



Introducing the 3P conceptual model of internal quality assurance in higher education: A systematic literature review

Matthijs Krooi^{a,*}, Jill Whittingham^b, Simon Beusaert^a

^a Department of Educational Research and Development, School of Business and Economics, Maastricht University, Tongersestraat 53, 6211 LM Maastricht, the Netherlands

^b Faculty of Health Medicine & Life Sciences, Department of Educational Development & Research, Maastricht University, Universiteitssingel 60, 6200 MD Maastricht, the Netherlands

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ABSTRACT

Institutions of higher education engage in internal quality assurance for teaching and learning in order to demonstrate legitimacy in the face of (societal) expectations, as well as to maintain and improve the quality of education. While the topic of quality assurance in higher education is a growing academic specialty, the evidence base for its impact on educational quality remains limited. Developing a shared language and understanding of concepts that enable further investigation of this phenomenon are key. The systematic literature review was conducted to shed light on the conceptualisation of internal quality assurance for teaching and learning. The thematic analysis revealed three interconnected dimensions of internal quality assurance: purpose, people and process. Based on these findings, an all-inclusive definition and a conceptual model were developed: the 3P model. This model promotes taking a contextualised and integral approach towards internal quality assurance by aligning purposes, people, and processes.

1. Introduction

Quality assurance for teaching and learning as part of higher education institutions' governance and quality management has become one of the most powerful and influential subjects in higher education research (Bendermacher et al., 2017; Wolfand & Janssens, 2007). Along with increased public expenditure on higher education during the 1980 s and 1990 s came a demand for more societal accountability: national quality assurance schemes (i.e., external reviews, accreditation) emerged as part of the 'New Public Management' mode of governance, which is associated with technocratic, rational control and a business-like mentality (De Boer et al., 2007; Harvey & Stensaker, 2008). This external quality assurance (EQA) aimed to monitor whether educational practices and programmes at higher education institutions (HEIs) are up to standard (Stalmeijer et al., 2022; Westerheijden et al., 2007). In order to boost their legitimacy, HEIs adapted accordingly by establishing or reinforcing internal quality assurance (IQA) procedures, defined broadly as: "all activities related to defining, assuring and enhancing the quality of a higher education institution" (Loukkola & Zhang, 2010, p. 9). With its introduction and growing importance, rationalistic and top-down approaches and their focus on accountability

IQA became contested. Some have argued that quality assurance is ineffective in promoting educational quality, and negatively impacts the working lives of academics (Newton, 2000; Harvey & Newton, 2007; Tavares et al., 2017). For instance, de Wolf and Janssens (2007) reported that quality monitoring can lead to unintended behaviours, such as window-dressing, teaching to the test, and proceduralisation. In response to these challenges, new concepts and models were developed to aid HE institutions. In their seminal paper, Harvey & Green (1993) present multiple conceptions of education quality, while calling for a pragmatic attitude toward defining quality, as different conceptions of quality can be valid in their own contexts. Since the 2000's, 'quality culture' has proven to be an increasingly influential notion in the discourse on IQA, especially in Europe. It aims to provide a more comprehensive picture of IQA by incorporating both structural-managerial elements, as more cultural-psychological elements (EUA, 2006; Harvey & Stensaker, 2008). IQA thus ideally represents a mechanism to help institutions provide the required evidence to meet societal expectations in general and external requirements in particular, but it has to be understood as a dynamic, rather than static, concept that is situated in time and space (Loukkola, 2012). Moreover, what constitutes "effective quality assurance" is not self-evident, and has

* Corresponding author.

E-mail address: mh.krooi@maastrichtuniversity.nl (M. Krooi).

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been associated with controversy for the past decades. It is therefore important to understand the crucial components of IQA, given the ambiguity and the questions regarding effectiveness.

In parallel with the increasing importance of quality assurance and the associated controversy, research on this topic emerged as a way to understand its legitimacy, development and impacts. Today, quality assurance for teaching and learning is considered an emerging specialty in the interdisciplinary field of higher education research (Steinhardt et al., 2017). One strand of research which is out of scope of this review focuses on national policy measures that influence quality systems in higher education (e.g., Stensaker, 2003). On the contrary, with respect to IQA research and the purposes of this study, two interesting approaches can be highlighted. Firstly, one group of scholars focus on the effects of IQA practices through (multiple) case studies in institutions, programmes or modules. For instance, Williams & Kane (2009) find acting on feedback from student surveys by institutions tends to be rewarded with an increase in student satisfaction. Gift and Bell-Hutchinson (2007), Lillis (2012), Leiber et al. (2018) find that peer review of education programmes is an instrument that positively impacts on internal dialogue and educational improvement. Andreu et al. (2003) find that participation in ‘critical friend groups’ (i.e. reciprocal peer evaluation by teachers) leads to concrete improvements in teaching if the right conditions are met. These studies provide valuable insights, yet are not designed to foster generalizable outcomes that can be translated to different contexts. A second line of IQA research takes an organisational culture perspective on quality assurance, focussing on the relationship between quality assurance and the functioning of institutions in higher education, in particular concerning the interaction between intangible cultural vis-à-vis structural/managerial elements, such as internal quality assurance arrangements. (EUA, 2010; Harvey & Stensaker, 2008). As part of this latter strand of research, Bendermacher et al., 2017 identify four working mechanisms (knowledge, empowerment, shared ownership and commitment) which provide an avenue for quality assurance interventions to affect organisational outcomes (e.g. student/staff learning and development, improvement of teaching-learning processes). Contrary to the first group who take a more isolated instrumental perspective, these researchers look at more fundamental organisational conditions necessary for initiating IQA. Still, it is acknowledged that the multifaceted and integrative nature of a quality culture makes it difficult to make hard claims on cause and effect.

The different approaches in researching IQA demonstrate that policies and interventions influence the functioning of HEIs, from the level of the institution (macro level) to the development of curricula (meso) to delivery in courses (micro level). Moreover, it is clear that the working of IQA is complex, and success is not only a result of finding the right tools, but also in setting the right conditions. Unsurprisingly, calls for more research remains abundant with respect to understanding the working of IQA, and its relation with the quality of student learning (Beerkans, 2018; Harvey & Williams, 2010; Mårtensson et al., 2014; Pratasavitskaya & Stensaker, 2010; Seyfried & Ansmann, 2018). For instance, one underlying measurement problem to overcome is the reliance on the measurement of stakeholder perceptions. However, before these issues can be addressed there is a need for more conceptual clarity about IQA.

This systematic literature review aims to contribute to the discussion about quality assurance in higher education by providing an analysis of the conceptualisation of IQA as found in the academic literature on that topic. Therefore, the research question is: How is internal quality assurance for teaching and learning conceptualised in the academic literature? Based on this analysis, a conceptual model of IQA is developed and its crucial components explored. Opening the conceptual “black box” will further our understanding of how educational quality is operationalised through these practices in HEIs. Moreover, it will provide insight into what it means to perform quality assurance for teaching and learning in an institutional setting. Although systematic literature reviews on the topic of quality management (Manatos et al., 2017) and

quality culture exist (Bendermacher et al., 2017), to date, there have been no comprehensive reviews focussed on IQA for teaching and learning and how it is conceptualised. This review addresses that gap.

The experienced lack of a coherent evidence base for IQA is partly due to the complexity of the research object: the definition of educational quality is, in a sense, “in the eye of the beholder”, and causal mechanisms in education are often hard to prove (Centoni & Maruotti, 2021; Harvey & Newton, 2007). This is highly unsatisfactory, because HEIs derive their legitimacy from their ability to provide high quality education for a number of reasons. First, administrators and quality assurance (QA) professionals are expected to make evidence-informed decisions in the design of their institutions’ QA system in order to optimise its positive effect on student learning. Second, considerable resources are spent on IQA directly by HEIs and indirectly by governments (Lillis, 2012). This automatically raises the question of the value for money. Third, higher education is becoming increasingly competitive, with the expectation that prospective students can make an informed choice based (among other things) on “quality”. In this context, all stakeholders have a vested interest in a stronger knowledge base with regard to the working of IQA and its crucial components in order to further evidence-informed practice.

To start addressing the issue, developing a shared language regarding key concepts and definitions surrounding QA is vital (Cheng, 2011; Jungblut et al., 2015; Pratasavitskaya & Stensaker, 2010). It is a precondition for making sure that IQA has a positive impact on educational practice and helps to inform institutions that are trying to develop effective and meaningful methods for assuring quality (White et al., 2022). This is important, because there are indications that even when relevant actors seem to speak the same language, underlying interpretations of key concepts regarding QA can differ substantially, with far-reaching consequences (Weenink et al., 2018). For instance, Vettori (2018) described how the uniform professional language on the surface of actor groups in Austrian higher education hid conflicting interpretive frames regarding QA, with each group having their own definitions of the problems QA should address, such as: (government) control of HEIs, customer protection, cost effectiveness, or supporting educators. Each problem definition can result in vastly different approaches. The uniformity of the language or concepts used thus can hide a significant amount of interpretive flexibility. One instance in which this becomes tangible and urgent in terms of social justice and democracy is whether quality education is understood narrowly in terms of reaching particular learning outcomes, or whether it includes *equity* as well, i.e. the extent to which outcomes of education are independent of background characteristics of students, as argued by Kyriakides et al. (2020). The latter (egalitarian) understanding of quality and equity implies that quality assurance measures should incorporate strategies to identify and mitigate inequities, such as conducting regular assessments of access, participation, and achievement among diverse student populations, and implementing targeted interventions to support those who may face barriers to success due to particular background characteristics.

2. Method

2.1. Search strategy

Between December 2020 and January 2023, a series of systematic literature searches were performed to identify studies relating to IQA in institutes for higher education (Hart, 2018). The search was limited to English peer-reviewed articles, published in academic journals. The timespan of the search was limited to the years after 2000, because there was an increase in empirical research on the topic in the early 2000 s (Manatos et al., 2017). The search terms “internal quality assurance” and “quality management” were each used in combination with “higher education”, since quality assurance and quality management are used interchangeably in the literature. Potential search terms referring to well-known examples of IQA (e.g., program evaluation) were omitted,

given the focus of this study on IQA for teaching and learning as a concept. These search terms were chosen by the researchers after an initial scan of the literature on IQA.

The comprehensive search included four databases and six journals, to ensure that the bulk of the publications on the topic were included. The databases were PsycINFO, Education Resources Information Center (ERIC), Web of Science (including Social Sciences Citation Index), and Wiley. The journals were six core journals for quality assurance for teaching and learning in higher education that were identified in the co-citation analysis by [Steinhardt et al. \(2017\)](#): *Quality in Higher Education*, *Assessment and Evaluation in Higher Education*, *Studies in Higher Education*, *Higher Education*, *Quality Assurance in Higher Education*, *Tertiary Education and Management*.

The initial search yielded 1507 articles. After removing 275 duplicates and non-English articles there were 1232 articles eligible for

review.

The articles were included or excluded on the basis of five criteria:

1. The article is a peer-reviewed academic article.
2. The article is concerned with HEIs, and their
3. IQA for teaching and learning.
4. The article presents an explicit definition of IQA for teaching and learning
5. or a description of IQA systems or processes (implicit definition).

The inclusion/exclusion criteria were addressed in three subsequent rounds of review (1st: title/abstract review by first author, 2nd: title/abstract review by first and last author, 3rd: full-text review by first author). In the 2nd round, both authors independently reviewed a random sample of articles, after which the results were compared and

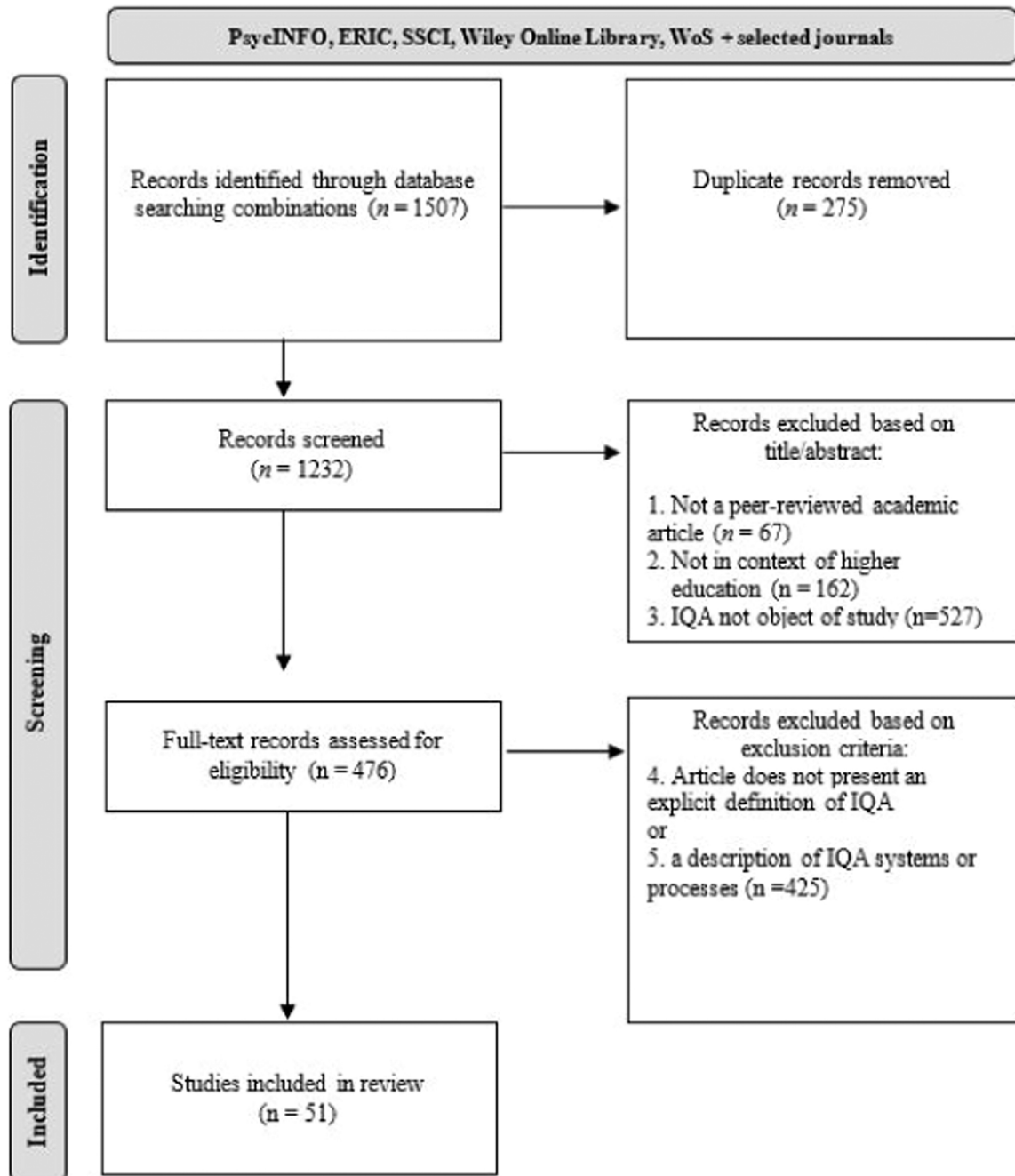


Fig. 1. PRISMA flow diagram of identified and included studies.

differences in interpretation were discussed. This calibration resulted in the conclusion that only articles with a clear focus on teaching and learning were to be included. One result of this decision was the exclusion of a number of articles that focused on total quality management (TQM) or service quality in higher education. The scope of these concepts goes beyond the dimension of teaching and learning by mainly measuring other aspects of the student experience such as facilities and ICT. This resulted in 51 articles eligible for inclusion. Because this article aims to provide reliable insights into the discourse on IQA for teaching and learning, a critical appraisal with the aim of excluding low quality articles was not conducted. Because lower quality articles also provide insight into the actual state of the academic research, excluding these articles would increase bias instead of reducing it [Fig. 1](#).

2.2. Thematic analysis

When the selection process was completed, the six-step thematic analysis process described by [Braun and Clarke \(2006\)](#) was conducted by the first and third author. Each article was read thoroughly to become sufficiently familiar with the data. Initial codes were noted and collated systematically, which enabled the exploration of themes. Next, the themes were reviewed in relation to the source material, by applying them first to a subset of the included articles, adding relevant themes. After multiple feedback loops, the set of codes was applied to all articles. During the entire process, both authors discussed the choices made in categorisation of the articles (i.e. four eyes principle). This led to a definitive list of named themes. This iterative method ensures that the literature itself is leading in the interpretation rather than pre-developed notions, reducing the risk of bias.

3. Results

3.1. General characteristics of the reviewed studies

As previously mentioned, 51 articles were included in the analysis. Of these articles, the majority were empirical ($n = 40$), while a minority were theoretical papers ($n = 11$). Of the empirical studies, 26 applied qualitative research methods, nine used quantitative methods and five took a combined approach. Thirty-one of the 40 empirical articles provided a description of the implementation of IQA in an institutional setting. The dominant research approach was the single case study ($n = 19$), describing quality assurance activities at an institution, programme, module or department. Other research approaches that were chosen were surveys ($n = 9$), semi-structured interviews ($n = 4$), document analysis ($n = 3$), and a multiple case study ($n = 1$). The multi-method studies combined a survey with focus groups ($n = 2$), a survey with interviews ($n = 1$), interviews with focus groups ($n = 1$), or a survey with student performance data ($n = 1$). It can be concluded that research into IQA has been primarily qualitative in nature.

The studies were also categorised according to geographical spread, based on the affiliation of the first author. Half of the studies represented the UK ($n = 11$) and Australia ($n = 10$). There were five studies conducted in the Netherlands, three each in the USA, Sweden and South Africa, two in Germany, and one each in Belgium, Spain, New Zealand, the UAE, Trinidad and Tobago, Taiwan, Qatar, Portugal, Ireland, Greece, Norway, Italy, Namibia, Bangladesh and Austria. This indicates a strong representation of the global north in the literature on IQA for teaching and learning.

From the thematic analysis a number of overarching themes were identified that informed both an overarching definition of IQA for teaching and learning and the development of a conceptual model. The analysis relied on definitions of IQA for teaching and learning, which can be idealised and therefore (partly) disconnected from reality. In order to strengthen the model, a subsample of 40 empirical studies that provide insights into the practical implementation of IQA at institutions were used to reflect on whether and how the model is put into practice.

3.2. Definitions of internal quality assurance

Of the 51 included studies, 38 mentioned an explicit definition of IQA for teaching and learning. As there was not one universally adopted definition or “gold standard”, this study explored the characteristics of these explicit definitions, to see to what extent the research on the topic converges around a joint understanding. Often, these definitions came in the form of a single sentence, such as the following example:

Quality education demands a process of continuous improvement by systematically and collectively evaluating and refining the system, practices and culture of education institutions in order to meet the needs of the customers. (de Jager & Nieuwhuis, 2005, p. 252)

In other cases, the definition was more elaborate and dispersed throughout the text:

A quality management system... is instrumental in collecting information from students, faculty, and experts from outside the university on the quality of curriculum design, teaching methods, teaching skills, and the learning environment... A quality management system can take the role of watchdog, and match information on academic quality with teaching efficiency as well as identify (potential) barriers to study progress... This system is being used for monitoring all facets of the educational program, remediation of problems and regular feedback. (van Peppen & Ruijgh-van der Ploeg, 2000, pp. 189–190)

While the definitions and exact wording varied significantly, the thematic analysis revealed key categories associated with three overarching themes related to IQA for teaching and learning: (a) purpose, (b) people, and (c) process. In brief, *purpose* refers to the different goals IQA is intended to pursue, *people* to actors who perform a role in IQA, and *process* to the actions associated with performing IQA for teaching and learning. These “3 P’s” form the basis of IQA. See [Table A.1](#) (appendix A) for an overview of the overarching themes with their associated categories.

3.3. Purpose of IQA

When defining IQA for teaching and learning, its purpose or general goals were mentioned. What these goals were exactly differed between articles and contexts. In general, three categories could be distinguished: improvement, professional development of teaching staff and accountability. These purposes were assumed to have a positive impact on educational quality as such.

Explicit definitions were mostly oriented towards improvement of education as the desirable end goal of IQA processes. One specific form of improvement that was mentioned several times was the notion of continuous improvement, that is, learning through ongoing cycles of feedback and improvement. For instance, [Kleijnen et al. \(2014\)](#) mentioned that IQA encompasses “all activities and processes deliberately organised to design, assure, evaluate and improve the quality of teaching and learning” (p. 104). For [Srikanthan and Dalrymple \(2004\)](#), the focus lay with “programme teams with academics working together to continually improve quality of teaching and learning...The teams establish quality improvement cycles of design, reflection, change and evaluation” (p. 277). In sum, improvement is consistently presented as a purpose of IQA for teaching and learning, with continuous improvement as a recurring ideal. However, it should be noted that this desired outcome is influenced by the organizational context as well as specific instruments developed to achieve this goal.

A second purpose mentioned was professional development of teaching staff. This aspect is consistently mentioned alongside improvement as a goal. [Houston and Hood \(2017\)](#), for instance, argued that teacher professional development activities are a crucial part of IQA systems that support high quality teaching and learning:

Conceptually, practically and rhetorically teaching (along with research) is at the core of quality in higher education institutions. Therefore, institutional quality assurance and quality enhancement mechanisms should focus on maintaining and improving institutional focus on, and capability for, teaching well. (p. 65)

In several of these definitions, IQA is framed as something that enables teachers to learn and act in a manner that fits the needs of a particular context, such as a course of programme. As [Cheng \(2017\)](#) puts it: “A point of departure is that quality evaluation needs to be turned into a support mechanism to encourage individual academic’s self-regulation of teaching and learning and to develop motivational forces for improvement.” (p. 161). [Gosling & D’Andrea \(2001\)](#) add that introducing pedagogical knowledge in the ‘quality loop’ helps to “provide the necessary professional development for teaching staff on teaching/learning strategies that would be most effective in meeting the educational aims and objectives of the curriculum developed” (p.11)”. In the context of student evaluation surveys, [Alderman et al. \(2012\)](#) noted that these can contribute to evaluation of teachers and their professional development, but only as part of a system that ensures a fair evaluation.

A third purpose of IQA that was mentioned explicitly, though less often, was accountability. Here, accountability could take different forms, such as (self-initiated) transparency or formal assessment by internal and/or external stakeholders. For instance, [Carmichael et al. \(2001\)](#) included communication about improvements to a diverse set of stakeholders in the definition of IQA: “Developing an institutional system to ensure that new and established quality assurance mechanisms for teaching and learning can provide answers to the following: [...] how do you know that you are improving? How do you tell your colleagues, students (prospective, current, past), employers, other universities and external agencies that you are improving?”(p. 454). Similarly, [Shah et al. \(2017\)](#) mentioned the notion of “closing the loop” as communicating and sharing the results of student feedback internally (with students and staff) as well as with external partners. Others were more specific in their description of accountability. For instance, [French et al. \(2014\)](#) explicitly mentioned that IQA exists “to meet external requirements” (p. 27). [Burden-Leahy \(2005\)](#) limited accountability to internal stakeholders:

These activities were reported annually to a quality assurance committee and every 5 years the team produced a major written report addressing all key criteria as a review of the programme to confirm that the programme continued to meet the institutional quality standards and conformed to the programme documentation originally approved by the academic council. (p. 131)

Both [Santos & Dias \(2017\)](#) and [Wickham et al. \(2017\)](#) mentioned public availability of relevant information in order to comply with standards and guidelines. Accountability, therefore, can be understood as a continuum ranging from transparency to strict compliance, where it matters to whom one is accountable [Tables 1 and 2](#).

3.4. People

Higher education traditionally revolves around the notions of teachers and learners and is therefore a quintessentially human undertaking. Unsurprisingly, therefore, another frequently mentioned theme concerned human actors, be they unspecified “stakeholders” or a wide array of specific groups of stakeholders who are explicitly mentioned: teachers, students, managers, quality development professionals, alumni, employers and external agencies. In the literature, these actors were attributed specific roles with regard to IQA. See [Table 2](#) for an overview of actor categories and associated roles. A table including references can be found in Appendix B (actors) and Appendix C (roles). Within this sample, teaching staff and students were most frequently mentioned.

Table 1

Number of hits per combination of search terms.

Database/journal	Internal Quality Assurance AND Higher Education	Quality Management AND Higher Education
PsycINFO	18	18
ERIC	70	97
Social Science Citation Index (via WoS)	4	88
Wiley	32	30
Web of Science	61	418
Quality in Higher Education	75	155
Assessment & Evaluation in Higher Education	15	43
Studies in Higher Education	8	32
Higher Education	14	60
Quality Assurance in Education	96	155
Tertiary Education and Management	12	6

Table 2

Categorization of actors in IQA, the number of articles per category, and key roles associated with each actor.

Actor category	n	Role
Teachers	33	Change agent Peer feedback provider
Students	26	Feedback provider Partner in dialogue
Managers of education	19	Facilitator Supervisor
Quality development professionals	9	Facilitator Educational expert
Alumni	6	Feedback provider
Employers	6	Feedback provider
External agencies	6	Assessor

Teachers were positioned primarily as change agents within the IQA system, responsible for the development of modules or study programmes. This implies that the main responsibility for educational quality is located with those most closely associated with the primary process of teaching and learning ([Ellis et al., 2007](#)). In this role, they receive feedback, reflect and implement improvements. For instance:

In case a course unit is flagged with results in need of further examination, the self-assessment report must include a reflection from the course unit coordinator on the reasons that may have been at the root of those results, as well as a suggestion for an action plan to overcome or minimise the problems detected. ([Santos & Dias, 2017](#), p. 288)

Additionally, teachers can be providers of (formal or informal) peer feedback to other teachers. For instance, teachers can give expert judgement about the strengths and weaknesses of a module or programme ([van Peppen & Ruijgh-van der Ploeg, 2000](#)). A well-designed peer-review approach can also strengthen the notion of a learning community ([Bingham & Ottewil, 2001](#)).

Students’ role in IQA as providers of feedback through student evaluation surveys was common practice at HEIs. This form of providing feedback is unidirectional: students respond to items on a form, which is processed by the institution for the purpose of evaluation and improvement:

Students are widely regarded as important stakeholders in universities; that surveys of their experience are established components of evaluation systems; and that feedback from them has the potential to contribute to improvement in the quality of learning and teaching. ([Alderman et al., 2016](#), p. 274)

Interestingly, multiple authors stressed that activating student feedback in this manner has limitations. For instance, a measure of student experience is not a direct measure of educational quality (Barrie et al., 2005), they are an insufficient evidence base for summative decisions (Alderman, 2012) and there often is no connection between the results of surveys and quality improvement (Nilsson & Wahlén, 2000). A less frequently mentioned role for students was as participants in the dialogue on educational quality. For instance, they could be representatives in student feedback panels or committees. In such a role, students can provide richer accounts of their perspective on educational quality:

Results indicated that not only did students feel a responsibility to represent the larger student body (Palomares 2012), but they also felt that they were entering into a partnership with staff with the shared goal to improve educational quality. (Stalmeijer et al., 2016, p. 63).

Managers of education, on either the programme or institutional level, were described as playing an important role as facilitators and supervisors. The role of facilitator entails responsibility for the functioning of the IQA system, thereby providing the necessary structure and resources. From this perspective, they enable other actors (e.g., students, teachers, support staff) to perform their roles:

The one most frequently mentioned in the responses of the [IQA committee] is involvement, that is, the ability to build quality systems capable of connecting the university's top management with the courses of study and the departments by creating a transmission belt between the level of government and the level where academic activities are carried out with special attention to disciplinary differences (Eritu & Turri, 2022, p. 12)

The supervisor management role refers to aspects of accountability within the organization, for example, through reporting by those lower in the hierarchy:

Each course co-ordinator is asked to provide a semester course summary report to the programme co-ordinator on how they responded to past student feedback and what was the response by the next student group to this change. These reports are discussed during programme team meetings and recorded in the PQMS [IQA system], and its predecessors, the course management system. (S. Jones, 2003, p. 225)

Moreover, in this role managers can also act as partners in the dialogue on quality, reinforcing the shared vision or goal of the institution with regard to educational quality (Burden-Leahy, 2005). Assessment of staff performance is also associated with the supervisor role (Yu & Ueng, 2012).

Quality development professionals, such as quality assurance officers and educational developers, could facilitate quality assurance in multiple ways. First, by designing and managing dedicated processes, for instance, by overseeing administrative aspects and facilitating committees. Second, by taking the role of educational expert when advising management and teachers in their process of reflection and improvement:

At one level the method of review was very straightforward. Members of the [educational unit team A] reviewed [educational unit team B] and vice versa, with the member of the LTI [learning & teaching institute] acting as advisor and facilitator. (Bingham & Ottewil, 2001, p. 34)

Alumni and employers were referred to mainly as information sources with regard to the link between educational programmes and the labour market, in addition to other information sources, through annual surveys. Others mentioned involvement of alumni and employers, though without specifying how they are involved in the IQA process:

While it is common for many programmes within hospitality and tourism to draw on industry expertise at programme development and delivery stages, there is further opportunity to involve others such as employers, and recent graduates in the quality assurance and enhancement processes. (Becket & Brookes, 2006, p. 134)

External agencies were relevant for IQA for teaching and learning to the extent that institutions used internal procedures in order to meet external expectations or requirements. For instance, Santos & Dias, (2017) note that.

A new law ... created an Agency for the evaluation and accreditation of higher education (A3ES)

whose main task is to perform programme accreditation... Under the new legal framework, each institution is required to develop its own internal QA system, certifiable along the lines of the ESG. (p. 281)

In this sense, their involvement was indirect. External quality audits were used to assess the institutions performance (e.g., in the context of accreditation). This influence of external agencies on IQA for teaching and learning shows the connection between external and internal QA as well as the resulting harmonization of the IQA arrangements of HEIs within countries and sectors.

3.5. Process

Most of the articles included in this study focused on the process dimension of IQA for teaching and learning. This provided fertile ground for analysis, both in the explicit definitions of IQA and in how its implementation was described. Subcategories found in the explicit definitions of IQA included the systematic nature of IQA processes, setting quality standards, information collection, monitoring and reflection. See Table 3 for an overview of the instruments used to implement these aspects of IQA for teaching and learning. References for these five categories and Table 3 can be found in appendices D and E.

A recurring trait in the description of IQA was its systematic and cyclical nature. Authors referred to the systematic nature of IQA mechanisms using words such as system, systematic, regular, recurring, periodic, closing the loop, Plan-Do-Check-Act (PDCA), cycles, and continuous improvement. For instance, Kleijnen et al. (2011) mentioned that “the core of quality management encompasses methodical proceedings of the plan/do/check/act (PDCA) cycle and an orientation towards continuous improvement” (p. 142).

Several authors referred to the role of quality standards as a

Table 3

Categorization of IQA processes, associated instruments and the number of articles per instrument.

IQA processes	Instruments	n
Module evaluation	student evaluation survey	7
	self-evaluation	3
	independent (peer) evaluation	3
	learning outcomes assessment	3
	focus groups	1
Programme evaluation	student performance data analysis	1
	student evaluation survey	6
	teacher evaluation survey	2
	alumni/employer evaluation survey	2
	self-evaluation	8
	feedback committee (students/staff)	7
	independent (peer) evaluation	8
	subject benchmarking (learning outcomes)	3
	learning outcomes assessment	4
	student performance data analysis	2
Teacher profession development activities	student population analysis	1
	teacher preparation programme	1
	teacher development programme	1
	peer feedback	1

prerequisite for monitoring, reporting and improvement. They were described as a baseline that allows tracking and comparing teaching and learning performance. As such, they function as a *de facto* definition of educational quality in a particular context. For instance, Burden-Leahy (2005) described it as follows:

These activities were reported annually to a quality assurance committee and every 5 years the team produced a major written report addressing all key criteria as a review of the programme to confirm that the programme continued to meet the institutional quality standards and conformed to the programme documentation originally approved by the academic council. (p. 131)

It was mostly not specified what the standards entail precisely, for instance, if they are qualitative or quantitative standards. An exception was French et al. (2014), who referred explicitly to the measurement of student performance on learning outcomes. Cheng (2017) stressed the choices institutions have for setting standards aimed at supporting teachers in improving student learning in contrast with quality evaluation only for the purpose of governmental accountability.

A number of authors explicitly pointed out the need for collecting information about quality indicators as a step in the quality assurance process, but the level of explanation of what this entails differed. Wickham et al. (2017) for instance, referred to institutions collecting “relevant information” (p. 365). Others (such as Burden-Leahy, 2005) referred to results or evidence that can be tracked and compared longitudinally. However, some authors provided more detail in describing what information is collected. Van Peppen and Ruijgh-van der Ploeg (2000) noted, for example, that “a quality management system... is instrumental in collecting information from students, faculty, and experts from outside the university on the quality of curriculum design, teaching methods, teaching skills, and the learning environment” (p. 189). One quality indicator to measure are student learning outcomes or competence levels. However, other articles mentioned the need for multiple information sources, for example, quantitative and qualitative information or feedback from multiple stakeholders, such as students and teachers. Alternatively, Alderman et al. (2012) stressed the importance of having multiple information sources to be able to make a judgment regarding educational quality: “It is also consistent with the university’s risk-based practice in relation to course quality assurance, which takes multiple data sets into account and consists of an ongoing, cyclical process of monitoring, review, benchmarking and improvement” (p. 273).

Authors mentioned “monitoring” or “assurance” as an aspect of the IQA process. It was described as a distinct process institutions use to make available and watch over quality-related information. It was also described as being an important step in the quality assurance process that enables subsequent action, such as reflection, design, support and improvement. For instance, Alderman et al. (2012) described the university’s quality assurance process as consisting of “an ongoing, cyclical process of monitoring, review, benchmarking and improvement” (p. 273). Santos and Dias (2017) stressed that the performance of the IQA system itself must be monitored as well, as part of a continuous improvement cycle.

The subcategory ‘reflection’ included references to individual and peer reflection or dialogue, such as: (peer) reflection, evaluation, self-regulation, analysing, self-assessment. Reflection by teachers was described as being based on information or evidence, such as the results of external assessments or the outcomes of teaching evaluations. It is a vital step aimed at interpretation of such information, for example, “understanding the cruxes of the teaching problem” (Yu & Ueng, 2012, p. 959), that ultimately leads to decisions on what and how to improve.

Further analysis of the 31 articles describing the implementation of IQA for teaching and learning shed light on how the process dimension of IQA (i.e., systematism, setting quality standards, information collection, monitoring and reflection) was translated to practice in institutions. For this implementation of their vision on IQA, institutions

required particular instruments. Some articles focused on one instrument, while others described how different instruments function together in an ensemble. Here, three main categories of processes could be discerned: module evaluation processes, programme evaluation processes and teacher professional development activities. The first two categories are focused on qualitative development of the curriculum, didactic aspects or the teaching and learning environment, while the latter centres on the teacher competences that ultimately impact students’ learning experience. A broad array of instruments for quality assurance fell within these categories (see appendix B). Often, the IQA system featured an ensemble of different instruments that contributed to the process of quality assurance.

4. Conclusion and discussion

This systematic literature review aimed to provide more clarity to the academic discourse by investigating the conceptualisation of IQA for teaching and learning, as defined in the literature. The results of this study demonstrated that IQA is an umbrella concept, which in practice can take many different forms based on local conceptions, needs or traditions. However, the results also revealed that a number of themes recurred in the scientific literature about IQA. Moreover, because of its association with unwanted side-effects, such as bureaucratization, work pressure, and window dressing, it is important to realise that interventions can do harm as well as good (de Wolf & Janssens, 2007; Overberg, 2019). In order to foster research on the working mechanisms of IQA, it is imperative to develop a shared language with regard to key concepts and definitions. A shared language and understanding of concepts ensure that contributors to the emerging field of quality assurance for teaching and learning research are better able to position their research questions, avoid blind spots, align their efforts and discuss what the most important challenges to tackle are.

Given the wide variety of definitions found in the academic literature, it is evident that an all-inclusive definition of IQA for teaching and learning within the context of higher education is needed. Given the recurring topics and themes in our analysis of the literature, the following definition is proposed: *Internal quality assurance for teaching and learning mobilises relevant actors for the purpose of improvement, professional development and accountability by means of systematic processes.* In other words, IQA allows institutions to develop purposes, people and process in a meaningful manner within its specific context. Building on this definition, we found a conceptual model of IQA for teaching and learning centred around the 3 P’s (purpose, people, process). In addition, and in line with Biggs & Tang’s concept of ‘constructive alignment’ (2011), this model provides a conceptual framework for reflecting on the alignment (or lack thereof) of the three dimensions that are present in any IQA configuration. In other words, depending on the goals of the organisation, processes can be selected that position actors in ways that ultimately contribute to educational quality. The model thus provides a perspective on IQA that has the potential to explain the working or non-working of IQA in HE. For instance, one British case study (Jackson, 2000) describes a curriculum mapping tool (‘Process’) aimed at supporting the review and planning of a curriculum (‘Purpose’) that was made successful by investing in the engagement of teachers (‘People’). A Swedish case study found that improvement (‘Purpose’) was stimulated by deliberately allocating time for structured discussions (‘Process’) by teaching teams (‘People’) directly after gathering input. Because the model is based on a very diverse set of institutional practices, it is applicable to any IQA ensemble in any context. Fig. 2 highlights that for a thorough understanding of IQA it is important to pay attention to subdimensions that allow us to zoom in on possible configurations of IQA within HE institutions.

In this study, we found that improvement is the dominant purpose attributed to IQA. Accountability, understood here as a continuum ranging from promoting transparency to relatively forceful compliance with regulations, plays a subservient role. Rather than juxtaposing

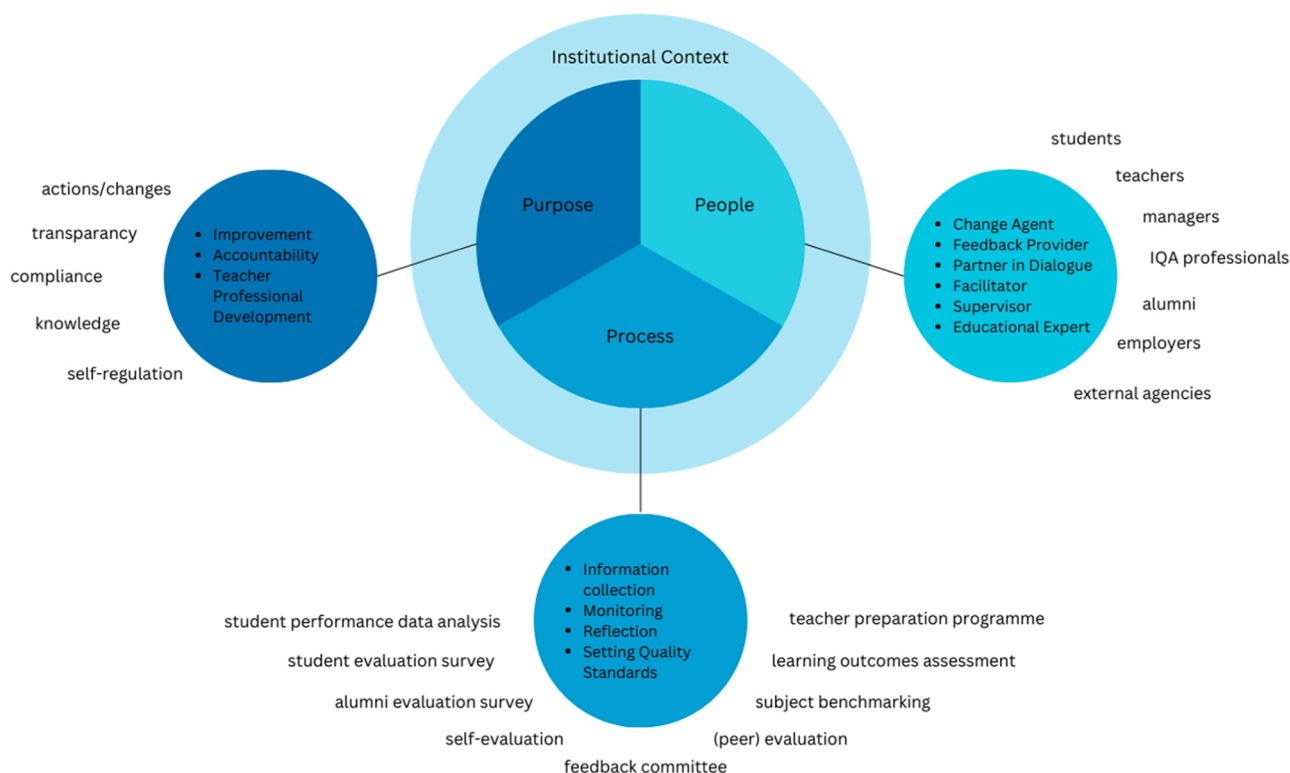


Fig. 2. The 3 P conceptual framework for internal quality assurance for teaching and learning in HE. *Purpose: Improvement, accountability and staff development.*

improvement and accountability, this study contributes to a more holistic view that emphasises the importance of connecting interventions aimed at accountability and improvement to achieve synergy.

The 3P model adds staff development as an additional purpose of IQA for teaching and learning. The dynamic HE environment requires a skilled workforce to keep up with the expectations of students and wider society with regard to educational quality (Knight, 2006). Relevant knowledge, skills and attitudes can be derived from formal training (such as onboarding programmes), or more informally through participation in IQA processes. This is in line with research on the importance of informal learning for professional development of teaching staff by stimulating exchange of information and using feedback in a proactive manner (e.g., Gerken et al., 2016). In relation to the above-mentioned holistic approach to improvement and accountability, teacher development can be a linking pin by providing a means for teachers to make sense of information, and processes. This fits with Ehlers's (2007) notion of "quality literacy", which emphasises the importance of professionalism for quality development. In this context, professionalism refers to the advanced knowledge, skills and attitudes teachers need to be able to effectively participate in quality assurance activities. Especially in higher education, where teachers often have different roles in an organization, such as researcher or manager, their professional identity as teacher is not a given. Instruments mentioned in the review, such as systems of peer learning (Andreu et al., 2003) cater for this need for institutions to reinforce the professional identity of teachers.

4.1. People: mobilising key actors for IQA

While formal definitions of IQA tended to focus on purpose and process, this review suggests that it is imperative to explicitly include a variety of human actors in different roles. In this way, the appearance of a mechanistic understanding of quality development that implies that a neat system routinely produces good outcomes is avoided (Ramírez, 2013). As Beerkens (2018) pointed out, evidence regarding educational quality, comes to life via the "messy" process of perception,

interpretation and argumentation by various actors. This review described teachers, students and management as dominant actors. The potential contributions of other stakeholders, such as quality development professionals, graduates and societally relevant groups require more attention in IQA research and practice. Involving a broader variety of stakeholders provides a more comprehensive perspective, but can also make processes more complex. On the other hand, making contributions of more relevant groups explicit can also provide a voice for important, but otherwise overlooked, actors.

The process and people dimensions are linked through communication, collaboration and dialogue, which are essential to establish continuous improvement of education. This is in line with the growing set of literature on a quality culture in higher education, which stresses the interaction between tangible organizational structures (rules, processes) and intangible forces that reflect the organizational culture, such as leadership and shared ownership (Bendermacher et al., 2018). In the metaphorical sense, IQA is better understood as a playing field than as a linear process.

4.2. Process: continuous cycle

The process category includes the mechanisms and instruments needed for achieving the purpose of IQA. The recurring themes can be identified as steps in the process of enacting IQA: setting quality standards, collecting information, monitoring and reflection. Together, they represent a flow of information that is selected, collected, distributed, activated and interpreted for the purpose of achieving a desired outcome. One important notion is systematism as a prerequisite for effective quality assurance. Often, this systematism takes the form of a cyclical approach, such as the plan-do-check-act (PDCA) cycle. Maintaining this cycle can be highly challenging for institutions; therefore, intentional design of IQA processes is imperative – in line with the purpose and people dimensions, as well as the institutional context. The large number of approaches found here indicates that there is significant flexibility and opportunity for choice with regard to the instruments that

can be deployed. Complex IQA systems require alignment to ensure overall effectiveness and to be experienced as beneficial by key stakeholders (Overberg, 2019). Because of the inherent fuzziness of educational quality as a concept, caution is advised, for instance by including multiple sources of information and stakeholder groups in the reflection.

4.3. Future research

The current study has limitations that should be taken into account. While institutional context is an important aspect of the 3P model, the review did not extensively describe the different determinants that can influence this specific context. Institutional context is defined by a variety of features. For example, on a macro level, the studies included in this review were mostly from the global north, which can be explained by the historical connection between quality assurance and the new public management ideology in liberal societies, as well as the dominance of these countries in academic publishing (Collyer, 2018). Our results may therefore reflect a generally western, and thus limited, perspective. It would be interesting to further research the conceptualisation of quality assurance in different parts and cultures of the world. On the meso-level, societal context can impact institutions and their quality assurance arrangements through political, legal, cultural and financial boundaries. On the micro- (i.e., organizational) level, the culture of an organization itself determines which instruments can be used and how they function. For instance, the responsible use of IQA instruments in the context of HR policy, such as student surveys for staff appraisals, is a topic that is currently under debate because of potential negative consequences (Lohman, 2021). Additionally, this review included a substantial number of single-case studies, which limits the generalizability of the results. Future research could further explore differences between IQA for teaching and learning in a variety of settings, keeping in mind differences on the macro-, meso- and micro-levels, in order to answer the question how to support or even optimise the alignment of purpose, process and people in an evidence-informed manner.

Future research can also focus on the development of instruments to measure IQA in a holistic manner, thereby going beyond procedural aspects. This means defining the purpose of IQA instruments and systems, and evaluating the process and outcomes in a targeted manner. Here, as mentioned above, it is important to take the institutional context into account. Because the working or non-working of any intervention or system is a process of social construction, discovering “what works” is not enough. One should also account for where, when and for whom IQA works (Beerens, 2018; März & Kelchtermans, 2012; Pinch & Bijker, 1984). One special point of attention that requires more investigation is the relation between professional development of teaching staff and IQA: how to bridge the gap, and make most of formal and informal learning opportunities?

4.4. Implications for practice

The 3P model promotes a contextual and integral approach towards understanding the working or non-working of institutional systems of quality assurance. The model contributes to design or evaluation of IQA arrangements in an intentional way, by asking the following questions: (1) What is the purpose of IQA in our institution? (2) Which actors need to be mobilised to fulfil this purpose? (3) Which process(es) are required to optimally position and connect these actors? Here lie many contingencies for HEIs, as this study shows, because of the many potential combinations of goals, actors and instruments. These are important insights that highlight the internal complexity and workings of IQA, which is a prerequisite for the ongoing development of quality assurance as an academic field, as well as critical evaluation of IQA interventions in practice. Depending on the institutional context, different ensembles of purpose, people and process can be deployed more or less successfully. An intentional design can help institutions to find the right balance

between accountability and improvement, and to make optimal use of their human capital. Institutional leaders and quality assurance professionals should be aware of this flexibility, as it can be tempting to make choices based on perceived, though non-existing, expectations or let ineffective traditions persist because “it has always been done this way”. Staff development initiatives can play an important role in bridging the gap between quality assurance and development. The “people” aspect of the model stresses the importance of human relations and behaviour in educational organizations, showing that a broad array of different actors can contribute to quality assurance. In a well-designed, intentional IQA system, process follows from the first two dimensions: form follows function. These results also help governmental bodies, such as accreditation agencies, to take a developmental approach to quality assurance, and to reflect on the intended and unintended impacts of external standards and requirements.

CRedit authorship contribution statement

Simon Beusaert: Writing – review & editing, Writing – original draft, Visualization, Validation, Supervision, Methodology, Investigation, Formal analysis, Conceptualization. **Matthijs Krooi:** Writing – review & editing, Writing – original draft, Visualization, Project administration, Methodology, Investigation, Formal analysis, Data curation, Conceptualization. **Jill Whittingham:** Writing – review & editing, Supervision.

Declaration of Competing Interest

None.

Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.stueduc.2024.101360](https://doi.org/10.1016/j.stueduc.2024.101360).

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