HERE seminar "Implementing Research Based Education"
Venue: Rectorate of the University of Montenegro
November 26, 2015
DRAFT AGENDA

9.00-9.30 Registration of participants
9.30–9.45 Opening session

- prof. Radmila Vojvodić, rector of the University of Montenegro, tbc
- Ministry of Education

9.45-10.00 The role of HERE team in HE reforms in Montenegro, Franco Burgio, Programme Manager, EACEA
10.00–10.15 Research-based education at te UoM, current state of play, prof. Maja Bacovic, Vice/Rector of UoM and HERE representative
10.15–11.00 What is researched-based education and why is it important for HE development, Wolfgang Deicke, academic expert, Humboldt University, Berlin
11.00–11.30 Discussion
11.30-11.45 Coffee break
11.45–12.30 Developing institutional strategies for research based education, Wolfgang Deicke, academic expert, Humboldt University, Berlin
12.30-13.10 The vision of research-based education at the University of Montenegro in various areas:

- Social Sciences - prof. Sasa Milic, University of Montenegro, Faculty of Philosophy, HERE member
- Natural Sciences – prof. Vladimir Pešić, University of Montenegro, Faculty of Natural Sciences and Mathematics
- Technical Sciences – prof. Mira Vukčević, University of Montenegro Faculty of Metalurgy and Techonology, HERE member
- Humanities – PhD Vanja Vukićević, University of Montenegro, Faculty of Philosophy

13.00–13.15 Students' expectations from reserch based education, and their role in the overall process, Milos Pavicevic, President of Student Parliament of UoM, HERE member
13.15-13.30 Experience of the WB region in implementing reseasrch based education (tbc)
13.30-14.00 Discussion
14.00–15.00 Lunch break
15.00-15.45 Presentations of the case studies, Wolfgang Deicke, academic expert, Humboldt University, Berlin
15.45-16.30 Discussion
16.30-17.00 Conclusions and recommendation from the Seminar

Background information

Two initial disclaimers are in order: First, there is - to date - no single agreed definition of what research-based education entails and how it relates to a range of other terms (e.g. research-oriented learning, undergraduate research, problem based learning, evidence based learning, independent inquiry, service learning to name but a few). Secondly, while there are some good articles around and related pedagogic approaches, they remain largely theoretical in terms of their content: while they outline the aims and supposed strengths of RBL and other active pedagogies, these claims are rarely substantiated by research.

What research-based learning shares with other pedagogic approaches from problem-based through to service learning is that it is an **active pedagogic approach**. It seeks to activate the students, to shift the emphasis from teaching (transmission of knowledge from teacher to student) to learning (active participation of the student in the acquisition of knowledge). Where research-based learning differs from other forms of active pedagogy – to our mind at least – is in its ultimate goal: research-based learning is an active pedagogic approach that seeks to prepare students for research, that is: for scientific careers in their chosen fields. Students may also acquire a whole range of other subject and transferable skills (time-management, project management, teamwork, decision-making, etc.) but these are secondary to the goal of training students to become competent researchers in their own fields.

> Suggestion for a working definition: ***Research-based learning seeks to create research opportunities for (undergraduate) students with a view to enable them to develop their research competencies early on in their academic careers by being able to carry out an independent piece of research*** and experience a complete research cycle (from the development of a research question and an appropriate research design to the presentation of the results and a reflection on the research process).

Understood in this narrow sense, research-based learning is distinct for other forms of linking research and teaching, in that its primary purpose is ***to train students to become independent researchers***. In the German literature on research-based learning, there is an ongoing dispute whether. For example, we can ask students to carry out a literature review to get them to engage with state-of the art research in their chosen subject; we can get them to identify an appropriate method for answering a given research question; we can get them to reflect on the strengths and weaknesses of the research design in an existing study. We can get them to analyse data in order to practice data analysis and to develop their analytical skills. All of these are useful - and indeed necessary – steps in research training, but they just that: necessary steps towards independent

research. The aim in these activities is primarily for the students to obtain a better understanding of their subject or to develop the methodological and analytical skills required to conduct research independently.

In other words: a carefully constructed curriculum *aimed at training future researchers* needs to engage students in research and support the development of the required knowledge and skills in a number of different ways *before* students are given the opportunity to carry out their own projects. How this is best achieved will vary between the academic disciplines (the Arts, Natural Sciences, Social Sciences, Humanities and Medicine) and between subjects within them, depending on how they define research and what methodological training/theoretical knowledge they require.

Conversely, various types of research-related training can be used to get students to engage more actively with their subject and to develop cognitive (e.g. analytical, reflective, decision-making, independent study competences), social (e.g. teamwork, time- and project-management) and professional skills (e.g. presentation, negotiation, leadership) that are also *important for graduate careers outside of academia*. While research-based learning can contribute to developing these skills, there are alternative forms of active (research-related) pedagogy which arguably do this just as well and may be better suited for different contexts. Table 1 below identifies some alternative approaches to creating active and student-centred approaches to learning and curriculum enhancement.

Learning outcomes:

The expert is expected to give his view on the research-led education, its implications on teaching and students` role in the process. The experts are also expected to give suggestions that can contribute to the development of research-based education policies in Montenegro. It may be a platform for creating measures and mechanisms for enabling research-based education be introduced at the level of different disciplines.
Target groups: Higher Education Reform Experts, University professors from all three universities, representatives of the Ministry of Education, rectors, vice-rectors, deans and vice-deans, director of Center for Doctoral Studies, Director of QA center, students` representatives...

Background documents:

A key text and good starting point in the English-language literature is Mick Healey's 'Linking Research and Teaching: exploring disciplinary spaces and the role of inquiry-based learning'

http://delta.wisc.edu/events/bbb%20balance%20healey.pdf (2005). This article seeks to investigate and systematise different possible links between research and teaching in various academic disciplines. To this end, Healy develops a four field matrix (a quadrant) that distinguishes between research-led, research-oriented, research-tutored and research-based formats of learning (2005: 3, 14, Figure 2). These distinctions are not without their problems, but as most current arguments and projects around RBL refer to this matrix (see Leeds in 2.1. below) or draw on it in some form, the article really falls into the category of required reading.

A second useful article is Rachel Spronken-Smith and Rebecca Walker's article **'Can inquiry-based learning strengthen the links between teaching and disciplinary research?' (2010) .** In this paper – one of the few empirical investigation of RBL-based calss designs – the authors investigate and present three different formats of undergraduate inquiry based classes (‚structured inquiry', ‚guided inquiry' and ‚open inquiry'). The three classes used as case studies here are also instructive in demonstrating why learner independence matters and how it can be regulated. The paper is recommended reading but not freely available.