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Erindi flutt við doktorsvörn 28. júní 2013

Þann 28. júní varði ég doktorsritgerð við Menntavísindasvið Háskóla Íslands. Við það tækifæri flutti ég eftirfarandi ávarp. Þar sem „...“ er innan hornklofa bætti ég við nokkrum orðum sem ekki voru skrifuð fyrirfram og ég man ekki nákvæmlega hver voru.

1. My work and how it began

President of the School of education professor Jón Torfi Jónasson, external examiner professor Jan van den Akker, external examiner professor Guðmundur Heiðar Frímannsson, dear guests!

[...]

I am a principal of a comprehensive secondary school since summer 2011. Before that I was the vice-principal of the same school for ten years and before that a teacher for fifteen years.

One of my responsibilities as vice-principal from 2001 until 2011 was to edit the school curriculum guide, and update it to implement demands made by the ministry of education.

During these years, I sometimes found the requirements made by the ministry not only hard to work towards in any honest way but also hard to understand. I had, for instance, problems with the general and over-arching aims listed in the general section of the National Curriculum Guide for secondary schools from 1999. I also had problems with subject-specific aims, not really understanding what role they were supposed to play.

In May 2011, the Ministry of Education issued a new National Curriculum Guide for secondary schools. According to this publication, secondary schools are required to organise each course or module for the attainment of specific types of aims, namely the knowledge, skills, and competences that students are supposed to acquire.

When I heard about these requirements in the spring of 2009, more than two years before their actual publication in 2011, my first thought was that they were not realistic.

The work on my PhD dissertation began when I started trying to explain why important parts of school education could not be organized to achieve aims of these three types. My dissertation is thus reactions of a perplexed school-head to the demands made by the national curriculum guide for secondary schools published in spring 2011.

I soon realised that this national curriculum guide exemplifies a tradition that has been dominant in curriculum design for a long time. My first task was to understand this tradition.

2. From Bobbitt to Bologna

The dominant tradition in curriculum theory in the latter half of the twentieth century was initiated in the United States with the publication of a book entitled *The Curriculum* by John Franklin Bobbitt. This was almost one hundred years ago, in 1918. In this book Bobbitt argued that curriculum design and development should use rigorous scientific methodology to derive the content and the methods of instruction from clearly stated educational aims. Bobbitt set his ideas forth in opposition to the romantic ideals of the nineteenth century, saying:

We have aimed at a vague culture, an ill-defined discipline, a nebulous harmonious development of the individual, an indefinite moral character building, an unparticularized social efficiency [...]. But the era of contentment with large, undefined purposes is rapidly passing. An age of science is demanding exactness and particularity.

Bobbitt's views did not however become dominant until much later, after Ralph Tyler's *Basic principles of curriculum and instruction* was published in 1949. After that the tradition was developed further by other curriculum theorists in the United States. The most important ones were probably Benjamin S. Bloom and Hilda Taba. Since then it has also been influential in Europe and in recent years, it has been largely incorporated into the so called Bologna process. In my work I extract the core elements from this tradition and argue that even though it is not uniform it has nevertheless been consistent in maintaining three core tenets:

1. What schools teach ought to be stated clearly and exactly as a list of educational objectives.

2. School curricula should be designed as experiences that make students attain educational objectives.
3. Educational objectives should be learner-centred, i.e. statements of changes that take place in students.

It is hard to criticise this tradition because its core tenets are commonly presented as common sense – something beyond dispute and beyond reproach. It is trivially true that any worthwhile activity has an aim of some sort because whatever makes it worthwhile can be described as an aim. Do the three core tenets not follow from this trivial truth, granted we may call the aims of education *objectives*?

To show that they do not – and to show that the three core tenets are not as innocent as they may appear to be at first sight – I analysed the concept of aims.

3. The five distinctions

The most important part of my work is an analysis of different ways in which actions relate to their aims, objectives, goals or purposes. It took me about two years to find out that behind talk about aims and purposes there are many different ways in which what we do relates to what we try to bring about. I ended up making five different distinctions.

Five distinctions	Left column		Right column
Distinction 1:	Causation	versus	Subsumption
Distinction 2:	Extrinsic	versus	Intrinsic
Distinction 3:	Independent of context	versus	Dependent on context
Distinction 4:	Objectives	versus	Ideals
Distinction 5:	Principles of design	versus	Principles of reform

These distinctions are between:

1. Causation and subsumption, that is between things, events, or states of affairs, created or causally brought about by the means and aims that are constituted by the means. This distinction between causation and subsumption is needed to account for the aims of

education because learning can both cause what is sought, and, be constitutive of worthwhile aims since trying to, say, understand a work of literature is both a means to becoming better educated and constitutive of being an educated person. The core tenets of the dominant view invite us to see educational aims as changes in students that are caused by educational experiences. This is however not true of all educational aims.

2. Extrinsic aims that are contingently related to the means and intrinsic aims that follow logically from the means. Education has intrinsic aims like acquiring intellectual virtues such as critical thinking. These intrinsic aims follow from the very concept of education. Education may also be instrumental to purposes that are not logically related to the concept of education, such as a stable political order or economic growth.
3. Aims that are independent of any specific context and aims that are dependent on, or only comprehensible within, a specific context. Aims within contexts such as sports, academic disciplines, categories of art, or hobbies, such as, say, gardening, often have a life of their own. Attempts to fit them into a hierarchy with more overarching aims at the top are, in some cases at least, bound to be strained and stilted. Thinking of sports as subservient to aims having to do with health, for instance, does not capture what is so important about football. Likewise, conceiving of music and mathematics, or other comparably rich traditions, as merely subservient to something described in general terms as, say, human happiness or flourishing does no justice to what people working within these fields really care for. To account for what is important about gardening, football, music, or mathematics, one needs to understand these activities from within and acknowledge aims that are only comprehensible within a context.
4. Objectives that can be reached and ideals that people can work towards, although the task cannot be completed. I will say more about this fourth distinction in a moment.
5. Aims as principles of design and aims as principles of reform. Curriculum design, like any other activity, can relate to aims in different ways. It is aims-based in the strongest sense if it is derived from previously specified aims or designed to meet them. It is aims-based in a weaker sense if it evolved more or less independently of the aims though each part of it can, however, be justified by appeal to them. The relation is still weaker if the aims are to some

extent adjusted to the curriculum, or if aims that are not feasible within existing school traditions are excluded or cast aside. On one end of the scale, we have educational aims as principles of design, aims that are specified before any decisions are made about what subjects to teach or how schooling is to be organised and then used to determine each detail of the curriculum. On the other end, we have aims as principles of reform, i.e., aims that guide piecemeal reform of previously existing traditions. In between these two extremes, there are various intermediate possibilities.

This fivefold classification is not meant to be exhaustive or to exclude other criteria for sorting or categorising aims. I only claim that my five distinctions are independent of each other and they are all relevant to understanding what is involved in talk about aims of education. When I say they are independent of each other I mean a single aim can belong to the left column of some lines in the table and the right column of other lines. (For comparison think of sorting cars into those with diesel engines and those with gasoline engines. That is independent of sorting them into those with manual transmission and those with automatic transmission.)

The gist of my argument against the dominant view is that it focuses exclusively on the types listed in the left column but education cannot do without some aims of the types listed in the right column.

Focusing exclusively on the left column involves conceiving of the aims of education as states of affairs that:

- Are specified antecedent to and independently of the choice of means to reach them (distinction 5);
- Can be fully realised (distinction 4);
- Are part of a hierarchy with overarching aims at the top (distinction 3);
- Are causally brought about (distinction 1);
- Are brought about by means that are extrinsic to (or logically independent of) them (distinction 2).

I do not have time here to explain all my five distinctions in detail so I will let it do to say a few words about one of them, namely distinction number four. I will also briefly explain how I used it to criticise the second core tenet of the dominant view. That is to say, I will explain

How I used

The distinction between objectives that can be reached and ideals that people can work towards, although the task cannot be completed

to criticise

The view that school curricula should be designed as experiences that make students attain educational objectives.

4. We need large undefined purposes

My fourth distinction is between objectives that can be reached and ideals that people can work towards although the task cannot be completed. Going for a swim this afternoon, painting the kitchen, and taking a walk together next Sunday are aims of the first type. Staying healthy, keeping a beautiful home, and having a happy marriage are lifelong tasks of the second type.

Educational aims defined in terms of behaviour typically belong to the first category. Learning to use Newton's inverse square law to calculate the gravitational force between two masses may be understood as an objective in this sense. But, if we aim at understanding we are seeking something that cannot be conclusively reached.

When has a student understood gravity: When she has learned to do simple calculations based on Newton's formula? Is able to explain how massive objects affect space-time? Has mastered the concepts used to describe black holes? Knows what the long search for the Higgs boson was all about? Can participate in debates about the differences between gravity and the other fundamental forces of nature? Understanding gravity is an endeavour, which, arguably, cannot be completed. It is open-ended.

Memorising formulae, like the inverse square law, is worth something, provided we are trying to understand nature. Without such aspiration, it becomes pointless. Likewise, going for a

swim, painting the kitchen, or taking a walk together is desirable if we want to stay healthy, keep a beautiful home, or have a happy marriage. In all these examples the ideals are important, something we are, rightly, reluctant to abandon or revise. Relative to them, the objectives are less important. If it rains, a couple should be happy to give up an aim like going for a walk together and go, say, to the movies instead. Abandoning an ideal or open aim, like a happy marriage or staying healthy is something much more serious. Likewise, the endeavour to understand nature is more important educationally than specific learning objectives such as memorising this fact rather than that.

Without ideals, like understanding the laws of nature, objectives, like learning to use the inverse square law, become pointless. Therefore aims of the type I call ideals, are needed to make learning meaningful.

Educational ideals, like the example from physics I have mentioned above, are not only impossible to complete, but, in some cases, it is also impossible to tell how far one has advanced towards them.

From this, it follows that some of the most important aims of education, the aims we should cherish the most are aims that cannot be reached. It is therefore not true that school curricula should be designed as experiences that make students attain educational objectives. Some parts of a good curriculum should rather be designed as experiences that encourage students to seek educational ideals. Such aims are what Bobbitt called 'large undefined purposes.' The dominant tradition of curriculum design has neglected or rejected such aims.

5. What I would like to do next

I hope this short account gives you some idea of my work during the last four years. The dissertation I defend today consists of six papers and a monograph. I have also published two additional papers in peer reviewed journals that are closely related to my dissertation though they are not formally a part of it.

I have enjoyed this work and I am grateful to all those who helped my, especially my supervisors, Dr. Kristján Kristjánsson and Dr. Ingólfur Ásgeir Jóhannesson.

[...]

I want to continue my research on educational aims and hope I will have time to do than in years to come. One of the questions I would like to tackle next is to what extent my defence of 'large undefined purposes' is a revival of nineteenth century romanticism.

[...]