Benchmarking: A Literature Review

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Executive Summary

This resource is designed to assist all Edith Cowan University (ECU) staff interested in benchmarking. The ECU *Benchmarking Policy* (Edith Cowan University, 2011) and Benchmarking Guidelines are referred to and should be read in conjunction with this resource. The purposes of this resource are to:

- Provide an overview of the literature on benchmarking;
- Clarify ECU's approach to benchmarking; and,
- Provide a model for benchmarking which will work at ECU.

Benchmarking is a tool for improving performance. ECU defines benchmarking as a continuous and systematic process of comparing products, services, processes and outcomes with other organisations or exemplars, for the purpose of improving outcomes by identifying, adapting and implementing best practice approaches (Edith Cowan University, 2011). Comparisons may be made against individual benchmarking partners or groups; other programs within the University; sets of accepted standards; or data from past performance (Teaching and Learning Centre, 2008). Benchmarking is different to using quality assurance (QA) models, as QA models generally focus on minimum acceptable standards and compliance and they are often imposed by management or external inspection requirements (Henderson-Smart, Winning, Gerzina, King, & Hyde, 2006). In contrast, benchmarking sits within a broader framework of quality management and improvement (Wilson, Pitman, & Trahn, 2000).

One of the most important benefits of benchmarking is the discovery of innovative approaches. Benchmarking highlights problem areas and the potential for improvement, providing an incentive to change, and assists in setting targets and formulating plans and strategies (Meade, 1998). As a result of good benchmarking, university leaders would know how their institution rates in certain areas in comparison with others, ascertain their competitive position relative to others, and also know how their institution can be improved (McKinnon, Walker, & Davis, 2000). The findings from benchmarking enable universities to prioritise resources and use their resources to best effect (McKinnon, et al., 2000). Benchmarking can ensure that plans are being carried out and demonstrate areas of merit to stakeholders (Wilson & Pitman, 2000). To maximise the benefits of benchmarking, institutions must undergo a thorough self-analysis and have a clear understanding of their own processes (Epper, 1999) which may be more useful than the comparison with another organisation.

In order to be successful and to ensure positive outcomes for all partners, benchmarking must be approached with some insight into the potential pitfalls and problems that may arise (Wilson, et al., 2000). Potential challenges include the need to ensure agreed outcomes for all partners and selecting an appropriate partner (Wilson, et al., 2000).

There are many types of benchmarking and many ways of categorising these types. Some terms are used by different authors with different meanings. Each type seems useful for a particular situation. However, the type of benchmarking is not as important as that the aims are clear, achievable and achieved, and that the choice of partner organisation is aligned with the aims.

A project by the Australian Universities Quality Agency (AUQA)[1] developed a list of success factors for higher education benchmarking:

1. Determine which areas to benchmark;
2. Identify benchmarking partners;
3. Determine types and level of benchmarking;
4. Prepare benchmarking documents and templates including the purpose, scope of project, performance indicators, performance measures and performance data;
5. Design benchmarking process;
6. Implement benchmarking process;
7. Review results;
8. Communicate results and recommendations; and,
9. Implement improvement strategies,

with questions for each step (Booth, Melano, Sainsbury, & Woodley, 2011). This aligns with the Plan/ Do/ Review/ Improve (PDRI) cycle in the Quality@ECU model, and it is the suggested method for benchmarking at ECU (see Table 1 for details).

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[1] AUQA has since been replaced by the Tertiary Education Quality & Standards Agency (TEQSA).

Benchmarking: A Literature Review

What is Benchmarking?

ECU defines benchmarking as a continuous and systematic process of comparing products, services, processes and outcomes with other organisations or exemplars, for the purpose of improving outcomes by identifying, adapting and implementing best practice approaches (Edith Cowan University, 2011).

Benchmarking enables universities to assess their performance and improve practice in a cyclical process involving both quality assurance and quality enhancement (Oliver, 2011b). When learning of yet another quality management tool, administrators often respond that they have been doing benchmarking for years but not calling it that (Epper, 1999). Benchmarking is different to using quality assurance (QA) models as they generally focus on minimum acceptable standards and compliance, and are often imposed by management or external inspection requirements (Henderson-Smart, et al., 2006) that may have a political agenda (Houston, 2008). Benchmarking may provide a conceptual framework for self-evaluation (Henderson-Smart, et al., 2006).

Benchmarking is a well-planned and systematic process with clear objectives and mechanisms to measure, compare and discover innovative practices, evaluate if these suit or adapt practices, and implement improvement. Benchmarking provides a formal exchange of information within an objective structure and timeline (Meade, 1998) and focuses on learning (Wilson & Pitman, 2000; Wilson, et al., 2000). Comparisons may be made against individual benchmarking partners or groups; other programs within the University; sets of accepted standards; or data from past performance (Learning and Teaching Unit, 2012).

Benchmarking is a tool for improving performance. Learning and teaching are thought to be a challenging area to benchmark because it is difficult to quantify the outcomes and performance in learning and teaching (Oliver, 2011b). In this area, benchmarking is an evidence-based process including comparisons with other institutions in order to enhance good practice (Learning and Teaching Unit, 2012).

The kind of benchmarking or knowledge-sharing that typically takes place in higher education in Australia is mostly the result of friendly rivalry between respected peers or peer organisations that resemble our own (Epper, 1999). In contrast to this model, "true" benchmarking encourages an organisation to look beyond peers to quite different benchmarking partners encouraging 'outside-the-box' thinking as distinguished from "simply sharing knowledge with one's peers". Benchmarking provides a model for action, not just data. It distinguishes between real innovation and simple reputation. A lot of learning takes place (Epper, 1999).

Benchmarking is a tool to assist organisations identify processes they need to change to be able to achieve specific strategic goals and objectives (Hacker & Kleiner, 2000). Benchmarking is the formal and structured process of searching for those practices which lead to excellent performance, the observation and exchange of information about those practices, the adoption of those practices to meet the needs of one's own organisation, and their implementation (Meade, 1998). Benchmarking is focused on improvement so it complements other improvement initiatives; the terms *best practice*, *quality improvement* and *quality cycle* are commonly used interchangeably.

Principles of Benchmarking

Ten principles form benchmarking theory (Meade, 1998). Benchmarking:

1. Improves practices, services or products;
2. Involves learning about 'best practices' from others;
3. Accelerates the rate of progress and improvements;
4. Contributes to continuous quality management;
5. Is an ongoing process;

6. Promotes fresh and innovative thinking about problems;
7. Provides hard data on performance;
8. Focuses not only on *what* is achieved, but on *how* it is achieved;
9. Involves the *adaptation*, not merely adoption, of best practices; and,
10. Results in the setting of specific targets.

(Meade, 1998)

Why Benchmark? – Benefits

Why should higher education organisations care about benchmarking? In a word: competition (Epper, 1999). In the past, it may have been possible to identify friendly rivals but recently the competitive landscape is changing quickly with new, non-traditional rivals that may be overlooked as competitors or benchmarking partners (Epper, 1999).

One of the most important benefits of benchmarking is the discovery of innovative approaches. Benchmarking highlights problem areas and the potential for improvement, providing an incentive to change, and assists in setting targets and formulating plans and strategies (Meade, 1998). Benchmarking provides assessments of quality that identify measures that give a valid and balanced, current picture of the parameters that distinguish courses, universities or sections of a university (McKinnon, et al., 2000).

As a result of good benchmarking, university leaders would know how their institution rates in certain areas in comparison with others, ascertain their competitive position relative to others, and also know how their institution can be improved (McKinnon, et al., 2000). Benchmarking may enable an institution to lay a legitimate claim to being "distinguished" in a particular area (Dunn, McCarthy, Baker, Halonen, & Hill, 2007). The findings from benchmarking enable universities to prioritise resources and use their resources to best effect (McKinnon, et al., 2000). Benchmarking can ensure that plans are being carried out and demonstrate areas of merit to stakeholders (Wilson & Pitman, 2000). Yet benchmarking distinguishes between real innovation and simple reputation as it focuses on demonstrating best practices beyond their initial launch (Epper, 1999).

To maximise the benefits of benchmarking, institutions must undergo a thorough self-analysis and have a clear understanding of their own processes (Epper, 1999) which may be more useful than the comparison with another organisation. Beyond the potentially humbling learning experience of benchmarking, the networking creates opportunities for further collaboration (Epper, 1999).

Criticisms of Benchmarking

In order to be successful and to ensure positive outcomes for all partners, benchmarking must be approached with some insight into the potential pitfalls and problems that may arise (Wilson, et al., 2000). For instance, benchmarking can be expensive and the scope must be narrow to make the study manageable (Epper, 1999). Potential challenges include the need to ensure agreed outcomes for all partners; participative training and awareness for all staff involved; and the need for benchmarking to sit within a broader framework of quality management and improvement (Wilson, et al., 2000).

By focusing on processes and practices that are already occurring and only on another institution's best practice, Hammer and Champy (1993, cited in Meade, 1998) argue that benchmarking may restrict innovation and ambition. Similarly, they state, by focusing on current processes and practices the need to prepare for a changing future and adapt to new conditions may not be fulfilled. Epper (1999) distinguishes this as "simply sharing knowledge with one's peers" and not "true" benchmarking.

If an organisation is to benchmark themselves against better and best organisations inside or outside the education sector as Meade (2000) and Epper (1999) suggest, then it may be difficult to choose the partner organisation. It may be impossible to know which potential partner organisation is the best in any specific area until data has been gathered and comparisons made. University league tables may purport to show rankings of excellence and self-identified sub-groups of universities may directly or indirectly claim merit by association. Individual universities may market their university or a specialist area as the best (McKinnon, et al., 2000). They may only be the best in a small area so several partners may be required. Similarly, it is impossible to find a partner that is better if your organisation is the best in that specific area. If benchmarking is a way of learning from others (Epper, 1999), then the question becomes why an organisation that knows it is the best in a specified area would commit the time and effort required to a benchmarking process.

Data may not be comparable between different institutions or even sections within the same institution because of different reporting conventions, different instruments used, and distrust amongst universities (McKinnon, et al., 2000) making results unreliable.

What is the Difference between Benchmarking and Moderation?

Frequently, the terms benchmarking and moderation are used interchangeably in conversation. Yet they are quite different; for example, to benchmark an institution's student grades, marks and assessments is not the same as moderating these. Moderation as a process involves the checking of assessment marking to ensure reliability, validity, fairness and accuracy (Bloxham, 2009) whenever more than one person marks assessment items in a unit (Edith Cowan University, 2012). The same coded unit may be offered in different semesters, schools, campuses or even in different countries. Moderation of assessments checks that marking is consistent such that an assessment item would be awarded the same mark by any marker. Whereas, the aim of benchmarking assessment processes is to make transparent the areas for improvement and areas of good practice. The ECU policy on *Moderation of Assessment* (Edith Cowan University, 2012) clarifies the process.

Types of Benchmarking

There are many types of benchmarking and many ways of categorizing these types. Some terms are used by different authors with different meanings. Each type seems useful for a particular situation. However, the type of benchmarking is not as important as that the aims are clear, achievable and achieved, and that the choice of partner organisation is aligned with the aims. Epper (1999) speaks of "true" benchmarking in contrast to "sharing knowledge with one's peers".

Three types of benchmarking advocated by the Australian Universities Quality Agency (AUQA) are:

1. **Sector benchmarking** in which comparisons of 'whole-of-institution' or focusing on some function or aspect are made against a benchmarking partner(s) in the same sector;
2. **Generic benchmarking** involving comparisons of processes and practices regardless of the industry; and,
3. **Best practice benchmarking** in which the University selects a comparator known to be best in the area to be benchmarked.

(Stella & Woodhouse, 2007)

Terms for types of benchmarking may be used with several meanings. For example, Griffith University distinguishes sector from whole-of-institution benchmarking. Sector benchmarking is a comparison of other university's performance outcomes using publicly available data or of processes and practices within the sector in selected areas with a view to identifying areas for improvement (Griffith University, 2012).

Standards-based benchmarking analyses processes, practices and outcomes against a generally agreed set of standards, e.g. those set by professional bodies for accreditation (Griffith University, 2012). Two types of standards-based benchmarking are clearly distinguished (McKinnon, et al., 2000):

1. **Criterion reference benchmarking** first defines the attributes of good practice in a functional area, then assesses whether that criteria has been achieved. The definition could be a checklist of essential attributes constituting good practice. If the benchmarking process concludes that the university is meeting the criterion then the university is meeting that benchmark. If the benchmarking process concludes that the university is not meeting the criterion, then there is clarity about what needs improvement.

2. **Quantitative benchmarking** distinguishes normative and competitive levels of achievement, demonstrating where practice is quantifiably different in some institutions. Differences may signal priorities, choice and policy rather than a need for improvement, e.g. proportion of postgraduate students within total enrolment.

There are four types of benchmarking based on the kind of organisation serving as the benchmarking partner (Meade, 1998):

1. **Internal benchmarking** in which comparisons are made against another division within the organisation;
2. **Competitive benchmarking** in which comparisons are made against direct competitors;
3. **Industry benchmarking** in which the benchmarking partner is not a direct competitor but does share the same industry; and,
4. **Generic benchmarking** compares processes and practices regardless of the industry.

Process benchmarking is by far the most commonly used model (Wilson & Pitman, 2000) of three types of benchmarking based on the practices or processes being benchmarked (Meade, 1998):

1. **Process benchmarking** focuses on discrete work processes and operating practices;
2. **Performance benchmarking** compares products and services; and,
3. **Strategic benchmarking** examines how companies compete.

Benchmarking Methods

Numerous models of benchmarking are discussed in the literature (Meade, 1998). However, the approaches are fundamentally similar and can be adapted for specific circumstances, fitting the University's quality model or policy framework (Hacker & Kleiner, 2000; Meade, 1998). The ECU approach to continuous improvement, the Quality@ECU model, is cyclic with four phases: Plan; Do; Review; and Improve (Edith Cowan University, 2010). Alongside the Quality@ECU model, the nine-step method of success factors for higher education benchmarking (Booth, et al., 2011) has specific questions as guidance (see Table 1).

Comparisons may be made against individual benchmarking partners or groups; other programs within the University; sets of accepted standards; or data from past performance (Learning and Teaching Unit, 2012). A three step process for benchmarking involves:

1. Identifying areas for improvement;
2. Choosing benchmark indicators (quantitative measures of achievement); and then,
3. Collecting information to enable comparisons in order to improve performance.

(Learning and Teaching Unit, 2012)

A twelve-step benchmarking process has four phases: planning; analysis; integration; and action (Hacker & Kleiner, 2000).

1. **Planning** has five steps: determine what to benchmark, identify key performance indicators, identify benchmarking partners, determine data collection method, and collect data;
2. **Analysis** has two steps: understand performance gaps, and predict future performance levels;
3. **Integration** has two steps: communicate findings and gain acceptance, then establish functional goals and implementation plans; and,
4. **Action** has three steps: implement and monitor progress, measure results against stakeholder wants and needs, and then recalibrate benchmarks.

Amin and Amin (2003) used a student self-assessment tool, pre- and post-tests to measure student competencies, and an external test to benchmark curriculum. McKinnon et al. (2000) provide lists of good practice definitions and description of levels for ten aspects of universities including organisational climate.

Three major steps in the benchmarking process are:

1. Self-evaluation against the benchmarks;
2. Comparing and contrasting self-evaluations against the benchmarks with benchmarking partners; and,
3. Applying benchmarking outcomes to improvement processes.

(Council of Australian Directors of Academic Development, 2011)

An AUQA project developed a list of success factors for higher education benchmarking:

1. Determine which areas to benchmark;
2. Identify benchmarking partners;
3. Determine types and level of benchmarking;
4. Prepare benchmarking documents and templates including the purpose, scope of project, performance indicators, performance measures and performance data;
5. Design benchmarking process;
6. Implement benchmarking process;
7. Review results;
8. Communicate results and recommendations; and,
9. Implement improvement strategies,

with questions for each step (Booth, et al., 2011). This model aligns with the Quality@ECU model so it is the suggested method for benchmarking at ECU (see Table 1 for details).

Benchmarking Courses and Assessment

Benchmarking is most effective when it is ongoing, not a one-off procedure, but part of the annual review process (The Association of Commonwealth Universities, 2012b). Benchmarking leads to continuous curriculum improvement (Amin & Amin, 2003) in response to the nascent trend of concern with questions of educational quality (Dunn, et al., 2007). Statistics from the public domain released annually by the Department of Education, Employment and Workplace Relations (DEEWR, now the Department of Innovation, Industry, Science, Research and Tertiary Education [DIISRTE]) is used to benchmark a number of measures of universities' international student programs using data from OECD countries (Olsen, 2011). Outgoing student mobility was benchmarked to quantify international study experiences in 2010 of students at Australian universities (Olsen, 2011).

The benchmarking process at a course level should be collaborative rather than competitive and aims to engage course teaching teams in critical conversations about improving capability achievement particularly for employability (Oliver, 2011a, 2011b). Eight broad educational dimensions provide the framework for

benchmarking undergraduate courses: curriculum, assessment issues, student learning outcomes, program resources, student development, faculty characteristics, program climate, and administrative support (Dunn, et al., 2007).

The Benchmarking Portfolio (Oliver, 2011b) is a 360-degree, evidence-based approach with four phases:
1. **Determine capabilities**: determine the capabilities that count for early professional success;
2. **Map inputs**: when, where and how those capabilities are developed and assessed in the course as demonstrated by reflective (qualitative) and numerical (quantitative) evidence;
3. **Evaluate outcomes**: engage with partners (internal and external stakeholders); and,
4. **Plan enhancements**.

Many institutions use a template for reporting that reflects the priorities and values (Dunn, et al., 2007). Alignment between curriculum, teaching and assessment as the conceptual framework for self-evaluation is pivotal (Henderson-Smart, et al., 2006), while content, instruction, assessment and equity and diversity were considered as curriculum (Ellibee & Mason, 1997).

The Australasian Council on Open, Distance and e-Learning (ACODE) provide a benchmarking plan with scoping statements, good practice statements, and performance indicators and measures for eight areas:

1. Institution policy and governance for technology supported learning and teaching;
2. Planning for and quality improvement of the integration of technologies for learning and teaching;
3. Information technology infrastructure to support learning and teaching;
4. Pedagogical application of information and communication technology;
5. Professional/staff development for effective use of technologies for learning and teaching;
6. Staff support for the use of technologies for learning and teaching;
7. Student training for the effective use of technologies for learning; and,
8. Student support for the use of technologies for learning.

(Australasian Council on Open Distance and e-Learning, 2007)

Examples of Benchmarking of Courses

1. The speech pathology discipline in Australia and New Zealand identified a valid framework of student learning outcomes, threshold standards and effective strategies to benchmark against these standards that resulted in the development of a valid and reliable competency-based assessment tool called COMPASS® (McAllister et al., 2011). Competencies and level of achievement required of graduate speech pathologists are the seven Speech Pathology Competency-Based Occupational Standards – Entry Level (referred to as CBOS). Reasoning, Lifelong Learning, Communication and Professionalism were also identified by the profession as important professional capacities (McAllister, et al., 2011).

2. Communications discipline course leaders from three universities benchmarked their journalism undergraduate courses starting with a review of literature identifying streams of literature over the past fifteen years (Oliver, Bethell, Fernanadez, Harrison, & Breit, 2011).

3. A benchmarking project on archaeology courses in Australian universities paid attention to criteria developed to assess students' demonstrated understanding and skills, and the teaching and learning environment (Teaching and Learning Centre, 2008).

4. A project to benchmark assessment between three Australian universities was carefully scoped through a collaborative process checking that it was achievable and within the timeframe. The project resulted in a clear, robust framework for benchmarking assessment (Booth, et al., 2011). Statements of good practice in assessment were developed as one part of a Teaching Quality Indicators ALTC project (Davies, 2009). The format was derived from the ACODE Benchmarking Framework (Australasian Council on Open Distance and e-Learning, 2007). All three universities used self-reviews to facilitate discussion and reflection as well as to collect and evaluate data. Yet each university adopted different methodologies for the self-review (Booth, et al., 2011).

Benchmarking the Whole-of-University

The ACU University Management Benchmarking Programme, active since 1996, is used primarily, but not exclusively, for universities from the Commonwealth. It focuses on the effectiveness of university-wide processes and policies, offering a unique and cost-effective opportunity for participating universities to compare their key management processes with those in a range of other universities. This helps to identify areas for change and assists in setting targets for improvement and identifying techniques for managing change. It enables members to learn from each others' experience of difficulty and success, across international boundaries (The Association of Commonwealth Universities, 2012a).

Benchmarking University's Service Centres

Much benchmarking of ECU service centres is conducted routinely and frequently under the auspices of national and state external bodies. For example, ECU's Finance and Business Services Centre has partnered with Australian universities to benchmark procurement activities, processes, systems and staff capabilities.

Benchmarking university libraries is common practice throughout Australia (Wilson & Pitman, 2000; Wilson, et al., 2000). The CAUL Performance Indicator database enables comparisons of outcomes and encourages the sharing of good practices that led to these outcomes (Council of Australian University Librarians, 2012).

The approach to benchmarking academic development units (ADU) (e.g. ECU's Centre for Learning and Development) advocated by the Council of Australian Directors of Academic Development (CADAD) is based on collaborative peer assessment of performance in each of eight domains and sub-domains considered relevant to the particular ADU against performance indicators (Council of Australian Directors of Academic Development, 2011). The eight domains are: strategy, policy and governance; quality of learning and teaching; scholarship of learning and teaching; professional development; credit-bearing programs in higher education; curriculum development; engagement with the university's communities; and ADU effectiveness (Council of Australian Directors of Academic Development, 2011).

The Universities' HR Benchmarking Program commenced in 2004 and has attracted 38 Australian universities and 10 international universities (Australian Higher Education Industrial Association, 2012). A self-assessment tool for HR benchmarking in Australian universities has questions in a framework for recruitment and selection; performance management and development; and workforce composition and planning (Edith Cowan University, 2007).

Australian University International Directors' Forum (AUIDF) has conducted benchmarking studies annually since 2002 with all 38 members of Universities Australia involved in 2010 (Olsen, 2011). Universities are invited to participate in benchmarking ten aspects of international offices including: costs; staffing; admissions policies and procedures; student services; student mobility; recruitment costs; conversion rates (applications-offers-commencements); organisational structures; scholarships; and, accommodation.

One final example of benchmarking conducted in ECU's service centres is the Graduate Research School's benchmarking exercise with all Australian universities, looking at areas including: completion rates; years to completion; enrolment status over time-period; completion rates by broad field of education (FOE); and, course level movement. The final report on this benchmarking project was presented at the national Council of Deans and Directors of Graduate Studies in Australia (DDOGS) meeting in 2010, with support from all Australian universities to continue with the benchmarking exercise in 2011.

Table 1: Success Factors for Higher Education Benchmarking

(Booth, et al., 2011)

1. Determine which areas to benchmark
 i. Is this area aligned to strategic goals in priority areas?
 ii. Will a major project in this area deliver significant benefits relative to the costs?
 iii. Are there drivers in this area which will sustain energy for the process, and ensure that benchmarking is given priority?
 iv. Is benchmarking in this area supported at the executive level and on the ground?
 v. Are there adequate human, financial and other resources to support benchmarking in this area?

YES   NO
Continue   *Rethink*

2. Identify benchmarking partners
 i. If possible, is there a history of sharing practice and/or an established relationship to build upon?
 ii. Do the partners have compatible institutional missions, values and goals?
 iii. Is there a comparable commitment to benchmarking in this area from senior and other relevant managers of the partner institutions?
 iv. Is there a high level of trust between senior and other relevant managers of the partner institutions?
 v. Is there a shared understanding of explicit benchmarking goals?
 vi. Are all partners willing to share information and discuss successes and failures?
 vii. Are the partners similar enough to offer transferable strategies in this area?

YES   NO
Continue   *Rethink*

3. Determine types and level of benchmarking
 i. Is there broad agreement on the types of benchmarking, e.g. data-sharing, strategy-sharing, evidence-based self-review?
 ii. Is there broad agreement on the level of benchmarking (e.g. policy level, discipline level, course level, unit level)?
 iii. Is there agreement on the model that should be the basis for benchmarking? If no existing model can be used or adapted, are there sufficient resources to develop and test a suitable new model?
 iv. Is there agreement on what is and what is not to be in scope?
 v. Is the scope realistic and achievable by the participants within the anticipated timeframe?

YES   NO
Develop and sign MOU and continue   *Rethink*

4. Prepare benchmarking documents and templates including the purpose, scope of project, performance indicators, performance measures and performance data
 i. Have the indicators and measures been clearly documented and thoroughly reviewed by each university for alignment to local structures, processes and terminology?
 ii. Are the indicators and measures aligned to accepted standards and good practice across the sector?
 iii. Have participants who will be carrying out the benchmarking, e.g. Faculty and/or professional leaders, had the opportunity to provide feedback to ensure clarity and fit?

YES   NO
Continue   *Further development needed*

5. Design benchmarking process
    i.   Is there a benchmarking reference/steering group?
    ii.   Have Faculty and/or professional leaders had the opportunity to comment and contribute to the design of the process?
    iii.   Does the benchmarking process encourage:
- Engagement?
- Sharing, both within and across areas?
- Reflection?
- An evidence-based approach?
- Identification of good practice?
- Identification of areas for improvement?

    iv.   Does the choice of process align with organisational culture – for example, does it mirror other forms of scholarly collaboration (e.g. round-tables, academic committees, surveys, comments on papers)?
    v.   Does the process minimise demands on staff time?

YES   NO
Continue   *Further development needed*

6. Implement benchmarking process
    i.   Is there a communication plan?
    ii.   Have Faculty and/or professional leaders been briefed on their responsibilities?
    iii.   Is there appropriate project management?
    iv.   Are there clear expectations for deliverables and deadlines?
    v.   Is there a checking process (quality assurance)?

YES   NO
Continue   *Further development needed*

7. Review results
    i.   Have Faculty and/or professional leaders had the opportunity to contribute to the review process?
    ii.   Does the review process encourage engagement, reflection and sharing, both within and across institutions?
    iii.   Is the review process designed to produce a clear evaluation, including ratings, identification of good practice and identification of areas for improvement?
    iv.   Is the review process carried out at multiple levels, e.g. faculty level, institutional level, across institutions?

YES   NO
Continue   *Further development needed*

8. Communicate results and recommendations
    i.   Do reports clearly identify good practice, standard practice and recommendations for improvement for each university?
    ii.   Within each university, is there a consultation process to obtain agreement on recommendations, e.g. through management and committee structures?
    iii.   Were participants acknowledged and thanked?
    iv.   Is there a process for sharing the benchmarking methodology and lessons learned with other areas of the university?

YES   NO
Continue   *Further development needed*

9. Implement improvement strategies

   i.   Are there clearly assigned responsibilities for implementing the recommended improvements?
   ii.   Have future collaborations between the universities been agreed, where this would assist improvements?
   iii. Is there a process for monitoring and reporting on the implementation of recommended improvements and their effectiveness?

YES   NO
Continue   *Further development needed*

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