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The master's degree in development practice: a case study of twelve university programs

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Sustainable development is a global priority. However, a lack of research exists on the programs designed to train sustainable development practitioners. This multi-case study, possibly the first to describe the programs that trains development practitioners, utilized case study theory and semi-structured interviews with program administrators to describe sustainable development programs offered by 12 higher education institutions in eight countries with membership in the Global Association of Masters in Development Practice. The results revealed five themes or key drivers, nine advantages, and four deficiencies. Two drivers were enrollment-focused (admission of students with prior work experience in development and financial support), two were curriculum-focused (incorporation of field work and integration of specific knowledge aspects and skills training in the curricula), and one was institutional attitude (adoption of a culture of flexibility). The most common challenges were impacts from the COVID-19 pandemic. These results provide insights for continuous improvement efforts of program administrators for students in sustainable development. The practical methodology developed can be replicated and adapted for investigation of similar programs and other disciplines in higher education.

KEYWORDS

sustainable development practice, continuous improvement, assessment, learning outcomes, higher education institutions

Introduction

Sustainable development is a global priority, evidenced by the 193 world leaders who adopted the United Nations 2030 Agenda for Sustainable Development ([United Nations General Assembly, 2015](https://www.un.org/sustainabledevelopment/)). With its 17 sustainable development goals (SDGs; [Table 1](#)), 169 targets, and 251 indicators to end poverty, protect the environment and fight injustice and inequality ([United Nations General Assembly, 2015](https://www.un.org/sustainabledevelopment/)), the general assembly recognized much work is to be done by development practitioners.

[Wu and Shen \(2016, p. 635\)](#) proposed that “education for sustainable development should contain the relevant social, environmental, and economic dimensions and integrate science and social science to achieve the earth's sustainable development.” Scholars have discussed the promotion of sustainability and teaching sustainable development in HEIs ([Seatter and Ceulemans, 2017](#); [Berchin et al., 2018](#)); the role of HEIs in sustainable development ([Stuart, 2010](#); [Muller-Christ et al., 2014](#); [Leal Filho et al., 2018](#)); implementation of SDGs in HEIs ([Leal Filho et al., 2021](#)); and education for sustainable

development (Wu and Shen, 2016; Anyolo et al., 2018; Singer-Brodowski et al., 2018). However, a paucity of research exists that investigates the ecosystems organized to support the training of development practitioners to address the multidimensional challenges of sustainable development.

Limited research has investigated the contributions of HEIs to the SDGs (Kioupi and Voulvoulis, 2020; Chaleta et al., 2021) and university students' perception about the SDGs (Al-Naqbi and Alshannag, 2018; Balakrishnan et al., 2019; Zamora-Polo et al., 2019). However, research is lacking that addresses and describes the programs of the HEIs with membership in the GAMDP to train development practitioners. That was the aim of this research.

HEIs provide undergraduate and graduate education for sustainable societies, develop future generations of professionals as change agents, facilitate and create dialogue for expression and exchange of ideas, challenge paradigms, and acquire and generate new knowledge (Seatter and Ceulemans, 2017). The International Commission on Education for Sustainable Development Practice (ICESDP) was established in 2007 and recognized four crucial needs: (1) a new type of generalist development practitioner (2) a new education system dedicated to sustainable development practice; (3) filling of existing gaps in graduate degree programs globally; (4) lack of appropriate training programs for lifelong learning (International Commission on Education for Sustainable Development Practice, 2008; Rodriguez, 2018).

Consequently, the ICESDP recommended several steps. (1) Establishment of core competencies in four disciplines: health sciences, social sciences, natural sciences and engineering, and management for sustainable development practitioners. (2) Launch of a Global Master's in Development Practice (MDP) which integrated knowledge in these four disciplines. (3) Recognition of the need for ongoing professional development for sustainable development practitioners. (4) Establishment of the Global MDP Secretariat and International Advisory Board with oversight for all MDP programs (International Commission on Education for Sustainable Development Practice, 2008; Wilsey et al., 2019).

Between 2006 and 2010, the first MDP program and the Global MDP Secretariat were launched within the Earth Institute at Columbia University with a \$3,275,000 grant from the MacArthur Foundation (Rodriguez, 2018). The MacArthur Foundation later awarded funding to an additional nine institutions in seven countries across six continents to create the first group of MDP programs (MacArthur Foundation, 2010). Today, MDP programs and continuing education programs have been established in twenty-three countries across six continents that form the Global Association of Master's in Development Practice (GAMDP; Global Association Master's in Development Practice, 2024).

MDPs and the 2030 Agenda for Sustainable Development

No country has achieved all SDGs, and 2022 marked the second successive year of failure. This deficiency was attributed to threats posed by the COVID-19 pandemic, climate change, and further crises in education, the environment, public health, food security, and peace and security (Food and Agriculture Organization, 2022; Sachs et al., 2022; United Nations, 2022).

TABLE 1 Acronyms.

GAMDP	Global Association of Masters in Development Practice
HEI	Higher Education Institution
ICESDP	International Commission on Education for Sustainable Development Practice
MDP	Masters in Development Practice
NGO	Non-Governmental Organization
SDG(s)	Sustainable Development Goal(s)
SIDS	Small Island Developing States
SSA	Sub-Saharan Africa
UN	United Nations

Sachs et al. (2021, pp. 29, 30, 31) summarized regional progress towards the SDGs:

- 1 Europe and North America: Continuously facing challenges with inequalities, biodiversity loss, and green-house gas emissions.
- 2 Eastern and Southern Asia: Progressed the most; however, major challenges with SDGs 2, 3, 5, 10, 14, and 15.
- 3 Sub-Saharan Africa and Small Island Developing States: Largest gaps to the digital divide, limited physical and human infrastructure, and management of environmental challenges.
- 4 Latin America and the Caribbean: Challenges with SDGs 10, 3, 6, 9, and 16.

Theoretical framework

This research utilized a qualitative case study research design and tools, as advocated by Yin (2018). Yin defined a case study as "an empirical method that investigates a contemporary phenomenon (the "case") in depth and within its real-world context" (p. 15). Case studies, Yin noted, are most applicable in situations where the boundaries between the phenomenon studied and the context are not openly obvious. These conditions apply to the current case study, the twelve programs offered by HEI members of the GAMDP.

Methodology

The HEIs studied train development practitioners to address multidimensional challenges of sustainable development in the countries and regions that they serve. Administrators, directors, or co-directors for the Masters in Development Practice programs at all thirty-five higher education institutions of the GAMDP were invited via electronic mail to participate in semi-structured interviews. Participants were informed about the purpose of the study in the informed consent form via email and were assured of anonymity. One interview per institution was analyzed. Thirteen individuals accepted: two from Africa, one from Australia, five from Europe, and five from North America. One institution was represented by two participants. All interviews but one (phone) were by Zoom, and all were 1–1.5 h,

guided by an interview protocol. Each interview was recorded, transcribed, uploaded to Dedoose qualitative software and thematically coded and analyzed for program components.

Findings

The profile of enrolled students was cohorts of ten to twenty, with each student having with 3–5 years of development experience in the public, private, and/or NGO sectors. Despite the tradition of not recruiting students directly from undergraduate colleges, some exceptions were made for students who had “lived experience” because they originated from, volunteered in, or participated in internships in low-to lower-income countries. The average program duration was between 12 and 24 months, and the average total credit hours was 45. The standard curriculum was a pre-program development boot camp; core courses from the four competency areas (health, natural, and social sciences; management); electives, and an 8- to 24-week field practicum.

Learning objectives and the SDGs

Most of the programs were not designed with teaching and learning objectives directly aligned with specific SDGs. [Leal Filho et al. \(2021\)](#) noted the lack of research on the framework to implement the SDGs within HEI programs. The administrators’ agreed that such research would be highly valuable, but an Australian participant pointed out lack of funds for this research.

However, administrators cited influences on sustainable development. The most direct alignment with the SDGs was observed in Kenya, characterized as East Africa’s financial, economic and transportation hub ([Central Intelligence Agency, 2022](#)). Yet the region experiences declining crop productivity, due to its dependency on rain-fed agriculture and lack of water resources from recurring drought ([Kabubo-Mariara, 2015](#)). In response, one field experience project addressed irrigation needs for smallholder farmers.

The project outcomes were targeted and mapped to three of the eleven most challenging SDGs (1, 4, 6). Regarding SDG 1, over 250 agribusinesses were established and over 1,250 individuals had improved livelihoods. Contributions to SDG 4 included the training of eight farmers and water technicians, 250 farmers in precision technologies, and creation of new irrigation-relation enterprises. Impacts on SDG 6 included a reduction in water-related conflicts, more efficient water management and usage, and the implementation of irrigation water-pricing policies ([Personal Communication from Participant, 2022](#)). In addition to such impacts on SDGs, five themes emerged in the programs analyzed, as well as the challenge of the COVID-19 pandemic.

Admitting students with previous work experience in development

Several administrators (67%) commented that students with prior work experience in development were preferred. However, several students were accepted directly after completing undergraduate studies. Although they lacked the preferred 3–5 years of development

experience, they had “lived experiences” because of living in lower-to lower-income countries.

This mix of students with and without development experience fostered synergistic relationships. One administrator from a North American program explained that the more experienced students shared experiences, and the recently graduated students supported them in overcoming their nervousness about returning to school and the associated academic challenges.

Incorporating field work into the curricula

All the administrators (100%) highlighted the benefits of incorporating field work in their curricula, a critical element of program design, especially for students without prior development work experience. Eleven programs offered field work practicums and one offered a capstone project, all between 8 and 24 weeks. The students were involved with public entities, the private sector, the United Nations system, and local and international development-focused NGOs. The lack of salary was compensated by logistical field support, office space, or assistants, or students’ choices of placement.

The administrators agreed that field work activity is critical, especially for students with limited work experience; moreover, the activities connect students to prospective employers. An administrator from a European program noted that in his country the development sector is difficult to enter without prior work experience. However, experience in field work opens doors for students and provides access to the international development network.

According to [Boni et al. \(2015\)](#), students’ worldview and assumptions are usually influenced by these experiences. They also inspire students to use theoretical knowledge learned, and students then recommend practical approaches for different challenges. The students gain real-world experience and the local communities benefit ([Leal Filho et al., 2018; Oe et al., 2022](#)).

Offering financial support

Financial support provided to the MDP students by 83% of the programs contributed to the retention rates of the programs. [Moore and Burgess \(2022\)](#) observed that the sources of financial support via various means typically offered by HEIs are provided directly from the institutions and governments and international charities to attract new students and/or are incentives that support students after enrollment.

One administrator from a North American program explained that some students were self-funded; however, the majority of administrators reported that their students received financial assistance. One administrator commented that the program offers partial scholarships to students, many of whom pay the full tuition cost and have access to three or four different scholarship opportunities.

Administrators agreed that offering financial support was a critical incentive to attracting and retaining students. Financial support was particularly relevant in European HEIs recruiting students from low-to lower-income countries. These students would not otherwise have had access to traditional government-based funding. Such support increases training opportunities, and these students are

expected to return to their home countries to address development challenges.

Among the organizations providing financial support to the programs analyzed were the [MacArthur Foundation \(2012\)](#), which supported four of the twelve HEIs with three-year grants. International students also received scholarships from their home governments or were supported by the International Foundation for Agriculture and Development, Japanese International Cooperation Agency, and Education for Sustainable Development in Africa.

Integrating specific knowledge aspects and skills training into the curricula

The curriculum recommended by the ICESDP for the training of development professionals is based on the four pillars of health sciences, natural sciences, social sciences, and management. However 83% of the administrators cited several knowledge areas and skills as essential: (1) conflict-related topics, (2) monitoring and evaluation, (3) project design and management, (4) gender equality, (5) proposal writing, (6) advocacy, and (7) communication skills. Several administrators emphasized the value of training development practitioners in both the hard skills (e.g., statistical analysis, monitoring, evaluation) and soft skills (e.g., conflict management, humility). Skills training was embedded into each course, as specific workshops, or as weekend modules.

One administrator from a European program explained that students often develop soft skills, including organizational ability, interpersonal relationships, and writing and analysis, during the field experience. A North American administrator believed that among the most essential skills needed by development practitioners were communication and conflict management skills.

The most frequently cited career skill was gender analysis, which provides methods to “gather and use sex-disaggregated and gender-related data and information to inform development interventions at various stages” ([Warren, 2007](#), p. 188). A European administrator commented that gender impact evaluations have historically distinguished the program from others.

Adopting a culture of flexibility

Eight administrators (67%) referenced the importance of flexibility in the MDP programs. One administrator from a small North American program commented that her team realized that flexibility was a better pedagogical approach than rigid adherence to traditional teaching. Her students were given the choice of “a basket of options” in the four pillars. Students could also select courses aligning with their personal and professional ambitions, take a leave of absence for if personal reasons, choose between a field practicum or capstone, and select one or more areas of specialization.

Challenge: the COVID-19 pandemic

The COVID-19 pandemic had a profound impact on the programs, according to all administrators. Impacts included a two-year delay in a new program’s starting date, decline in recruitment

initiatives and thus enrollments, cancellation of international field experiences, and shifts from in-person programs to online and/or hybrid approaches.

In-person programs designed to attract students from different regions experienced unique challenges. With two European programs that targeted students from Sub-Saharan African countries, including Zambia, Tanzania, Sierra Leone, Rwanda, and Ethiopia, students were expected to travel to Europe to receive their training and later return home to implement and improve sustainable development conditions. However, because of the pandemic travel ban and other restrictions on international travel, students experienced difficulties securing visas and were unable to travel.

Consequently, one of the European institutions reorganized its program design for accessibility to its own local and regional populations. Further, the original in-person mode of delivery was organized around activities that required the students to be physically present. This adjustment also affected faculty employment, with English-speaking faculty initially hired for English-speaking students from African countries. However, with program redirection to the localized populations, different native-speaking faculty were hired.

The majority of administrators reported that during the pandemic their institutions had temporarily adjusted to some type of online delivery, although without future plans to switch permanently, except for one Australian program. [Crawford and Cifuentes-Faura \(2022\)](#) noted that little preparation for online modalities increased the detrimental impacts of COVID-19 on HEIs’ learning and teaching methods.

Discussion

This study described twelve of the thirty-five programs that form the GAMDP, with contributions from thirteen program administrators in eight countries and four continents. The findings identified five themes and one common challenge to operations among the programs. These themes were (1) admitting students with previous work experience in development (75%), (2) incorporating field work into the curricula (100%), (3) offering students financial support (83%), (4) integrating specific knowledge areas and skills training into the curricula (83%), and (5) adopting a culture of flexibility (67%). The common challenge was the impact of the COVID-19 pandemic (100%).

With regard to the first theme, students’ prior work experience, students with and without development experience developed synergistic relationships. The more experienced students shared their field experiences but were often nervous about returning to school and the associated academic challenges. The recent graduates, more comfortable with the academic environment, culture, and activities, were able to share study habits and reassurances with the other students. Researchers have investigated non-traditional adult students’ enrollment in higher education ([Tumuheki et al., 2016](#); [McCall et al., 2020](#)) and their retention rates ([Cotton et al., 2016](#)), but no studies were identified specific to the experiences and interactions between non-traditional and traditional students participating in MDP programs.

Pertinent to the second theme, field work in the curricula, [Chew \(2008\)](#) pointed out that field work has become an accepted component of many curricula and that, to some extent, the field work conducted

was based on observations and not practical skills and techniques. However, this was not the case of the MDP field work experiences in the programs analyzed. The students' experiences aligned with the observations of [Kirksey et al. \(2021\)](#), who suggested that in field work students apply academic skills to their postgraduate employment.

Regarding the third theme, financial support, it was essential to students from low- and lower-income countries and increased their access to professional education. These students would not otherwise have been able to pursue the MDP training. Financial support also provides incentives for mid-career development professionals, especially, as in the current cases, for practitioners from African countries who travelled to Europe to pursue the MDP.

Financial assistance has a bearing on the field experiences in the programs, because most field placements are unpaid and last between 8 and 24 weeks. Without the support, students from the low- and lower-income countries may not have been able to support themselves. As [Moore and Burgess \(2022\)](#) pointed out, financial support via scholarships and other financial aid that are typically offered by HEIs are provided directly from the institutions, governments, and international charities to attract new students and support students after enrollment.

Concerning the fourth theme, integrating specific knowledge areas and skills training, [Holcombe and Howard \(2019, p. 250\)](#) advocated that “to truly comprehend and be equipped to advance integrated transformative development, a sustainable development practitioner needs to be grounded in a wide range of subjects.” This observation aligns with the recommendation of the ICESDP to establish core multidisciplinary competencies in health sciences, social sciences, natural sciences and engineering, and management ([International Commission on Education for Sustainable Development Practice, 2008](#)) and is the model adopted by the participating institutions.

Other skills cited by most of the administrators were data collection and qualitative and quantitative research methods and data analysis. One administrator from a European program explained that students often develop soft skills, including organizational ability, interpersonal relationships, and writing and analysis, during the field practicum experience.

The most frequently cited career skill was gender analysis, as noted above, which provides methods “gather and use sex-disaggregated and gender-related data and information to inform development interventions at various stages” ([Warren, 2007, p. 188](#)).

Pertinent to the fifth theme, adopting a culture of flexibility, many administrators recognized its value, from non-traditional teaching methods to student choices of courses. Students could also take leaves for personal reasons without affecting the timelines of their programs.

With regard to the impacts of the COVID-19 pandemic on the programs analyzed, the findings are similar to [Garrels and Zemliansky's \(2022\)](#) observation: the ability to pivot from face-to-face to online instruction was among the most dramatic changes for teachers and students. The experiences described support the conclusions of [Crawford and Cifuentes-Faura \(2022\)](#) that the pandemic severely impacted the lack of preparation for online modalities in the learning and teaching methods of HEIs.

However, only one administrator from an in-person program noted that online and/or hybrid modalities were considered prior to the pandemic. [Huish \(2021\)](#) predicted that online approaches will be included in the pedagogies of many institutions. Most

administrators in the study believed in the value of in-person delivery but recognized that online or hybrid modalities would mitigate some of the pandemic impacts. These modalities would also allow more students to enroll in the program, increase the enrollment of mid-career practitioners because they could remain in their home countries ([Joshi et al., 2022](#)). These benefits are particularly relevant to European institutions that target students from African countries. Such convenience and flexibility, however, are less readily available in the traditional learning environments ([Aziz et al., 2020](#)) currently in the participating institutions.

Advantages and deficiencies of the programs

In analysis of the findings for all twelve institutions, ten advantages and four deficiencies were identified ([Table 2](#)). Some of these overlap with the themes, and the advantages are discussed first.

Financial support from the McArthur Foundation

Four (33%) of the MDP programs were launched with three-year grants from the [MacArthur Foundation \(2012\)](#) for tuition scholarships, field practicum travel, and faculty hiring. This support meant that more students from various regions could attend.

Offering scholarships

The individual financial support provided to the students by 83% of the programs contributed to the retention rates. Most administrators recognized that financial support was a critical incentive to attracting and retaining students, especially those from low- to lower-income countries. Scholarships were often provided by home governments and international organizations.

Admitting students with previous work experience in development

Nine administrators (70%) commented that new students with prior work experience in development were preferred. However, as noted above, several students were accepted directly after undergraduate graduation, having had “lived experiences” in their countries of origin. Additionally, students with more hands-on and more academic experiences formed mutually helpful relationships.

Incorporating field work into the curricula

All the administrators (100%) highlighted the benefits of incorporating field work in their curricula, critical especially for students without prior development work experience. Eleven programs offered field work practicums and one offered a capstone project. The students were involved with public entities, the private

TABLE 2 Summary of advantages and deficiencies of programs.

Institution and location	Advantages	Deficiencies
Institution 1 North America	Launched with funding from McArthur Foundation Scholarships Admits students with previous work experience in development and directly from undergraduate programs Field practicum Integrates specific knowledge aspects and skills training Adopted culture of flexibility	Face-to-face delivery Does not report on assessments of alumni impacts on SDGs
Institution 2 North America	Launched with funding from McArthur Foundation Scholarships Admits students with previous work experience in development Field practicum Cohort size of 15 to 20 makes customization and flexibility easier Adopted culture of flexibility	Face-to-face delivery Does not report on assessments of alumni impacts on SDGs
Institution 3 North America	Admits students with previous work experience in development Capstone project Integrates specific knowledge aspects and skills training Adopted culture of flexibility	Does not offer scholarships Does not report on assessments to determine impacts of alumni on the SDGs
Institution 4 Europe	Launched with funding from McArthur Foundation Field practicum Integrates specific knowledge aspects and skills training Scholarships Adopted culture of flexibility	Face-to-face delivery Does not report on assessments of alumni impacts on SDGs
Institution 5 North America	Offers scholarships Admits students with previous work experience in development Field practicum Integrates specific knowledge aspects and skills training Adopted culture of flexibility	Face-to-face delivery Does not report on assessments of alumni impacts on SDGs
Institution 6 Africa	Scholarships Admits students with previous work experience in development Field practicum Integrates specific knowledge aspects and skills training Adopted culture of flexibility Student leadership-Two student representatives serve on governing committee of program for student input in program planning	Face-to-face delivery Does not report on assessments of alumni impacts on SDGs
Institution 7 Africa	Admits students with previous work experience in development Field practicum Integrates specific knowledge aspects and skills training Program alumni serve as mentors to students	Does not offer scholarships Does not report on assessments of alumni impacts on SDGs
Institution 8 Europe	Scholarships Field practicum aligned with the SDGs Assessments for alumni impacts on SDGs	Face-to-face delivery
Institution 9 Europe	Scholarships Field practicum Integrates specific knowledge aspects and skills training	Face-to-face delivery Does not report on assessments to determine impacts of alumni on the SDGs
Institution 10 Europe	Scholarships Curriculum incorporates field practicum Integrates specific knowledge aspects and skills training Adopted culture of flexibility	Face-to-face delivery Does not have capacity to assist students with field placement Does not report on assessments of alumni impacts on SDGs

(Continued)

TABLE 2 (Continued)

Institution and location	Advantages	Deficiencies
Institution 11 Australia	Admits students with previous work experience in development Field practicum Integrates specific knowledge aspects and skills training Development practitioners mentor students six times per semester	Face-to-face delivery Understaffing Does not report on assessments of alumni impacts on SDGs
Institution 12 Africa	Scholarships Launched with funding from McArthur Foundation Field practicum Integrates specific knowledge aspects and skills training Adopted culture of flexibility Admits students with previous work experience in development Student leadership Students are responsible for organizing all aspects of annual sustainable development conference	Face-to-face delivery Does not report on assessments of alumni impacts on SDGs

sector, the United Nations system, and local and international development-focused NGOs.

Although without monetary compensation, the students received other types of support from the partner organizations, as noted above. A North American administrator explained that some placement organizations provided other benefits, such as office space and assistants. In an African program, the students and institution together identified field placement organizations. An administrator in a European program commented that because the institution did not have the capacity to identify field practicum partners and place students, the students chose.

The administrators agreed that field work activity is critical, especially for students with limited work experience; moreover, the activities connect students to prospective employers. An administrator from a European program noted that in his country the development sector is difficult to enter without prior work experience. However, field experience enables students to learn about available positions. Students are able to apply classroom knowledge to real-world experiences, enlarge their repertoire of solutions, and help local communities benefit (Leal Filho et al., 2018; Oe et al., 2022).

Integrating specific knowledge aspects and skills training into the curricula

A total of 83% of the administrators, as noted, cited several knowledge areas and skills as essential: conflict-related topics, monitoring and evaluation, project design and management, gender equality, proposal writing, advocacy, and communication skills. The greatest variations were in the African programs, in which gender equality, mining development, religion and the SDGs, technology and the SDGs, food security, sustainable food systems, peace, conflict, and culture and leadership were incorporated into the curricula. Several administrators emphasized a balance of training in both hard and soft skills, which were embedded into the curricula.

Adopting a culture of flexibility

Eight administrators (67%) referenced the importance of flexibility offered in the MDP programs from completing a program within the timeframe allotted, choice of field experience between a

field practicum or capstone, and selection of one or more areas of specialization. Flexibility supported different pedagogical modes and students' individual choices.

Creating student leadership opportunities

Three administrators commented on the advantages gained, including higher retention rates, as a benefit of student leadership opportunities. Administrators cited MDP students from a North American program serving on the program's governing committee and students from an African program responsible for planning the institution's sustainable development conference.

Mentorship programs

Mentoring relationships took place in two institutions and their alumni networks and public, private, and NGO sectors. One administrator from an Australian institution described pairing students with development practitioners and credited these relationships with a major program accomplishment. Mentorship programs include face-to-face seminars, lectures, and discussions; students also receive guidance in career development plans.

Four deficiencies were also evident in the programs.

Face-to-face delivery only

Ten programs (83%) were offered via face-to-face delivery only. However, this mode limited the number of students participating in the programs. As noted earlier, online or hybrid modalities offer advantages to students—cost reductions, self-paced learning, and staying in their home countries.

Limited reporting on assessments of alumni impacts on SDGs

Few programs conducted assessments to determine impacts of alumni on the SDG. Although graduates work directly with public or private development-focused NGOs, as well as the United Nations

system, twelve (92%) of the programs were not designed with teaching and learning objectives directly aligned with specific SDGs nor have assessments been conducted. Additionally, participants did not report on assessments to determine the impacts of alumni on the SDGs. [Leal Filho et al. \(2021\)](#) noted the lack of research on implementing SDGs within HEI programs. One administrator from a North American program noted their program focuses on sustainable development within the local context. The administrators agreed that such research would be highly valuable, but an Australian participant pointed out lack of funds for this research.

Not offering scholarships

Two administrators commented that their programs did not offer scholarships to students. This lack created barriers for students with limited financial resources to cover the costs of MDP training.

Understaffing

One administrator from an Australian program observed the detriments of chronic understaffing due to the COVID-19 pandemic and loss of over 40,000 jobs in the education sector.

Study limitations and recommendations for research

The primary limitation of this study was the small pool of 12 (33%) HEI administrators with membership in the GAMDP. It is therefore recommended that future researchers consider more HEIs and administrators for participation. Other recommendations include the following.

Investigate design of MDP programs with activities directly aligned with the local sustainable development context and advance the 2030 Agenda for Sustainable Development and the SDGs in the countries and regions served.

Interview MDP graduates for their present and future involvement and suggestions for advancing the 2030 Agenda for Sustainable Development and the SDGs in their countries and regions.

Interview MDP graduates regarding how GAMDP can utilize their collective and localized experiences to build on the ICESDP recommendations to align with current challenges in their countries.

Study the impact of the MDP graduates' influence and effectiveness in their countries.

Conclusion

The aim of this research was to describe programs offered by the HEIs that form the GAMDP to train development practitioners. The participant administrators acknowledged that the 12 programs had impacts on sustainable development through the field experiences and professional contributions from alumni to sustainable development in their countries. Five themes emerged as key drivers of the programs. These themes were also advantages, in addition to four others; four deficiencies were also discussed.

With the findings from this research, more countries may be able to design higher education programs that train development practitioners to design practical solutions for challenges to sustainability in low-and lower-income countries. The programs reviewed can produce graduates who impact sustainable development and its growth in their home countries. It is hoped that further studies will become catalysts for the design, implementation, and analysis of additional Master of Development Practice programs, knowledgeable and dedicated graduates, and their ongoing contributions to sustainable development.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. Written informed consent from the patients/participants or patients/participants legal guardian/next of kin was obtained to participate in this study in accordance with the national legislation and the institutional requirements.

Author contributions

FC: Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Software, Visualization, Writing – original draft. GG: Conceptualization, Data curation, Investigation, Methodology, Supervision, Writing – review & editing. RC: Conceptualization, Supervision, Writing – review & editing. JA: Conceptualization, Supervision, Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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