



## 2019 European Quality Assurance Forum

### Supporting societal engagement of higher education

Hosted by TU Berlin  
21-23 November 2019

### Call for contributions: Paper submission form

**Deadline 22 July 2019**

*Please note that all fields are obligatory. For a detailed description of the submission requirements and Frequently Asked Questions please consult the Call for Contributions.*

ISSN: 1375-3797

#### Author 1

**Name:** Marie Gould (Presenter)

**Position:** Head of Higher Education Monitoring and Review

**Organisation:** Quality and Qualifications Ireland (QQI)

**Country:** Ireland

**E-mail address:** mgould@qqi.ie

**Short bio (150 words max):**

*Marie Gould is Head of Tertiary Education Monitoring and Review at Quality and Qualifications Ireland (QQI). Marie has over 15 years' experience at national policy level in tertiary education in Ireland, having worked with QQI since its establishment in 2012, and with one of its predecessor agencies since 2003. Marie has recently returned from a three-year secondment from QQI, during which time she was national project manager for the development of a new quality assurance (QA) framework for the main public vocational education providers. Marie took up her current role in QQI in December 2018 and currently leads QQI QA teams for the monitoring and review of both higher education and further education. Marie also oversees the QQI process for the validation of doctoral research degree programmes at level 10 on the Irish National Framework of Qualifications (NFQ).*

#### Author 2

**Name:** Holly Dubbs

**Position:** Research Intern

**Organisation:** Quality and Qualifications Ireland (QQI)

**Country:** Ireland

**E-mail address:** dubbshol@msu.edu

**Short bio (150 words max):**

*Holly Dubbs is an undergraduate at Michigan State University in the James Madison College studying International Relations and Social Relations and Policy, with a secondary focus on European Studies. Holly is in her final year and is due to graduate in May 2020. As part of her degree programme, Holly completed a summer internship at QQI. During her time at QQI, Holly assisted in putting this paper together by undertaking qualitative research (conducting interviews with senior representatives of the higher education institutions [HEIs] and with other stakeholders), and quantitative research (reviewing annual institutional quality reports [AIQRs] and other documentation). Holly summarised the outcomes of the research process and contributed to the paper's content and conclusions*



## Proposal

**Title:**

***A Study of the Relationship between Societal Engagement and Quality Assurance in Irish HEIs***

**Abstract (150 words max):**

Higher education has an impact through social engagement. This paper examines, through a mixed methods approach, the relationship between internal and external quality assurance (QA) and community engagement activities of higher education institutions (HEIs) in Ireland. It considers both the QA regulatory context and national policy context of community engagement in Irish HEIs. A review of the HEIs' community engagement strategies and activities provides an understanding of how the institutions are addressing their third mission/societal engagement objectives, and an analysis of the annual institutional quality reports (AIQRs) and institutional review reports indicates how these activities are integrated within the institutional QA system. This relationship is further explored through the lens of a case study, and the perspectives and opinions of the HEIs and other stakeholders are sought through qualitative interviews to acquire a better understanding of how to enhance and improve practice and quality, as well as the obstacles the HEIs may encounter in doing so.

**Has this paper previously been published/presented elsewhere? If yes, give details. No.**

**Word Count: 3,302**

## 1. Societal Engagement and Higher Education

The role of universities and higher education institutions (HEIs) has evolved over the last twenty years. This transformation is captured in the notion of a *third* role, which has been described as social engagement, regional development and engagement (Gunasekara 2004), and a *third mission* conceptual framework (OECD 2017, p.23), although the sharing of knowledge between universities and their communities has been a prominent feature of adult education in Europe since the 1800s (Tandon, 2016). Zomer and Benneworth (2011) describe the third mission as the strategic and conscious societal contributions that universities make. The student is also changing, and students of the future will increasingly want “insight into choices for the future that are based on broad social engagement” (van der Zwaan, 2017, p. 237). This means that the university will need to engage in a range of activities in society, demonstrating what it stands for, and how it relates to the surrounding community and region (ibid. p. 240).

Examples of the *third mission* are enormously diverse – there may be projects and activities related to economic and regional development, the integration of minorities or marginalised groups, the acquisition of basic skills, the addressing of environmental questions, or healthcare services (Montesinos et al. 2008). HEIs are embedded in communities and have developed close relationships with civic and social organisations (Lebeau, 2015). The *Triple Helix* concept refers to the relationship between university, industry and government; the *Quadruple Helix* refers to a fourth relevant entity, such as community, individuals, internationalisation and others. (Leidesdorff, from (Solomon A., 2018)

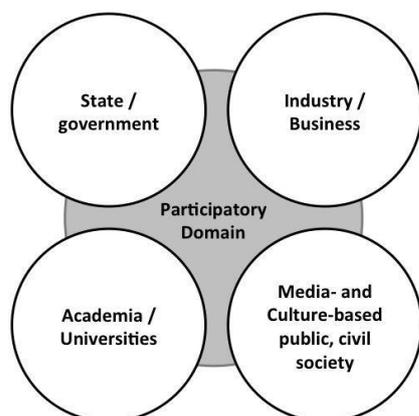


Figure 1: Quadruple helix model [Van Waart et al., 2015].

Whilst the literature refers in the main to universities, in Ireland, higher education is provided through Universities, Institutes of Technology and other designated HEIs. In this paper, ‘HEI’ is used to reflect designated organisations that provide higher education. The literature also conflates societal and civic engagement/third mission activities and the authors do not purport to develop a new framework for these concepts.



## 2. Research Aim and Methodology

Campus Engage (Campus Engage , 2019) an initiative based at the Irish Universities Association (IUA), that supports the implementation of community engagement practice across the higher education system, sets out a diverse range of activities under the broad heading 'societal engagement', including types of community engagement such as community-based research, teaching and learning and student volunteering.

The aim of this paper is to examine the features and characteristics of *community engagement* within Irish HEIs and to consider how internal and external quality assurance (QA) support this activity. The paper aims to address the following questions:

- I. What are the features of civic/community engagement within Irish HEIs?
- II. What is the relationship between QA (internal and external) and the community engagement activities of Irish HEIs?

The research methods are mixed, with the integration of quantitative and qualitative methods in the form of documentary analysis, interviews and case study. Quality and Qualifications Ireland (QQI) is the external quality review body of publicly funded HEIs, and this research included a thematic examination of the 22 *Annual Institutional Quality Reports* (AIQRs) submitted by public HEIs<sup>1</sup> to QQI in February 2019, along with an examination of QQI's statutory quality assurance guidelines. The published Institutional Review Reports for six HEIs for the CINNTE Review cycle (2018-2023) were also considered<sup>2</sup> and the websites and published strategies of the institutions reviewed.

The documentary evidence is not formally coded or interpreted but helps to map the landscape and provide a background to crystallise the interviews. The case study methodology was selected as it gives an opportunity to investigate and consider the questions arising within a contemporary and real-life context, as well as allowing the concepts to be considered from the perspective of the key actors/stakeholders (Gall, 2005). Semi-structured conversational interviews were used to explore the issues; these were guided rather than rigidly determined by a set of questions (appendix A).

The documentary analysis led to the identification of some cases and interviews were requested with five HEIs, three institutions confirmed availability and qualitative interviews were arranged with QA Directors/Senior Quality Officers. Interviews were also completed with senior staff from two national representative bodies – the Irish Universities Association (IUA) and the Technological Higher Education Association (THEA).

---

<sup>1</sup> *The empirical analysis of the 2018 AIQRs undertaken for this paper include the reports of 22 institutions of higher education, the Universities and Institutes of Technology. Following the establishment of Technological University Dublin (TU Dublin) in January 2018, and the Institute of Technology Blanchardstown, Dublin Institute of Technology, and Institute of Technology Tallaght are now dissolved.*

<sup>2</sup> <https://www.qqi.ie/Articles/Pages/Institutional-Reviews07.aspx>

Due to time constraints the number of respondents interviewed was limited in scale and the authors acknowledge the limitations of this small study. The authors also acknowledge and thank colleagues from Dublin City University (DCU), Maynooth University (MU) and Technological University Dublin (TU Dublin); and from the IUA and THEA for their openness in the qualitative interviews, and for their generosity in giving their time for this research.

### 3. Mapping the Landscape

#### Societal Engagement

In its 2007 recommendation the Committee of Ministers (Council of Europe, 2007) defined the different missions of higher education, recommending that “public authorities should ensure that higher education institutions... can meet society’s multiple expectations and fulfil their various and equally important objectives, which include...preparation for life as active citizens in democratic societies.” One of the objectives of the strategic framework for European cooperation in education and training (ET 2020) is to “promote equity, social cohesion, and active citizenship” (European Commission , 2007). The framework is implemented through a variety of tools, including mechanisms for enhanced cooperation between different stakeholders, including civic society.

The social objects of Irish Universities are clearly set out in the legislation (Section 12(a) Universities Act 1997, Section 9(1)(k) Technological Universities Act 2018). The *National Strategy for Higher Education to 2030 in Ireland* (Department of Education and Skills, 2011) recommends that higher education engagement with the wider community “must become more firmly embedded in the mission of higher education institutions” and that HEIs must “put in place structures and procedures that welcome and encourage the involvement of the wider community in a range of activities, including programme design and revision” (ibid.,21). Societal engagement or the third mission of HEIs is formalised as a policy objective through funding. The *Higher Education Authority (HEA) System Performance Framework 2018-2020* includes civic and community engagement in two of its six key system objectives (HEA, 2018). There is national policy commitment to systematic embedding societal engagement activities of HEIs, emphasised at a recent seminar by the Assistant Secretary of the Department of Education and Skills outlining the need to focus on societal challenges/missions to which research can contribute (Campus Engage Brokerage Event, 2019).

#### Quality Assurance

The *Standards and Guidelines for Quality Assurance in the European Higher Education Area* (ESG) do not explicitly reference community engagement but do include guidance that programmes should reflect the four purposes of higher education of the Council of Europe (ESG, 2015). One of the purposes is “preparing students for life as active citizens”, and so could be interpreted to implicitly include community engagement activities within internal QA, as they relate to teaching and learning, e.g. programmes. Interestingly, the recently published *African Standards and Guidelines for Quality Assurance in Higher Education* make specific reference to community engagement, “*Standard 10 Community Engagement Standard: The institution shall encourage engagement in community outreach programmes as part of its social responsibility*” (ASG-QA, 2018).

Societal and community engagement objectives and activities of the HEIs are not incorporated explicitly within the national QA regulatory context. QQI Statutory Core Quality Assurance Guidelines (QQI, 2016) describe QA as the “processes that seek to ensure that the learning environment (including teaching and research) reaches an acceptable threshold of quality” (QQI, 2016, p. 2). The guidelines do not give explicit guidance on community engagement, external engagement activities are incorporated and implicit within the guidelines in the context of teaching and learning (educational) activities. In its *Core Guidelines*, QQI also describes QA as being “the enhancement of education and training and the standards attained by learners” (ibid.). QA is therefore both compliance and enhancement focused, with the nature, complexity and scope of a provider’s QA system being influenced by the provider’s context.

Each HEI provides QQI with an AIQR, consisting of an overview of its QA system. It also captures QA activities, themes, changes, enhancements and impacts for the reporting year. An annual synopsis report on the information provided in the AIQRs is compiled by QQI. QQI conducts cyclical reviews on a periodic basis through its external review process. The report produced by the institution following the self-evaluation process, called the *Institutional Self-Evaluation Report (ISER)*, is the core document for the Review Team. The diagram below summarises the core elements of this quality framework and engagement with providers.



Figure 2: QQI QA Framework

## 4. Empirical Analysis

### Documentary Analysis

The analysis of the 22 AIQRs for 2018 indicates that some institutions are reporting on and integrating civic engagement activities within their QA system, and suggests societal and community engagement is an emerging theme within institutional QA. Specific reference was made to civic engagement activities in the context of quality development or enhancement in five of the reports. The analysis shows different approaches across the HEIs to operationalising community engagement objectives and to the integration of community engagement objectives within internal QA.

For example:

- The University of Limerick reported that a range of community-engaged research initiatives were undertaken in health, the social sciences, education and natural sciences, design, and engineering.
- Athlone Institute of Technology (AIT) reported on being awarded a Certificate of Recognition for its work with the *Carnegie Framework*.
- Maynooth University provided details of its Maynooth University Student Experience Awards (MUSE), which recognises and rewards students' contribution to non-credit bearing activities such as work experience, volunteering, club and society involvement, and student representation.
- University College Cork (UCC) reported its involvement in the Learning Neighbourhoods programme, working with organisations and residents in local areas.

Though the institutions reported on these community engagement activities, they did not reflect in their AIQRs on the effectiveness of these activities, or the impact on the institution and learning environment, or the role of internal QA in supporting the process. It would seem civic engagement strategy and activities are not considered to be an element of, or systematically integrated within, the internal QA systems.

The terms of reference for QQI's external review process does not explicitly include societal or community engagement as a specific objective or criterion for the review process (QQI, *Cinnte Cyclical Review Handbook*, 2017). Rather, the objective of reviewing the effectiveness of the institution's QA procedures extends to the overarching procedures set out by the institution and is therefore dependent on the complexity and scope of institutional QA. QA objectives and procedures relating to community engagement are determined by the institution and reported on through the AIQR and/or the ISER. The scope of the external review examines and considers community engagement only if it is an explicit institutional objective, or it is surfaced by the external panel through engagement with stakeholders. For example, the institutional review report for Letterkenny Institute of Technology commended the role and influence of the institution in the local region and community (QQI, 2018).

The documentary and qualitative analysis indicates a very rich and diverse landscape of societal and civic engagement in Irish HEIs. The case studies on the Campus Engage website (Campus Engage, 2019) illustrate the range of engagement activities that occur, including



community-based teaching and learning, engaged research and innovation for societal impact, and student volunteering. It also indicates that HEIs are working collaboratively on “building a national framework for measuring and evaluating the positive social impact of higher education civic and community engagement” (ibid.). The relationship between these activities and the QA system is further explored through the lens of short case study and the qualitative interview analysis.

### Case Study and Qualitative Analysis

Dublin City University (DCU) is located close to Dublin city centre and in 2017/18, had almost 17,000 students. Within *DCU’s Strategic Plan 2012-2022* one of the key objectives is engagement with the community, and DCU was one of the first HEIs in Ireland to develop and include an ‘engagement strategy’ as a constituent strategy within its Strategic Plan. DCU has implemented the ‘Quadruple Helix’, as referenced in Section 1 of this paper, aiming to combine the areas of government, academia, industry, and citizens. The *DCU Engagement Strategy* communicates the university’s engagement goals and values (DCU, 2018), one of which is to “build [its] engagement with local communities” (ibid.,4). A series of actions and success measures are outlined to support the operationalisation and implementation of this goal, including, for example, the establishing an education festival every two years (DCU, 2018). DCU has also established the *President’s Award for Engagement*, which promotes the expansion of engaged research and community outreach. The actions and success measures, along with the President’s Award, enable DCU to evaluate the implementation of its community engagement strategy.

In terms of its internal QA system, community engagement is not explicitly incorporated within DCU’s QA framework, and is not formally reported on within the AIQR; neither did it surface as a core theme during DCU’s recent institutional review. The community engagement success measures identified by DCU relate to evidence of implementation of its strategic objectives, and are not incorporated within QA developments, enhancements or impacts. DCU colleagues expressed mixed views on the relationship between QA and community engagement in the institution, though the strategic commitment to community engagement is clear, with colleagues expressing an underpinning philosophy and commitment to this work.

While not systematically embedded within internal QA, DCU colleagues confirmed that community-based activities have appeared in internal review processes. There are annual plans, forums, committees, and an external advisory committee, demonstrating a coordinated approach to community engagement. DCU colleagues expressed the view that engagement with the community is considered beneficial to all parties involved, and, while acknowledging the role of QA in assuring the nature of such engagement, did have some concerns with regards to QA ‘taking over’ the community engagement agenda and activities, as illustrated in the following quote:

“Quality assurance...may be a mechanism for us to assure ourselves that we are happy with our engagement activities, rather than...driving the engagement agenda...This is something that is nurtured by individual inspiration and connection.” (DCU Interviewee)



DCU colleagues are also of the view that effectiveness at any level is difficult to measure and categorise, especially when there may be a conflation between activity and impact; just because there is a lot of activity in terms of engagement, individual projects may have different results or measures of impact. The interviewees noted that, while engagement greatly benefits the students, the ranking of the institution could be impacted negatively. In order to be a highly ranked institution, resources need to be directed towards other areas, meaning less are available to support engagement. This implies a potentially negative relationship between community engagement and institutional ranking.

The views surfacing in the case study are reflected in the other interviews conducted, with a reluctance expressed by some interviewees for the possible imposition of further external requirements or measures. Some colleagues expressed the view that internal and external QA does not have a role in community engagement; it is rather a matter for the HEIs to develop and implement their own engagement strategies. Others were of the view that the current external review process already encapsulates engagement and expressed reluctance to include additional requirements and sections, although these interviewees expressed a strong commitment to engagement within the context of research:

“the people who fund us are entitled to what we discover” (MU Interviewee)

Concerns about using QA to measure effectiveness and impact was reflected in the interviews; interviewees were concerned that it could ‘stifle’ and ‘stunt’ engagement. The freedom within the institution for projects and engagement to grow organically is considered important.

“[It is] ...important for student societies...to have the freedom...to do what they want to do...[They] can be more creative with what they want to support”  
(TU Dublin Interviewee)

## 5. Conclusions

In addressing our first question, the documentary and qualitative analysis suggests that societal and community engagement is an embedded feature within the strategic objectives of Irish HEIs. The institutions are active and creative participants in community engagement activities, which take a variety of forms – from institutional-led strategic level engagement to more organic engagement at individual programme level. The diverse features of community engagement are illustrated well in an article in the *Irish Times*, which reports on universities opening their campus grounds to the general public, providing flora and fauna trails, and guides on biodiversity, this highlights how open to the local community these institutions have become (Thomson, 2019).

The view emerging from the qualitative analysis is that HEIs perceive community engagement to be of benefit. However, uneven development of, and different approaches to, this type of engagement are apparent across the institutions. Whilst community engagement features in the activities of all the institutions, it is not uniformly or systematically embedded in institutional processes.



In respect of the second element of our research, it is evident that internal and external QA tools and processes to support community engagement are still in an ‘embryonic stage of development’ (Sin C., 2018), from the literature reviewed, this also appears to be the case in other jurisdictions. Different perceptions and views emerged among the institutions and representative bodies on the role of QA in institutional community engagement activities. Representatives from the institutions expressed concern about the language of QA and the processes of measurements, impacts, and evaluation *stifling* community engagement and innovation. Further emerging is the perception of QA as primarily a tool to support both institutional accountability and control (internal) and government/system accountability (external). QA is perceived as core part of the systems and structures of control and accountability.

European standards and guidelines defined the term ‘quality assurance’ as describing both assurance and enhancement activities within the continuous improvement cycle (ESG 2015). Reflecting this definition, higher education QA systems have gradually expanded over the last number of years, and continue to evolve; so, for example, the focus on teaching has, in many jurisdictions, now evolved to incorporate research. The legitimacy of both internal and external QA depends on the extent to which it is supported by staff, academics and others, and inherent within this is the extent of engagement and collaboration in the processes, and the language of QA (Harvey 2002 & 2005). Indeed, this is even more relevant for those staff directly involved in civic/community engagement, who work within the language and ethos of the community. This analysis leads to further questions for internal and external QA.

The questions for institutions – in respect of internal QA systems – are not *whether* institutions are engaging in societal/community engagement, or whether what they are doing is ‘correct’? It is not a matter of *compliance*. The questions are, how do you know that what you are doing is right? How do you know that what you are doing has impact? This is, of course, difficult to evaluate, but not impossible.

In relation to external QA, we must ask ourselves whether we need to rethink the language and some of the concepts of QA. This is not to suggest that QA should be used to drive the specific agenda of societal engagement, but rather that we should look at QA as an agent for change and that we should test its boundaries. For example, the lens of external institutional review could be used to bring community engagement into focus. Community engagement could be incorporated within the scope of review, but it is up to the institutions to say what their engagement is and what it is they would like to try to evaluate/tackle. It is an evolutionary rather than revolutionary process.



## Appendix 1

### Interview Questions for Institution Meetings

1. Is societal engagement, specifically community-based engagement, a strategic objective of the institution?
  - Elaborate if yes
2. How are community-based engagement activities implemented within the institution?
  - a. If they are not, can you think of any reasons why it would be something important to support?
3. How does the institution measure effectiveness and impact of such activities?
  - a. On the institutional environment
  - b. On the learning environment
  - c. On the learner
  - d. On staff
4. What role if any does the QA framework of the institution play?
5. Is there a systematic approach/process for planning and coordinating community engaged activities?
6. Are community-based activities aligned within the institutional QA framework?

Why or why not?
7. Apart from QA reasons, do you see benefits to HEIs fostering the idea of engaging in the community?
8. In terms of QA for HEIs, should there be a societal/community engagement aspect to the measures?
9. Do you have any other relevant information/comment?

## References

- ASG-QA. (2018). *African Standards and Guidelines for Quality Assurance in Higher Education*. Retrieved from [https://haqaa.aau.org/wp-content/uploads/2018/12/ASG-QA\\_Manual\\_en\\_09.FINALE-with-License.pdf](https://haqaa.aau.org/wp-content/uploads/2018/12/ASG-QA_Manual_en_09.FINALE-with-License.pdf)
- Campus Engage. (2019). Retrieved July 3, 2019, from <http://www.campusengage.ie/about-us/about-campus-engage/>
- Campus Engage Brokerage Event. (2019). <http://www.campusengage.ie/brokerage-event-to-match-researchers-with-csos-to-develop-research-partnerships-with-societal-impact/>. Dublin. Retrieved July 2, 2019
- Council of Europe. (2019). Retrieved July 5, 2019, from The Democratic Mission of Higher Education: <https://www.coe.int/en/web/higher-education-and-research/democratic-mission-of-higher-education>
- DCU (2017). *DCU Strategy Plan 2017-2022*, Retrieved June 26, 2019, <https://www.dcu.ie/external-affairs/strategic-plan.shtml>.
- DCU (2018). *DCU Strategic Plan 2017-2022 Consituent Strategy: Engagement*. (Internal Document)
- Department of Education and Skills. (2011). *The National Strategy for Higher Education . (2030)*. Retrieved July 1, 2019, from <https://hea.ie/assets/uploads/2017/06/National-Strategy-for-Higher-Education-2030.pdf>
- ESG. (2015). *Standards and Guidelines for Quality in the European Higher Education Area*,. Retrieved July 1, 2019, from [http://www.ehea.info/media.ehea.info/file/2015\\_Yerevan/72/7/European\\_Standards\\_and\\_Guidelines\\_for\\_Quality\\_Assurance\\_in\\_the\\_EHEA\\_2015\\_MC\\_613727.pdf](http://www.ehea.info/media.ehea.info/file/2015_Yerevan/72/7/European_Standards_and_Guidelines_for_Quality_Assurance_in_the_EHEA_2015_MC_613727.pdf)
- European Commission (2007). Retrieved July 5, 2019, from [https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework\\_en](https://ec.europa.eu/education/policies/european-policy-cooperation/et2020-framework_en)
- Gall, J. G. (2005). *'Applying educational research: a practical guide'*. Boston: Allyn and Bacon
- Gunasekara, C. (2004, Nov). The Third Role of Australian Universities in Human Capital Formation. *Journal of Higher Education Policy & Management*, 26(3), p329-343. Retrieved June 27, 2019
- Harvey, L. (2002). *The End of Quality? Quality in Higher Education*, Retrieved Oct 1, 2019 from <http://www.qualityresearchinternational.com/Harvey%20papers/Harvey%202002%20Overview%20of%20the%20End%20of%20Quality.pdf>
- Harvey, L. (2005). *Quality assurance in higher education: some international trends*. Retrieved Oct 1, 2019 from <http://www.qualityresearchinternational.com/Harvey%20papers/Harvey%202005%20QA%20in%20HE%20some%20international%20trends.pdf>.
- HEA (2018). Retrieved May 28, 2019, from <https://hea.ie/resources/publications/higher-education-system-performance-framework-2018-2020/>
- Lebeau, Y. & Cochrane A. (2015). Rethinking the 'third mission': UK universties and regional engaement in challenging times. *European Journal of Higher Education*, 5 (3), pp. 250-263. Retrieved June 26, 2019
- Montesinos, P. C. (2008). Third Mission Ranking for World Class Universities: Beyond Teaching and Research. *Higher Education in Europe; Jul 2008, Vol. 33 Issue 2/3*,, p259-271. Retrieved June 25, 2019
- OECD (2017). *Benchmarking higher education system performance: Conceptual framework and data*, Enhancing Higher Education System Performance, OECD Paris.



- QQI (2016). *QQI Core Quality Assurance (QA) Guidelines*. Retrieved June 26, 2019, from <https://www.qqi.ie/Downloads/Core%20Statutory%20Quality%20Assurance%20Guidelines.pdf>
- QQI (2017). *Cinnte Cyclical Review Handbook*. Retrieved June 28, 2019, from <https://www.qqi.ie/Articles/Pages/Institutional-Reviews07.aspx>
- QQI (2018). *Institutional Review Report Letterkenny Institute of Technology*. Retrieved June 25, 2019, from <https://www.qqi.ie/Reviews/Pages/Letter-Kenny-Institute-of-Technology---CINNTE-2018.aspx>
- Sin C., T. O. (2018, Jan). Assessing the quality of third mission in Portuguese universities. *Passo Fundo*, 33-46. Retrieved from <http://dx.doi.org/10.5335/rep.v26i1.8439>
- Solomon A., D. (2018). The Relationship between the third mission and university ranking: exploring the outreach of top ranked universities in BRICS countries. Retrieved June 15, 2019
- Tandon, R. S. (2016). *Knowledge Democracy and Excellence in Engagement*. . IDS Bulletin: Engaged Excellence, 47 (6), 19-35. Retrieved from [Also available online at: <https://opendocs.ids.ac.uk/opendocs/bitstream/handle/123456789/12748/IDSB47>
- Technological Universities Act (2018), Retrieved October 14, 2019, from <http://www.irishstatutebook.ie/eli/2018/act/3/enacted/en/html>
- Thomson, S. (2019, March 30). Campuses where everyone is a student of nature. *The Irish Times*. Retrieved April 5, 2019, from <https://www.irishtimes.com/life-and-style/travel/ireland/campuses-where-everyone-is-a-student-of-nature-1.3839279>
- Universities Act (1997). Retrieved October 14, 2019, from <http://www.irishstatutebook.ie/eli/1997/act/24/enacted/en/html>
- van der Zwaan, B. (2017). *Higher Education in 2040*. (V. Collingwood, Trans.) Amsterdam University Press. Retrieved May 15, 2019, from <https://www.managementboek.nl/e-book/9789048535163/higher-education-in-2040-e-book-engels-bert-van-der-zwaan>
- Van Waart, P., Mulder, I., & Bont, C. (2015). PARTICIPATORY PROTOTYPING FOR FUTURE CITIES. Retrieved June 27, 2019, from [https://www.researchgate.net/publication/276290920\\_PARTICIPATORY\\_PROTOTYPING\\_FOR\\_FUTURE\\_CITIES](https://www.researchgate.net/publication/276290920_PARTICIPATORY_PROTOTYPING_FOR_FUTURE_CITIES)
- Zomer, A. H. (2011). The Rise of the University's Third Mission. In H. F. In J. Enders, *Reform of Higher Education in Europe* (pp. (81-102)). Rotterdam, The Netherlands: Sense Publishers.