



Pulse

Journal for Music and Interdisciplinary Practices

Vol.4 No.1 May 2023

()

Sound (& for Violii

Finding Resonance: Sustainable Development Goals in the Undergraduate Music Education Programs of a Public University in the Philippines

Anna Patricia Rodriguez-Carranza¹

Abstract

With just a "Decade of Action" (United Nations 2019) left until the target date of 2030, the United Nations continues to call on various sectors of the society from all levels to join the efforts to "end poverty, protect the planet, and improve the lives and prospects of everyone, everywhere." Philippine Higher Education Institutions (otherwise known as HEIs) join other sectors in this effort by measuring their institution's contributions to "real-world impact" ("2022 THE Impact Rankings: Ateneo Continues to Lead PH Universities in Real-World Impact" 2022), ensuring the quality of the institution transcends the boundaries of the classroom. This study aimed to probe into how sustainable development goals (or abbreviated as SDGs) resonate in the music teacher education undergraduate programs in a public university in the Philippines. The research aimed to find out answers to two concerns: first, articulations of SDGs in the undergraduate music education programs; and second, perceptions on SDGs of students in their respective undergraduate music education programs. Data gathering techniques included document analysis of the undergraduate program handbooks, course syllabi, and portfolio assessment for the identified music teacher education courses; and voluntary answering of an online survey on the student perception of SDGs in their music teacher education courses. Data was analyzed through curricular mapping of the SDGs, and thematic coding for the qualitative data. Results of the study revealed that non-alignment between program input, processes, and output are primarily a result of non-engagement in the continuous implementation of quality assurance. Recommendations of the study include coordinated strategic planning across different levels in the university and the explicit use of language of SDGs in program input, processes, and output.

Assistant Professor, arcarranza@up.edu.ph Received 06/03/2023, Revised 08/04/2023, Accepted 15/05/2023.

Sustainable Development Goals in Music Teacher Education

Different sectors of society are called upon to contribute to the achievement of the 17 Sustainable Development Goals (or SDGs), a crucial part of concretely carrying out the United Nations' 2030 Agenda for Sustainable Development. This set of goals is "a shared blueprint for people and the planet, now and into the future" ("THE 17 GOALS" n.d.) that seeks to address continuing development priorities set out in the Millennium Development Goals, such as poverty eradication, health, education, food security, and nutrition, together with a call for more peaceful and inclusive societies. It is important to remember though that despite being crafted by the United Nations, SDGs are not without critique as the meaning of sustainable development is not shared by all cultures (Castro 2004; Chankseliani and McCowan 2020).

Although higher education institutions were not particularly mentioned as direct contributors to the achievement of the 2030 Agenda for Sustainable Development (United Nations 2020), universities have a great potential to contribute greatly to societal transformation (Brennan, King, and Lebeau 2004; Sharma 2015). Universities, even though having had a history of being associated with the elite (Chankseliani and McCowan 2020), now have become institutions that carry the potential to serve the public through dialogue and generation of knowledge through faculty research, program implementation, and community extension (Chankseliani and McCowan 2020; Reid 2020; Whitmer et al. 2010). Contributing to this potential are factors such as student population growth (Wells 2018), increasing globalization of (ASEAN University Network 2020; Kinser and Lane 2017) and access to higher learning (*Ensuring Inclusive and Equitable Quality Education: Sustainable Development Goal 4 in Canada 2020* 2020) and labor market (Uvalic-Trumbic and Martin 2021).

Teacher education, as a program of study in higher education, carries the potential to support the inclusion of SDGs as they are key social actors (Chisingui & Costa 2020). Therefore, pre-service teachers need to be trained to become qualified (Nakidien, Singh, and Sayed 2021) even before they enter the workforce. Rieckmann (2017) states that UNESCO recognizes the need for educating educators-to-be through Education for Sustainable Development (or ESD), a part of SDG 4: Quality Education's targets (Rieckmann 2017, 8). ESD, which was crafted for various ages

and settings, "empowers learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society for present and future generations" (Rieckmann 2017, 7). ESD focuses on the learner- their present as a student, onwards into their future - and veers away from being content- and outcomes- centered only. Being learner-centered, ESD "asks for an action-oriented, transformative pedagogy, which supports self-directed learning, participation and collaboration, problem-orientation, inter- and transdisciplinarity and the linking of formal and informal learning" (Rieckmann 2017, 7).

As a subject of expertise in teacher education, music education addresses several issues tackled in the SDGs, such as gender equality, environmental footprint, equality, health care strategies, and policy making (Center for Music Ecosystems 2021, 5). According to Center for Music Ecosystems (2021, 95-99), music education increases pathways of knowledge, diversifies the economy, creates collaborations between peoples and disciplines, and maximizes the safe use of technology. For instance, an equal access to music education across different ages and genders instills knowledge, skill, and valuation of intellectual property to its citizens, therefore, generating more jobs. Music education has also been seen as a tool to help in developing literacy (reading and writing), reasoning (math), and empathy for other people. Outside the education setting, music has been seen to improve one's well-being, foster connections online and offline, and further advocacies such as sustainability and conflict resolution. With that, it can be said that the quality of music teacher education making is crucially supportive of education in sustainable development.

Quality Assurance in Higher Education Institutions

Uvalic-Trumbic and Martin (2021, 15) states that although "there is a multiplicity of contexts" for quality assurance in higher education, there should be a measure agreed upon by different sectors to assure the quality of higher education institutions (otherwise known as HEIs). Surveyed literature list down several reasons why it is important for HEIs to undergo quality assurance, which range from serving as guidance to prospective students before they invest time and resources in a particular program (Kinser and Lane 2017), a boost for employee morale and motivation (Mishra 2007), and an "important part of accountability" (Wells 2018, 8) to stakeholders. In fact, the 2009 World Conference on Higher Education puts weight on the social responsibility of higher education, wherein all stakeholders, especially the government, should "advance our understanding of multifaceted issues and our ability to respond to them" (UNESCO 2010, 2). Education offered by HEIs should be able to effectively meet the needs of its stakeholders (ASEAN University Network 2020; Uvalic-Trumbic and Martin 2021), with efforts of regular maintenance and improvement readily available to the public.

Several models of quality assurance used by higher education institutions all over the world point out broad criteria for assessment (ASEAN University Network 2020; Kinser and Lane 2017; Mishra 2007; ESG 2015). The common criteria found across the surveyed literature include program structure, including teaching, learning, and assessment; physical and web-based facilities; stakeholder support (faculty and staff, student support, and facilities); publicly available information; institution output; and continuous efforts for improvement. Using these criteria, universities are assessed as either compliant or even one of the leading institutions of its kind (ASEAN University Network 2020). Transparency of institutional quality assurance (Ferdekeil 2008) can be accessed through publicly available university rankings (Kaiser, Melo, and Hou 2022; Pusser and Marginson 2013; Shah and Jarzabkowski 2013). One example of this is the Times Higher Education Impact rankings, first launched in 2019, which has a set of performance metrics that intend the success of universities in delivering the United Nations' Sustainable Development Goals (or SDGs) ("About the Times Higher Education World University Rankings" 2021). Although not without critique, De la Poza et al. states that the ranking of universities in terms of SDG achievements are accurate, with the higher-ranking universities reporting more "positive actions related to health, education, industry, responsible consumption and production, climate action, and partnerships" (2021).

Research questions:

The study presents itself as a miniature quality assurance of undergraduate music education courses using the lens of Sustainable Development Goals. As the researcher, I probe into two main questions that draw out data from the input, processes, and output (ASEAN University Network 2020) of undergraduate programs of music education in a public university in the Philippines.

- 1. What are the articulations of Sustainable Development Goals (or SDGs) in the undergraduate music education programs of the institution?
- 2. What are the perceptions on SDGs of students in their respective undergraduate music education programs, particularly in music education methods and practicum courses and the capstone project?

For this study, I hypothesize the following claims:

- 1. The identified SDGs of the university are articulated in the identified undergraduate music education programs, as seen in the program input, processes, and output of the said programs.
- 2. Students perceive that music education methods courses, practicum courses, and the capstone project course contributed to the achievement of the learning outcomes of identified SDGs.

Limitation:

The research sample involved undergraduate music education students in a public university in the Philippines. The public university, located in the National Capital Region, offers 71 undergraduate programs and seven associate programs. Since the 1910s, the college, under the public university, has been offering pre-baccalaureate and baccalaureate programs, post-graduate diploma, and graduate studies. At present, the college is still running a total of 12 baccalaureate programs, 15 pre-baccalaureate programs, and 1 associate in arts program in music.

The students that were identified to take part in the study are under three types of undergraduate programs in music education, namely the associate in arts with concentration in music education, pre-baccalaureate diploma in music education, and bachelor's degree in music education. For the students to qualify in the research, they must have taken music education methods and practical teaching courses implemented during the academic year 2021 to 2022. These courses are music education methods and practicum courses in preschool, elementary school, and high school and a capstone project course situated in one's community of choice.

Data for document analysis were obtained from official institutional websites and course instructors and students of the said courses during the specified implementation period. These documents include institutional handbooks, documents pertaining to curriculum proposals and revisions approved on the cluster and/or university level, course syllabi, and actual coursework accomplished by the students. Course instructors and students were also asked for follow-up clarifications about the documentation of their course work and assessment.

With the above said limitations, it is to be noted that the study is not generalizable to all undergraduate music education programs in the Philippines. This study was written from a reflexive stance, primarily as part of my professional practice as a music educator of pre-service music teachers. In addition, my experience as quality assurance officer of our college contributed greatly to framing the research, in the hopes of contributing to the sustainability direction that the university is undertaking.

Methodology:

Data collection was done through document analysis and survey. The following needed to be obtained from the documents surveyed: expected learning outcomes, which include institutional philosophy and mission-vision; programme structure and content, teaching and learning approach, student assessment, and achievements. Documents in electronic format were manually coded by using the comment feature of a word processing program. For documents coming from an online platform, such as online event invitation materials and website word content, these were copied and pasted on a word processing program. Then, a combination of manual encoding in a spreadsheet program and a computer program in the word progressing app was used to organize the coded data in a spreadsheet program.

As for the survey, a letter obtaining the participants' free, informed, and prior consent was emailed to the identified participants. After consent was obtained, they proceeded to answer the qualitative survey through an online survey tool.

The online survey required participants to answer binary questions (requiring either "yes" or "no" answers), checklists, and short essay questions. The online survey

consisted of five sections, namely 1) reiteration on informed consent, 2) participant profile, 3) self-reported awareness of Sustainable Development Goals (SDGs) (Yuan, Yu, & Wu 2021), 4) selected SDGs as experienced in the implementation of the course/s, and 5) thoughts on the trajectory of their future practice as a music educator in connection to SDGs. Part 4 is a checklist of objectives in education in sustainable development for teacher education as the participants were preservice teachers enrolled in undergraduate music education courses.

Data analysis:



The gathered data from both document analysis and survey were analyzed using conceptual framework analysis (data from document analysis of program and course documents and essay questions) and frequency analysis (data from checklist and binary questions).

The conceptual framework of this study illustrates that quality assurance in higher education shows sustainable development goals as an input that informs and outputs that can be seen in teacher education. The quality assurance model used for this study is the ASEAN University Network Quality Assurance Assessment Model version 4.0 (2020) at the program level. At the program level, alignment is sought between the program's input, processes, and output. The selected music education

programs, as represented by the music teacher education courses, were benchmarked using the UNESCO (2017) document "Education for Sustainable Development Goals: Learning Objectives." The selected SDGs for this research were based on the key SDGs found on the university's website (<u>University of the Philippines, 2023</u>). These are SDG 3: Good Health and Well-being, SDG 4: Quality Education, SDG 5: Gender Equality, SDG 11: Sustainable Cities and Communities, SDG 13: Climate Action, and SDG 17: Partnerships for the Goals.

Program input includes the educational philosophy of the university as stated in its mission-vision and core values. On the program level, the educational philosophy should be aligned with the program learning outcomes (PLOs) and course learning objectives (CLOs). For this research, UNESCO's Learning Objectives for Teachers to Promote ESDs were used. Students were asked whether they were able to accomplish, in part or fully, generic and specific Learning Objectives for Teachers to Promote Education in Sustainable Development (ESD) (Rieckmann 2017) in their music teacher education courses. The general learning objectives of ESDs target the following key competencies (Rieckmann 2017, 10) on strategizing, collaboration, critical thinking, self-awareness, and integrated problem-solving while the specific learning outcomes under SDGs were divided into three domains: cognitive, socio-emotional, and behavioral.

Program processes primarily come from the dynamic contents of the course syllabi which include topics, essential questions, recommended teaching and learning activities and assessment, and sources. Program output is reflected in actual coursework done and stakeholder feedback. Key methods for learning SDGs (Rieckmann 2017, 55) include 1) collaborative real-world projects, 2) vision-building exercises, 3) analyses of complex systems, and 4) critical and reflective thinking. Together, these evidences illustrate a picture of a program as intended and as implemented. Consistency should be seen across all criteria, from the intended level all the way to the implemented level.

Simultaneous to the answering of the online survey of the target participants, I evaluated the collected documents using the learning outcomes for ESD, key methods of assessment in learning the SDGs, and learning outcomes for the selected SDGs.

Results:

RQ1: What are the articulations of Sustainable Development Goals (or SDGs) in the undergraduate music education programs of the institution?

The results of the document analysis of the institutional documents reveal that there are articulations alluding to SDGs present in the documents pertaining to the program input of the three undergraduate music education programs of the identified music college in a public university.

In its vision statement, the university envisions itself to become a "leading regional and global university that sustains 21st century learning, knowledge creation and public service for society and humanity", as supported by its knowledge creation in research, programs, and creative work and public service efforts. Knowledge creation and public service should contribute to the university's goals, which include optimization of resources, contribution to national development, improvement of constituent welfare, and promotion of access and diversity. Looking at the strategies under each of the said goals of the university, the more specific articulations that allude to SDGs can be seen in the following: 1) collaboration with other national and international academic institutions, as well as with the spheres outside the academe, such as government, industry, civil society, and community; 2) interdisciplinary programs that respond to national concerns, such as health, food security, climate change, etc; 3) improving online and offline access to generated knowledge, which include research and creative work, as well as other resources available in the university; and 4) sustainability in running and supporting its employees, academic programs, infrastructure, and other related activities.

Moving towards the college level, the college's vision, which seeks to create artists and scholars that will "transform[] the world" through their various music output, seem to resonate that of the university's. The college aims to provide its students with a balance of intellectual and practical knowledge through a high level of musical training and provision of opportunities to showcase their creative works of new music and performance, pedagogy, and research. These are all thought of with an international audience in mind, while being of service to the Filipino people. On the program level, the program learning objectives of the three music education programs under the college contribute to the college's vision. The associate in arts program (2019) and pre-baccalaureate diploma (Rodriguez-Carranza 2020) are dual-natured programs which can either be terminal or pre-baccalaureate. As terminal programs themselves, the associate in arts and diploma aim to equip their graduates to have enough skills to work in different fields of music performance, production, education, or administration. To say one has "sufficient skills", a graduate of the associate program must display a high level of technical skill in music, professionalism, critical and creative thinking, and nationalism and respect for other cultures. Meanwhile, the bachelor program (2018) aims to produce leading music practitioners that display professionalism, critical thinking, knowledge of methodical technique and context, and nationalism, whether it be in performance, pedagogy, composition, or research.

More specifically, music education graduates (UP College of Music, 2016) aim to produce music educators that can apply their understanding of music of various socio-cultural contexts across various teaching-learning-performance contexts. In addition, music education graduates must be able to engage with their community in creating, implementing, and evaluating music education programs that are specific to the needs of the Filipino as well as global communities.

I also looked at the documents pertaining to the identified courses. For this section, course learning outcomes have been extracted from the individual course syllabi. As seen in the documents, course learning outcomes for methods, practicum, and capstone project courses emphasize the following: 1) being knowledgeable about the target learner (eg. "developmentally appropriate", "community-based", mention of specific school level/age group); 2) a working knowledge of music methods and lesson and curriculum planning, both in theory ("oral and written skills") and practical implementation; 3) music repertoire building that is "culturally relevant" and rooted in "musical understanding"; 4) organization, implementation, and evaluation of final music performance output; and 5) professional behavior ("ethical behavior").

Putting together all the data from the program input as seen in the university, college (music), and program (music education program and courses) levels, the

common themes of the articulations that allude to the SDGs are as follows: 1) interdisciplinary nature of the programs, 2) fostering excellence rooted and geared towards socio-cultural understanding, and 3) being service-oriented, especially to the Filipino community. These three common themes are part of three out of six SDGs central to the university's education, namely SDG 4: Quality Education, SDG 11: Sustainable Cities and Communities, and SDG 17: Partnerships for the Goals. SDG 4: Quality Education is revealed in the university's and in the college's focus on improving the university's programs and providing high quality education to its students, which will eventually cascade to lifelong learning in their community after they graduate. SDG 11: Sustainable Cities and Communities is revealed in the university's and in the college's efforts of revitalizing and reducing inequity in access to generated knowledge, which includes creative work implemented across various socio-cultural contexts. SDG 17: Partnerships for the Goals is revealed in the university's and in the college's efforts in creating new and strengthening existing linkages with other academic institutions, as well as the public and private sectors.

RQ2: What are the perceptions on SDGs of students in their respective undergraduate music education programs, particularly in music education methods and practicum courses and the capstone project?

As gathered from the online survey, the respondents (n=11) are not aware of what SDGs were, with a few declaring that they were somewhat aware, and none stating that they were very much aware. Even if their answers differed here, they were still given a chance to watch a short video on the introduction of the 17 SDGs, which all of them fulfilled as part of the survey.

The next part of the survey, which deals mostly with program input and program output, reveals that most of the students perceive that their methods, practicum, and capstone course touch on the general Learning Objectives for Teachers to Promote Education in Sustainable Development (ESD) in varying levels. Objectives that were more cognitive in nature were more apparent in the methods classes (eg. "Develop their own integrative view of the issues and challenges of sustainable development by taking into account the social, ecological, economic and cultural dimensions from the perspective of the principles and values of sustainable development, including that of intergenerational and global justice") while objectives that were more action-oriented were more apparent in practicum classes (eg. "Act as a change agent in a process of organizational learning that advances their school towards sustainable development."). Capstone courses seem to touch upon all of the ESD general objectives. In terms of documentary evidence, some of the general ESD objectives (Rieckmann 2017, 52) allude to the identified program learning objectives. Common themes that were revealed by the data are as follows: 1) mastery of one's discipline vis a vis interdisciplinarity, 2) community building, 3) socio-cultural awareness, and 4) practice of profession in various socio-cultural contexts.

In terms of methods of assessment vis a vis key methods of learning ESD (Rieckmann 2017, 55), all of the respondents who took capstone project and more than half of the respondents who took methods and practicum courses agree that the four key methods of learning ESD were implemented in their courses. Here are the key methods of learning vis a vis the student output and methods of assessment: 1) vision-building exercises through lesson planning, peer teaching, and project proposal making; 2) collaborative real-world projects through class observation reports and culminating musical activity integrated with school topics, calendar activities, and/or community needs; 3) analyses of complex systems through curriculum critique, post-conference of classroom teaching session observation by instructor, and creation of line item budget for project; and 4) critical and reflective thinking through reflective essays and anecdotal record writing.

In terms of SDG-specific learning objectives, interview data reveal that the top three SDGs mapped out through the questionnaire are SDG 4: Quality Education (72%), SDG 3: Good Health and Well-being (56%), and SDG 5: Gender Equality (38%). The respondent perception is consistent with the course documents being inclusive (ie. consideration to access to resources and mode of delivery emphasized more during the onset of the remote learning related to the COVID-19 pandemic), apprenticeship and modeling, and lifelong learning. Respondents perceive that the cognitive, socio-emotional, and behavioral learning objectives were fulfilled, whether in part or fully, in their methods, (64%) practicum courses (47%), and capstone project (61%). SDG 3 and SDG 5 did not come out in the top three SDGs revealed in the document analysis of the program input. Also, as revealed by the questionnaire,

SDG 11: Sustainable Cities and Communities only ranked fourth (32%) while SDG 17: Partnership for the Goals ranked fifth (15%).

Data from the open-ended questions in the survey reveal that respondents perceive that SDGs in their music teacher education courses were not explicitly mentioned in their course materials but they were still able to encounter it in their course activities, content, and outcomes. Also, when asked about their thoughts on the trajectory of their future practice as a music educator in connection to SDGs, their responses align with SDG 4's stance on lifelong learning and SDG 17's partnerships with communities.

Synthesis:

As the data reveals, the articulations alluding to the top three SDGs in the documents as program input vis a vis the course activities and output together with respondent perception as program processes and output present little alignment with each other. To recap, data from the program input reveals that the top three SDGs undertaken by education in the university pertain to solving problems and/ or contributing to the progress of quality education (SDG 4), sustainability in the community (SDG 11), and partnerships to attain these goals (SDG 17). Meanwhile, data from program processes and output reveals that the top three undertaken by education in the university pertain to solving problems and/or contributing to the progress of quality education from program processes and output reveals that the top three undertaken by education in the university pertain to solving problems and/or contributing to the progress of quality education of good health and well-being (SDG 3), and gender equality (SDG 5).

The non-presence of alignment between the program input, processes, and output may be due to large year gaps in between the production of the documents representing the program input, processes, and output. The interval between the time of approval of the three programs span almost decades apart (2000 to 2019). To add to this, the university's mission-vision, which is usually co-terminus with the administration, has been crafted specifically for the period 2017 to 2023. Therefore, looking at the inclusive years of the two sets of documents, the three programs are due for revisiting in light of the university's current direction, as well as global issues (United Nations 2019).

The statements above also emphasize the need for continuous quality assurance (ESG 2015; NAAC 2003 in Mishra 2007; Uvalić-Trumbić and Martin 2021, 73) as a way to ensure the success of the programs. Before determining whether a program is successful or not, writing self-assessment reports (ASEAN University Network 2020, 41; NAAC 2003 in Mishra 2007; Uvalić-Trumbić and Martin 2021, 83) founded on collected data and evidences provides a documentation and "analysis of strengths and weaknesses…based on a set of standards provided by the quality assurance agency"(Kinser and Lane 2017, 8). The making of this research followed the principles of the "Do" part of the Plan-Do-Check-Act (otherwise known as PDCA) cycle (ASEAN University Network 2020), with the non-alignment of input vis a vis processes and output showing that there are gaps in the program that need to be addressed in the next steps of the PDCA cycle.

Recommendations:

The non-alignment between the university and program levels warrants a strategic planning that consciously involves different stakeholders of a program. Since quality assurance is a continuous process, programs should not evolve only with institutional direction from the administration but also with current issues of national and global concern.

Teacher education programs, which contribute to the empowerment of teachers in professional practice (Nakidien, Singh, and Sayed 2021), should already include the use of SDGs in its programs by incorporating competencies in its target objectives and course coverage. In this way, programs become aligned, with graduates "living what [they] learn" (Rieckmann 2017, 53) as the indicator not only of a program's success but also of the community they will serve.

References

- "2022 THE Impact Rankings: Ateneo Continues to Lead PH Universities in Real-World Impact." 2022. Ateneo de Manila University. 2022. https://www. ateneo.edu/news/2022/04/28/2022-impact-rankings-ateneo-continues-leadph-universities-real-world-impact.
- "About the Times Higher Education World University Rankings." 2021. Times Higher Education (THE). July 27, 2021. https://www.timeshighereducation. com/world-university-rankings/about-the-times-higher-education-worlduniversity-rankings.
- ASEAN University Network. 2020. Guide to AUN-QA Assessment at Programme Level Version 4.0. https://aunsec.org/application/files/2816/7290/3752/ Guide_to_AUN-QA_Assessment_at_Programme_Level_Version_4.0_4.pdf.
- Brennan, John, Roger King, and Yann Lebeau. 2004. "The Role of Universities in the Transformation of Societies: An International Research Project." John Brennan Academia.Edu. November 1, 2004. https://www.academia.edu/37349301/The_Role_of_universities_in_the_transformation_of_societies an international research project?source=swp share.
- Castro, Carlos J. 2004. "SUSTAINABLE DEVELOPMENT: Mainstream and Critical Perspectives." Organization & Environment 17 (2): 195–225. https:// doi.org/10.2307/26162866.
- Center for Music Ecosystems. 2021. Your Guide to Music and the SDGs: Executive Summary. https://www.centerformusicecosystems.com/sdgs.
- Chankseliani, Maia, and Tristan McCowan. 2020. "Higher Education and the Sustainable Development Goals." Higher Education 81 (1): 1–8. https://doi.org/10.1007/s10734-020-00652-w.
- Chisingui, António Valter, and Nilza Costa. 2020. "Teacher Education and Sustainable Development Goals: A Case Study with Future Biology Teachers in an Angolan Higher Education Institution." Sustainability 12 (8): 3344. https:// doi.org/10.3390/su12083344.
- De la Poza, Elena, Paloma Merello, Antonio Barberá, and Alberto Celani. 2021.
 "Universities' Reporting on SDGs: Using THE Impact Rankings to Model and Measure Their Contribution to Sustainability." Sustainability 13 (4): 2038. https://doi.org/10.3390/su13042038.

- Ensuring Inclusive and Equitable Quality Education: Sustainable Development Goal 4 in Canada 2020. 2020.
- Federkeil, Gero. 2008. "Rankings and Quality Assurance in Higher Education." Higher Education in Europe 33 (2–3): 219–31. https://doi. org/10.1080/03797720802254023.
- Kaiser, Frans, Ana I. Melo, and Angela Yung Chi Hou. 2022. "Are Quality Assurance and Rankings Useful Tools to Measure 'New' Policy Issues in Higher Education? The Practices in Europe and Asia." European Journal of Higher Education 12 (sup1): 391–415. https://doi.org/10.1080/21568235.2022.2094816.
- Kinser, Kevin, and Jason Lane. 2017. "An Overview of Authorization and Quality Assurance of Higher Education Institutions." UNESCO Digital Library. Right to Education Initiative. 2017. https://unesdoc.unesco.org/ark:/48223/ pf0000259561.
- Mishra, Sanjaya. 2007. Quality Assurance in Higher Education: An Introduction. https://oasis.col.org/colserver/api/core/bitstreams/5154fb34-2c2e-4bd0-8388-c2f5b2046f26/content.
- Nakidien, Toyer, Marcina Singh, and Yusuf Sayed. 2021. "Teachers and Teacher Education: Limitations and Possibilities of Attaining SDG 4 in South Africa." Education Sciences 11 (2): 66. https://doi.org/10.3390/educsci11020066.
- Pusser, Brian, and Simon Marginson. 2013. "University Rankings in Critical Perspective." The Journal of Higher Education 84 (4): 544–68. https://doi. org/10.2307/23486805.
- Reid, Sarah Kate. (2020). Mapping the Sustainable Development Goals (SDGs) in the University Curriculum. The University of Edinburgh. https://www. ed.ac.uk/sustainability/programmes-and-projects/student-leadership-forsustainability/sdgs-in-the-curriculum/sdg-curriculum-mapping.
- Rieckmann, Marco. 2017. Education for Sustainable Development Goals: Learning Objectives. UNESCO Publishing. https://unesdoc.unesco.org/ark:/48223/ pf0000247444.locale=en
- Rodriguez-Carranza, Anna Patricia. 2020. "100 Years in Retrospect: Articulations of Philippine Identity in the Undergraduate Programs of the U.P. College of Music (1916 to 2016)."
- Shah, Mahsood, and Lucy Jarzabkowski. 2013. "The Australian Higher Education Quality Assurance Framework." Perspectives: Policy and Practice in Higher

Education 17 (3): 96–106. https://doi.org/10.1080/13603108.2013.794168.

- Sharma, Radhe Shyam. 2015. "Role of Universities in Development of Civil Society and Social Transformation." Proceedings of International Academic Conferences 2604181 (July).
- Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). 2015. Belgium: European Association of Institutions in Higher Education. https://www.enqa.eu/wp-content/uploads/2015/11/ESG_2015.pdf
- "THE 17 GOALS." n.d. Sustainable Development. Accessed October 2, 2022. https://sdgs.un.org/goals#history.
- UNESCO. 2010. Communique; 2009 World Conference on Higher Education: The New Dynamics of Higher Education and Research For Societal Change and Development. Paris: United Nations Educational, Scientific and Cultural Organization. https://unesdoc.unesco.org/ark:/48223/pf0000183277
- United Nations. (2019). Decade of Action. https://www.un.org/sustainabledevelopment/ decade-of-action/
- Uvalić-Trumbić, Stamenka, and Michaela Martin. 2021. A New Generation of External Quality Assurance: Dynamics of Change and Innovative Approaches. Paris: International Institute for Educational Planning. https://unesdoc.unesco.org/ ark:/48223/pf0000377497/PDF/377497eng.pdf.multi.
- Wells, Peter. 2018. "The Role of Quality Assurance in Higher Education: Challenges, Developments and Trends." https://iite.unesco.org/wp-content/ uploads/2018/06/Piter-Uells_-UNESCO_angl.pdf
- Whitmer, Ali, Laura Ogden, John Lawton, Pam Sturner, Peter M Groffman, Laura Schneider, David Hart, et al. 2010. "The Engaged University: Providing a Platform for Research That Transforms Society." Frontiers in Ecology and the Environment 8 (6): 314–21. https://doi.org/10.1890/090241.
- Yuan, Xinqun, Le Yu, & Hao Wu. 2021. "Awareness of Sustainable Development Goals among Students from a Chinese Senior High School." Education Sciences 11 (9): 458. https://doi.org/10.3390/educsci11090458.