

Student Information

Student Name:

ID-Number:

Title Project:

TU/e First Assessor Name:

Second Assessor:

Internship PhD: *if relevant*

Final Report Grade:
in 0.1 grades

Signatures

Only sign the form when it is complete. Do not make any further changes after signing.

Signature Second Assessor

USER MANUAL OF THE BEP RUBRIC

Ideally, the bachelor end project (BEP) should demonstrate that a student has achieved all the learning goals of Sustainable Innovation (SI) bachelor programme at a sufficient level before awarding the diploma. This way the quality of the student and the value of the SI bachelor diploma can be guaranteed. However, the learning outcomes of the SI programme are phrased in terms of ACQA competences, whereas main deliverable is the bachelor thesis, which should meet scientific standards. This rubric for the bachelor end project (BEP) thesis is designed to make the relation between the two as explicit and transparent as possible.

The rubric is designed with the following goals in mind:

- The rubric makes sure that all learning outcomes are represented in the form of ACQA competences, while still being as concise as possible.
- In addition, the relation between the actual deliverables of the BEP is made explicit by listing the features of the bachelor thesis, the writing skills and process that can be used to assess a given competence (first column).
- By making the criteria for grading explicit, the assessments from different teachers should be more homogeneous and counteract different practices. It should be easier to assess a given bachelor thesis. Given that there is a wide variety between research topics of the BEP, the criteria for excellence should NOT be read as an exhaustive list, but as guidelines for interpreting the more abstract competences.
- The rubric is a formative feedback instrument that teachers can use to give feedback about the performance of the student. Each competence can be rated from Failed, via Insufficient to Excellent.
- The comment boxes are crucial for explaining why a certain competence was rated high or low. Providing comments is therefore mandatory.
- The rubric can also be used as a summative grading instrument. Both the first assessor and second assessor can assign partial grades.
- The rubric for the intermediate report is used in an extended form for the assessment of the final report.

Usage:

- Second assessor assesses report/project by means of the form for the second assessor (this form).
- First assessor assesses report/project by means of the form for the first assessor (not this form).
- Second assessor sends the assessment form (this form) to the first assessor.
- First assessor completes the form of the first assessor and sends both forms to the CSA IEIS (CSA.IEIS@tue.nl).

A. Quality Problem Identification and Theoretical Framework

	1-4	5	6	7	8	9-10
Research problem, research aim and question, scientific and societal relevance	The research problem does not concern a socio-technical issue and is not related to sustainability/sustainable innovation. There is no or poor description of the research problem leading to a clear problem statement. There is no relation to the research question/aim or the literature does not match the problem, relevance of the research is not clear.	The research problem concerns a socio-technical issue and is related to sustainability/sustainable innovation. Limited description of the research problem. There is no relation to the research question/aim or the literature does not match the problem, relevance of the research is not clear.	The research problem concerns a socio-technical issue and is related to sustainability/sustainable innovation. There is a broad research problem and it is connected with relevant literature to the research question/aim. The relevance of the research is described.	The research problem concerns a socio-technical issue and is related to sustainability/sustainable innovation. There is a clear research problem and it is connected to the research question/aim. The relevance of the research is described. Gap in the literature is identified.	The research problem concerns a socio-technical issue and is related to sustainability/sustainable innovation. There is a clear and concise research problem which is clearly connected to the research question/aim; the relevance of the research is substantiated. Scope and boundaries of the research are well defined.	The research problem concerns a socio-technical issue and is related to sustainability/sustainable innovation. There is a clear, concise and original research problem which is clearly connected to the research question/aim. The student substantiates the scientific and societal relevance of the research. Scope and boundaries of the research are well defined (boundaries).

A. Quality Problem Identification and Theoretical Framework

	1-4	5	6	7	8	9-10
Description of relevant literature	A review of the relevant literature is missing, incomplete or unclear.	Review of the relevant literature is incomplete or unclear.	The relevant literature is described	The relevant literature is described, connected to the research aim	Thesis contains critical review of relevant literature, connected to the research aim.	Thesis contains critical review of relevant literature and connects to ongoing debates and the research aim.

Relevant theories and key concepts	Role of theory is not clear. Literature used is (partly) irrelevant and/or insufficient to answer the research question. And/or, theoretical concepts are misunderstood	Role of theory is insufficiently clear. Literature is only partially relevant. And/or, theoretical concepts are misunderstood	The main theoretical concepts and their relations are clearly defined and linked to the research question/ aim and literatures. Theoretical concepts are understood and application is sufficient	The main theoretical concepts and their relations are clearly defined and linked to the research question/ aim and literatures. Theoretical concepts are understood and application is sufficient to good.	The research question/ aim is reformulated in theoretical terms. The main theoretical concepts and their relations are clearly defined and connected to literatures. Theoretical concepts are understood and application is good.	The research question/ aim is reformulated in theoretical terms. The main theoretical concepts and their relations are clearly defined and connected to relevant literatures and theoretical debates. Theoretical concepts are understood and application is excellent / original.
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Grade Part A	Explanation (obligatory)

B. Quality of Research Methods

	1-4	5	6	7	8	9-10
Scientific approach	The chosen research method(s) do not correspond (well) to the problem statement. No structured description (reproducible steps) of the research method.	Most of the chosen research method(s) and instruments do not correspond well to the problem statement. No structured description (reproducible steps) of the research method.	The research approach is mostly adequate (one or more suitable research methods) corresponding to the problem statement. The steps of the research method are listed.	The research approach is adequate. The chosen research method(s) and instruments correspond to the problem statement and are based on literature. Steps of research method are listed and basically explained. Validity of research approach is discussed. Researcher shows sufficient scientific attitude (applying (inter)disciplinary literatures, concepts and methodes)	The research approach is adequate. The chosen research method(s) and instruments correspond to the problem statement and are based on literature. The chosen research approach is justified by the student. Steps of research method are listed and explained in detail. Validity of research approach is critically discussed. Researcher shows good scientific attitude (applying (inter) disciplinary literatures, concepts and methodes)	The research approach is adequate and thoroughly considered. Choices are clearly justified from the perspective of the problem statement and literature. The research approach stands out because of originality and/or complexity. Steps of the research method are listed and explained in detail. Validity of research approach is critically discussed. Researcher has an excellent scientific attitude (applying (inter)disciplinary literatures, concepts and methodes)

Grade Part B

Explanation (obligatory)

C. Quality of Research Execution

	1-4	5	6	7	8	9-10
Data Collection and Data Management	The student was not able to collect data and/or process data or the collection of data is too limited.	The collection of data is too limited and/ or there are doubts about the validity and reliability of the data, prompted by the unclear or incorrect way in which the student acquired and/ or processed the data (not transparent)	The collection of data is sufficient but minimal. There is sufficient faith in the validity and reliability of data and its processing (most times transparent).	The collection of data is sufficient. There is sufficient faith in the validity and reliability of data and its processing (always transparent).	The collection of data is substantial. There is faith in the validity and reliability of the data and its processing (transparent), based on an adequate justification.	Extensive data collection. The acquisition of the data took place in an adequate fashion. The way in which the data have been processed has been meticulously documented and justified.

Data analysis and results	No or limited analysis and/or interpretation. Claims cannot be checked. There is no or limited description of the research results or the presented results do not logically follow from analysis.	Results follow broadly from analysis but without interpretation.	Correct analysis. Results follow from analysis. Analysis and interpretation are superficial	Correct analysis. Results follow logically from analysis. Results are presented clearly and organized, factual and with interpretations.	Correct and thorough analyses of the data. Results follow logically from analysis. The results are presented clear and well-organized, factual and with interpretations. and presented in relation with research questions.	Advanced and original analyses of the data. The results follow logically from analysis. The results are presented are clear, very well- organized (emphasizing the essence of the research) and factual. The meaning of the results is described and explained in detail. Tables and figures are well integrated in the line of argumentation. Critical reflection on results and the relation between concepts.
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Grade Part C	Explanation (obligatory)

D. Quality of The Conclusion and Discussion

	1-4	5	6	7	8	9-10
Conclusions and implications	No or (very) weak conclusions. Not based on data analysis and not linked to the research questions. Or conclusions are drawn providing only partial answers to the research question, repeat results or are not substantiated by results or relevant literature.	Some conclusions are drawn providing only partial answers to the research question. Conclusions merely repeat results or conclusions are not substantiated by results or relevant literature.	Conclusions are based on analysis and linked to the research questions. The research questions are answered.	Conclusions are based on analysis, linked to the research questions, and substantiated by results and relevant literature.	Conclusions are based on analysis, clearly linked to the research questions, and well substantiated by results and relevant literature. Conclusions are formulated exactly. Scientific relevance is addressed. Strategic and/or policy implications are formulated.	Conclusions are based on analysis and clearly linked to the research questions. Conclusions very well substantiated by results and relevant literature on a higher level. Results are positioned in broader debates in innovation studies literature. Conclusions are formulated exactly and concise, grouped in a logical way. Identifies the scientific contribution of the research as well as strategic and/or policy implications.

Recommendations	No or unsupported recommendations.	Recommendations are too limited and/or the presented recommendations do not logically follow from results.	Recommendations are sufficient, but are superficial. Recommendations follow from results.	Recommendations are clear and follow logically from results. Recommendations are superficially linked to the scientific debates in innovation studies literature or to the strategic and/or policy implications mentioned in the conclusion.	Clear, well-formulated, and advanced recommendations. Recommendations follow logically from results. Recommendations are linked to the scientific debates in innovation studies literature or to the strategic and/or policy implications mentioned in the conclusion.	Recommendations are well-formulated, advanced and original. Recommendations follow logically from results. Recommendations are linked to the scientific debates in innovation studies literature and to the strategic and/or policy implications mentioned in the conclusion.
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D. Quality of The Conclusion and Discussion

	1-4	5	6	7	8	9-10
Critical reflection on the research performed	No critical reflection on the research. Reflection only touches trivial or very general points of criticism. Or student identifies only some possible strengths and weaknesses and/or points at strengths and weaknesses which are in reality irrelevant or non-existent	Student identifies only some possible strengths and weaknesses and/or points at strengths and weaknesses which are in reality irrelevant or non-existent	Student indicates main strengths and weaknesses in the research.	Student indicates main strengths and weaknesses in the research and is able to weigh their impact on the main results relative to each other.	Student indicates all strengths and weaknesses in the research and weighs them relative to each other. Furthermore, (better) alternatives for the research methods used are indicated. The student reflects on how technical and social science knowledge integration contributed to results.	Student is not only able to identify all possible strengths and weaknesses in the research, but is also able to indicate which strengths and weaknesses affect the conclusions the most. Student indicates all strengths and weaknesses in the research and weighs them relative to each other. Furthermore, (better) alternatives for the research methods used and suggestions for future research are indicated. The student reflects on how technical and social science knowledge integration contributed to results.

Grade Part D

Explanation (obligatory)

Proceed to the next page.

Finalisation

Final Comments

Grade Final Report*

First print this form and then sign it. Afterwards, scan the signed document and e-mail to the **first assessor**.

* Please fill in the grade of the final report manually. This grade is based on the grades of block A, B, C and D, taking into account the phase of the project. This grade is not necessarily a calculated average of the grades of block A, B, C and D. Add Final comments to clarify possible differences.

Note: Grade Final Report is expressed in 0.1 grades and is an advice to the first assessor.

This is the end of the Bachelor's End Project (BEP) Final Evaluation Form.