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OUTCOMES FOR THE EDUCATION OF PROFESSIONAL REFLECTIVE PRACTITIONERS

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Using the following educational model as a basis for design, a MF program that substantially differs from traditional ones is being developed at the University of New Brunswick.

Student \longrightarrow *Education Program* \longrightarrow *Outcomes*

The model states that outcomes are the result of the educational program imposed upon and in interaction with the student. In education design, the model is purposely used to devise an appropriate education program given a description of the student (the system “input”) and a set of desired outcomes (the system “output”). This presentation describes the desired set of ‘outcomes’ which can be used to develop a masters of forestry program.

Outcomes refer to the things students need to know and be able to do. How outcomes are described influences the nature of both the learning program which students will follow, and the assessment approach used to evaluate their ability to achieve the outcomes. In terms of professional practice, explicitly defined outcomes ensure education is relevant because they describe what practitioners need to be able to do. In traditional systems, outcomes are usually loosely defined, focussing either on technical issues students need to know about, or general characteristics under which they need to work. Consequently, student performance is assessed in comparison to peers rather than against absolute standards.

In the program being developed at UNB, outcomes are explicitly described and form the basis for learning and evaluation. A hierarchical framework is used to ensure relevance and track continuity between levels within the hierarchy. The highest level or goal of the program is reflective professional forestry practice. Professional practitioners exhibit a set of qualities and abilities which comprise the second level. Qualities describe attitudes and general qualities including ‘adaptability and versatility, reflection, thoughtfulness, excellence etc.’ These are indirectly incorporated in the program through the choice of problems, learning structures, and through direct and indirect interaction with students. Abilities describe the specific skill and knowledge areas required for effective professional practice. There are both technical (e.g., silviculture design) and generic professional abilities such as structured problem solving, analysing valuing and decision making, social interaction, formal communication, teaching learning and leading, and effective citizenship. At the next hierarchical step, a set of performance indicators is described which guides student learning is directed and evaluation.

Within forestry, explicit description of desired outcomes is in its early stages. The set presented in this paper will hopefully stimulate discussion and enhance development of professional education systems.