do not allocate a specific time or embed in another topic or lesson.

I include the topic as an activity, lesson or discussion embedded within another topic or lesson in the course.

I allocate specific time and space in the syllabus to specifically address ethics.

I teach an entire course on ethics.

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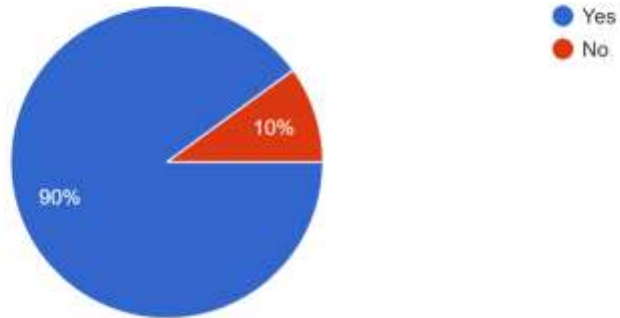
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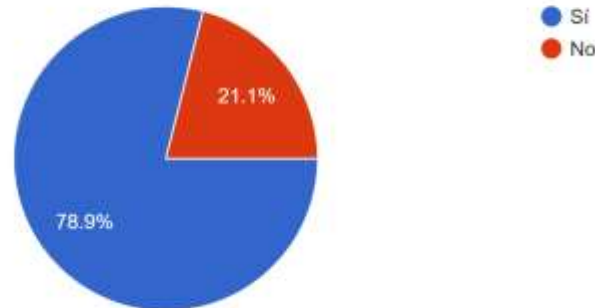
Including in the future...

Are you considering including a discussion of ethics in your course in the future?
50 responses



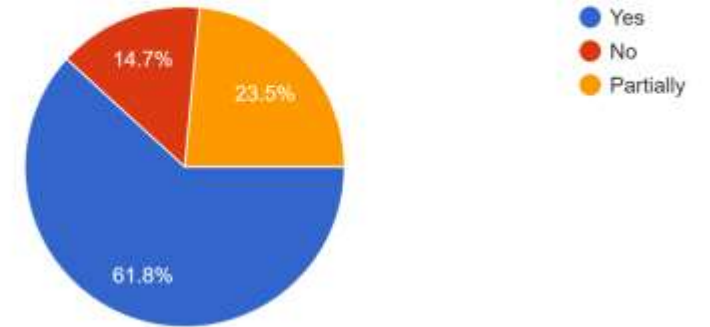
America

Está considerando incluir la discusión de la ética en cursos futuros?
38 responses



Europe

Are you considering including a discussion of ethics in your course in the future?
34 responses



Work to be done!!

Integrated Geospatial Information Framework (IGIF)

Strategic Pathway 8

Capacity and Education

This strategic pathway establishes enduring capacity development and education programs so that the value and benefits of integrated geospatial information management is sustained for the longer term.

The objective is to raise awareness, build and strengthen knowledge, competencies, skills, instincts, processes, resources, and innovative entrepreneurship for organizations, communities and individuals to utilize geospatial information to the fullest, including government capacities and capabilities for capturing, sharing and integrating geospatial information, for evidence based decision-making and effective service delivery.

<https://ggim.un.org/IGIF/>

The four elements are:



- **Awareness** – raises, advocates and promotes the principles, values, needs and benefits of geospatial information via techniques including ‘contact’ courses, online courses, and outreach programs involving different interest groups, communities and individuals.
- **Formal Education** - offers sound foundation in topics important to understanding concepts of geography and geographic science; imparts knowledge, science and technology, and develops competencies, skills and instincts in geospatial information management and its application.
- **Professional Training** - offers intensive, up-skilling and hands-on experience, and promotes lifelong learning and development needed to sustain geospatial information management. Aids the adoption, adaptation and embracing of new and emerging paradigms, technologies and methods, bringing enduring benefits to a geospatial information organization.
- **Entrepreneurship** – encourages capacity through innovative and creative applications, design and launch of start-ups, and operating new business ventures that are critical to vibrant and growing digital economies underpinned by geospatial information.

Some comments from national members of UN-GGIM Americas, 12 session of the UN-GGIM, August 2022.

- Share conceptual and practical experiences- Network- communities connected.
- Formation/training of technicians/professionals in the subject.
- Technologies are converting technicians trained by vendor companies but there is a lack of academic-based technical training.
- Human resources qualified in GIS.
- Leverage synergies and knowledge given the reduced budgets, therefore cooperation for capacity building is essential.
- Continuing education.

“The importance of professional education, continuing professional development, and training as a “life-long” learning approach throughout a whole career”

Work to be done!!

How Comm 2 (and FIG more broadly) links to the academic groups:

- Identify demands and needs on education around the world:
 - regions with common needs
 - groups with less access to education (indigenous, women, etc.)
- Network of Academic Institutions of Surveying around the world: curricula and courses offered
- Inventory of:
 - curricula in Surveying
 - offers of education/ training courses: Hub of courses in GI around the world: Academic Network UN-GGIM

Make an efficiently use of resources/ideas/knowledge around the world

FIG Academy?

- **Create an international academic “center” – Microcredentials?**
- **Certificate courses/ training – permanent courses? As minimum credits per year?**



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Thank you - Gracias

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