L2): The Coherent Sequencing of the Curriculum Content. By Dr Robert Rose

As we saw from the Legal Framework, summarised in L1b, one of the questions that can arise concerning the individual years of the sub phases is the ***coherence*** and ***sequencing*** of the main lesson ***content*** with regard to their ***aims***: what are they and in what order could the teacher arrange the lesson blocks? The difficulty is that these are different in each of the phases. As we will see, however, there is a principled coherence and sequencing to the Waldorf curriculum that is derived from Steiner's philosophy of child development (ontogeny) and pedagogy.

If we focus for the moment on the main lesson blocks, previously we presented sub phase 1 of main phase 2 as if there were many differentiated subjects within it. However, the standard curriculum is normally described as having only three topics: Literature/Literacy, Mathematics and Home Environment. This leaves the teacher with the problem of how to create a differentiated curriculum thus avoiding a good degree of uninteresting sameness with the consequence of poor learning.

As we have seen though, Steiner frequently made the case that any subject could be taught in any sub-phase so long as the age appropriate methodology is used. This raises some very interesting questions concerning a more differentiated approach to sub phase 1 subjects or indeed those of sub phase 2. It might be possible then in the design of a curriculum to import the more specific topics from the later sub phases and metamorphose them in accordance with the age of the child.

The Yearly Sequence and the Lower School Time Period

In other words:

In this section we will explore the proposal that the essential pattern and coherent sequencing within each individual year can be derived from a consideration across the totality of the second major phase provided that the age phase appropriate pedagogy is used .

For sub phase 1, some possibilities are depicted in the slide below.

The Evolving Education: Main Lessons	Sub-Phase 1 Learning Method: **Imaginative Anthropomorphisms** Classes 1 - 3
English, Literature, Drama	English Literacy, Literature and Language through Imaginative Stories
History	History in Imaginative Story Form
Geography	Home Environment:
Nature Studies: Human, Animal, Plant & Environment	1) Geography through stories 2) Plant and Animal studies through Anthropomorphisms. 3) Foundations of Agriculture through experience and stories.
The Physical World: Physics, Chemistry, Technology. Building	4) House Building through experience and stories. 5) The Physical World through Imaginative stories and Experience
Mathematics	Mathematics through Imaginative Stories

In many circumstances, in this sub phase 1, the identified topics are not introduced as separate main lessons. As we have seen though in previous modules, all subjects may be taught at any time so long as they are done in the teaching method, or pedagogical form, appropriate for the age. In the case shown, this pedagogical form is the **imaginative anthropomorphism**. Also, as we have observed in previous modules, this pedagogical form should **not** override the **essential curriculum content** that is to be learned, each subject needs to be determined as to the nature of its essential content and the learning goals associated with it. The pedagogical form in this sense is a process of adapting this content to the developing nature of the child and thereby supporting it. For example, mathematics may be taught to the children in this age using imaginative anthropomorphisms, but the content of what is taught needs to be true to the nature of mathematics and not be overridden by the anthropomorphism. This follows for all subjects.

Bearing this in mind as a possibility, the question of sequencing of the **content** of the curriculum still remains. So, if all subjects can be taught in principle in any sub phase, whilst adhering to the age related pedagogy, we can explore the question of sequencing across the **whole** of major phase 2. This may guide us to an understanding of curriculum sequencing generally.

In the following, in order to make the exploration of our design principles, we will consider Waldorf Education as having six types of main lessons across the lower school. A practicing teacher may, of course, divide the year differently, perhaps into 7 or 8 main lessons, etc. The point being here though that we need a starting point for the analysis; and as we have seen in previous modules that when the reality of the World is "divided" up and taught as curriculum subjects, then seven foundational topics arise, but the spiritual and moral topic is integrated making six. In practice, a teacher is free to divide up the topics in accord with their own insight and reason. Next, we consider a rationale for the coherent sequencing of these possible six main lessons in accordance with Steiner / Waldorf educational philosophy. Moreover, as we will see shortly: ***Proceeding from the human soul and spirit in language and mathematics, there is then a coherent sequence on to the studies of human physiology in contrast with animals, then carrying on with the analytic process we arrive at plant then mineral & physical studies. Then through synthesis, we arrive at the human realms of history and the global geography of the social life: the economy, the rights life and the culture / spiritual sphere.***

Literature and Mathematics as Starting Points

In most cases, from practical point of view, teaching in Steiner Waldorf settings begins with the language-literature-literacy complex. On a deep level, language, literature and literacy are distinctive of what Waldorf Education calls the human spirit and soul. The human being is unique in nature to have an expressive and creative language. Through it we can imaginatively describe the reality of the World as well as how it can be imagined to be. It can also express our thoughts, feelings and actions, in this sense it becomes the expression of the inner human being in the outer World. Language also creates the uniquely human bridge between the actual and the possible. *These notions link well with Steiner's idea that the first sub-phase of child development needs a pedagogical form derived from human nature which then evolves towards the other kingdoms of nature*.

There is also a pragmatic justification for this starting point: all learning in schools occurs through a solid foundation in language-literature-literacy. This means that all other subject topics are dependent on it for them to be learned, somewhat like a house is dependent on the foundations upon which it is built. Without a good foundation in language-literature-literacy all other subjects become very difficult, if not impossible.

In addition, language-literature-literacy education also evolves through being interlaced with other subjects. So for example, new words and sentence formations are, or can be, introduced in the different subjects. This can so be arranged across the sub phases and within each year.

A similar argument could be made for mathematics. On the one hand, mathematics describes the most general aspect of human and World physical body existence. In counting, arithmetic and geometry the human being can experience its physicality in relationship to that of the World. On the other hand, mathematics is also a unique human activity. In its relatively abstract nature, it also represents a high level of human thought, even in something as basic as counting. Mathematics from this perspective emerges from the spiritual-soul aspects of human nature and thus also links to the first sub phase of child development within the second major phase: ***the human centred mode of understanding***.

This subject would normally follow literacy as a natural sequence as good language-literature-literacy is needed to learn mathematics. On the other hand, mathematics can be related to any other subject and also be further developed there.

It is feasible therefore to have literacy and mathematics as the first two main lessons respectively. But what about the others?

From the Human Being to the Animal

Take an example we have seen in module 6. For Steiner, the **starting point** for nature education is the human being. In fact, he made the case that the **"Human Being is the *synthesis* of the other three kingdoms of nature to a higher level"**. The Education needs to be organised around this principle:

"It is enormously important to know that the aim in teaching the children about natural history will be completely subverted if we do not **start** these natural history lessons by describing the **human being**. You may say quite rightly that there is not much you can tell nine-year-old children about the natural history of the human being. But however little it may be, you must present it to them as a ***preparation* for all your other natural history lessons**. When you give such lessons, you must be clear that the human being represents a **synthesis**, a bringing together of the **three kingdoms of nature**, that the three kingdoms of nature are united in the human being at a **higher level**... By letting the concept arise out of the form, we teach the children as much as possible about the **natural history** of the human being. And **only then** do we continue with the rest of natural history, **first** to the animal kingdom." Steiner, R (1919): Practical Advice to Teachers, Anthroposophic Press, p. 92. (My bold and italics)

In this case then, the teaching sequence is **first** the human being, **then** the animal.

Plant Studies to follow Animal Studies

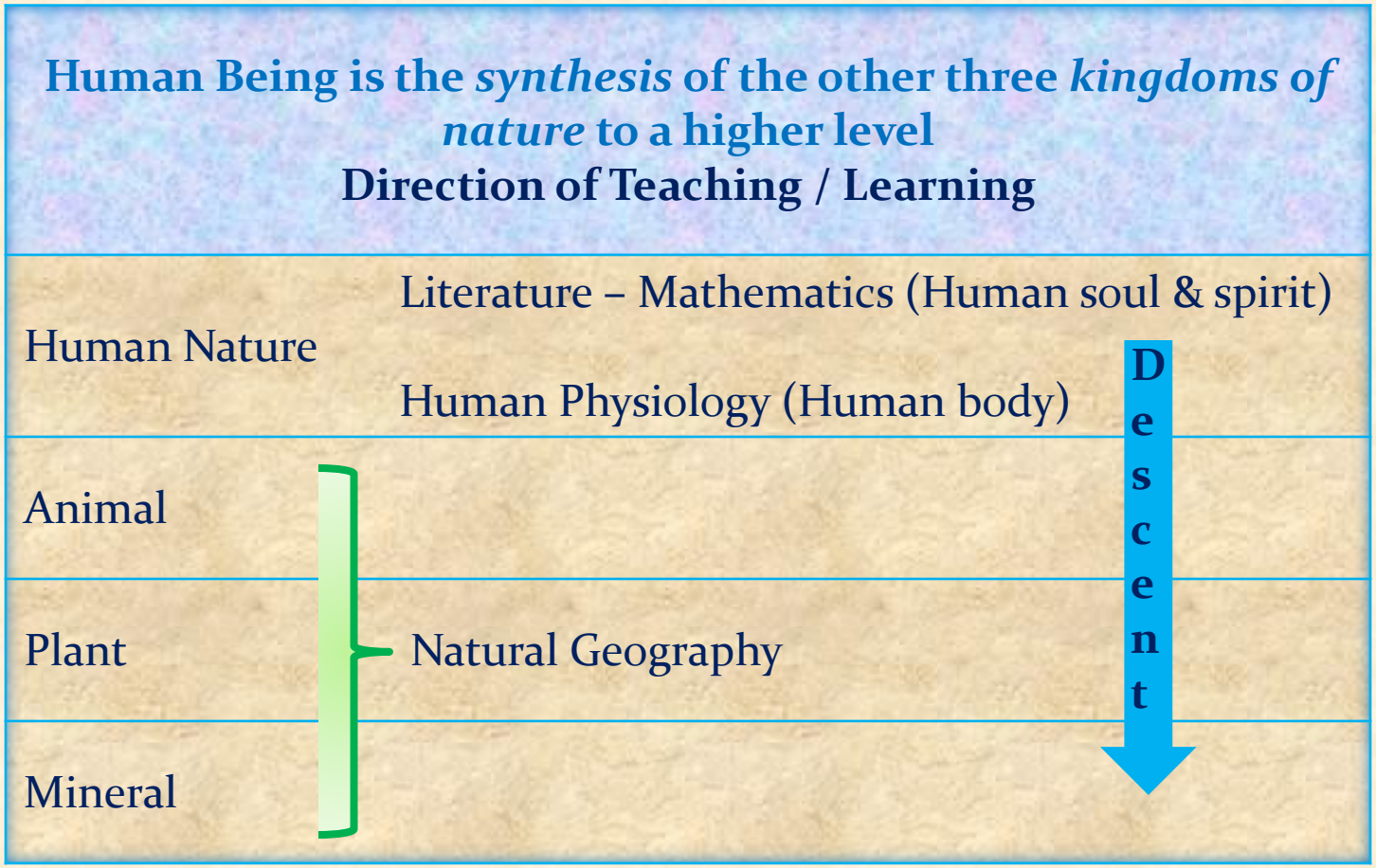
In terms of when to place the plant studies, this was to be sometime after a main lesson period on the Human – Animal curriculum:

"But let me first say that the correct procedure is to study the animal world ***before coming to terms with the natural conditions*** **of the plants**. In the efforts necessary to characterize the form of your botany lessons—finding whatever examples you can from one plant or another—you will become clear why the animal period must come first". Steiner, R (1919): Discussions with Teachers, Anthroposophic Press, p. 115. (My bold)

This impacts on how the design of a whole year curriculum is built up. Plant studies is intended to follow that of the animal. As we have seen from module 5 and 6, this was also intended to involve the **natural geography** of the plant world including the soils and minerals the plants grow in:

"Therefore you must not teach geography and geology by themselves, and then botany separately. That is absurd. Geography must be taught together with a description of the country and observation of the plants, for the earth is an organism and the plants are like the hair of this organism. Children must be able to see that the earth and the plants belong together, and that each portion of soil bears those plants that belong to it." Steiner, R (1924): The Kingdom of Childhood, Anthroposophic Press, p. 39.

For the children, in terms of their development, the process of curriculum teaching so far can be seen as a kind of "**descent into matter**" as described in the following picture. Clearly, Steiner presents a particular order to the teaching here. The study of the human being is to be first, then animals, followed by plants together with soils, rocks and, eventually in the 3rd sub phase, minerals. In light of this, we could represent the teaching sequence in the following way:



In this context, mineralogy is closely related to the physical sciences such as physics and chemistry. So as the holistic process proceeds from wholes to parts, in terms of coherent sequencing, the physical sciences follow mineralogy. This is also associated with the teaching of subjects in line with the child development principles:

"Because of all this, we harm their development if we teach children mineralogy, physics, chemistry, or mechanics in a way that is too intellectual for children before the eleventh year, because they do not yet have a corresponding experience of their inner mechanical and dynamic nature. Steiner, R (1922): The Spiritual Ground of Education, Anthroposophic Press , p. 80/81.

As we have seen, mineralogy can be introduced within the plant-geography curriculum, particularly as a part of a study of soils: minerals are parts of soils and the physical – chemical processes are parts of the mineral, amongst other things. It would be quite a naturalistic process then to teach the physical sciences **after** the teaching of mineralogy.

Having "descended" from the human realm to the mineral, the curriculum may then "**ascend to the spirit**": upwards from the natural, to the economic, passing "gently" though the political, and then on to the cultural/spiritual:

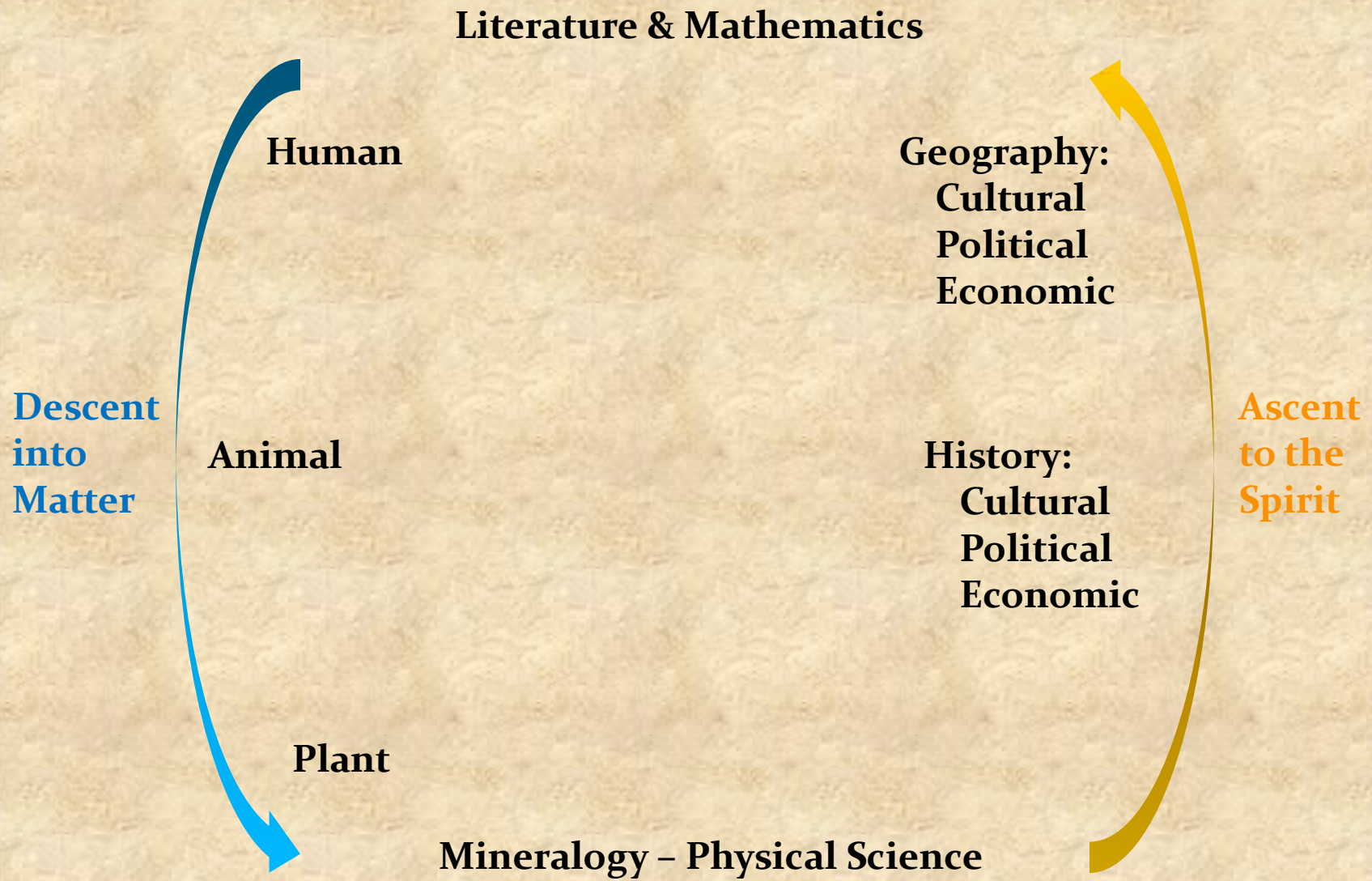
"When you have drawn together in a picture of the **whole Earth** all the knowledge you have given the children about the **economic life** of humans and **when you have also taught them history in the manner described** for about six months, you can transfer your attention to the **cultural environment** made by the people who inhabit the different continents. **But do not go into this different sphere until you have made the children's souls somewhat pliant through their first history lessons**… From this point, we lead on to an understanding of cultural and spiritual matters pertaining to different peoples. Then, while saving the details for later, we merely **hint** at what goes on in the **rights sphere** of the different nations, letting only the very first, **most primitive concepts** peep through the economic and cultural life. The children do not as yet have a full understanding for matters of the rights sphere, and if they are confronted with these concepts too early in their development, their soul forces will be ruined for the rest of their lives because such concepts will be so abstract." Steiner, R (1919): Practical Advice to Teachers, Anthroposophic Press, p. 149/50. (My bold).

Clearly, then, the **human** geography elements of **economics**, **political** and **cultural** are intended to be ***done after the first history lessons***.

But history is to follow the studies of plants and animals:

"Children are not mature enough to **understand** history before the age of twelve. You can certainly prepare them for learning about history by **telling stories** or by giving them **short biographical sketches**, or even by telling them stories with a moral. **They become mature enough to learn history through learning about botany and zoology as I have described it**. Steiner, R (1920): The Renewal of Education, Anthroposophic Press, p. 198/9. (My bold)

This seems to contradict what was just said. But bear in mind what we are talking about here is that history should follow nature studies which includes some of **natural** geography. Previously though, in module 5, L4, we were discussing **human** geography in terms of its economic, political and cultural dimensions proceeding **after** a consideration of natural geography. The human social geography was then intended to follow both nature studies as well as history. Within the context of human geography, after an introduction to economic geography, the cultural and spiritual characteristics of the World's peoples could then be brought in together with a small element of political geography. We may then give a brief overview of the curriculum sequence in any given year:


Literature & Mathematics
Human
Geography:
Cultural
Political
Economic
Descent into Matter
Animal
History:
Cultural
Political
Economic
Ascent to the Spirit
Plant
Mineralogy – Physical Science

However, these are not necessarily all main lesson blocks (but could be), but items to introduce within the main lessons blocks. So a more likely scenario for a sequence of main lesson blocks over a year might be as follows:

1) Language/Literature / Literacy

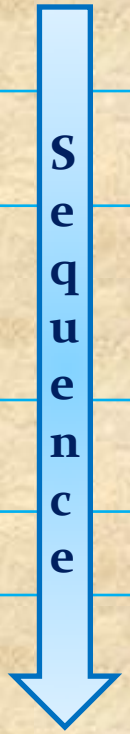
2) Mathematics

3) Nature Studies:
   a) Human & Animal physiology,
   b)Plants & Bio-Geography & Mineralogy

4) Physical Science

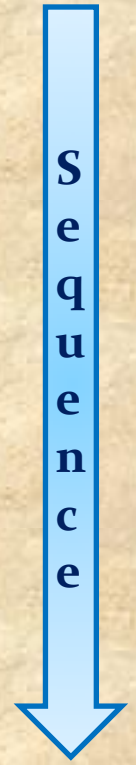
5) History

6) Geography Natural to Human: from nature to economy, political and cultural



This is not intended to be prescriptive so many combinations are obviously possible such as having six times two week main lesson blocks in each term:

Weeks of the Terms	Term 1	Term 2	Term 3	
Weeks 1 & 2	1) Language / Literature / Literacy	1) Language/ Literature / Literacy	1) Language/ Literature / Literacy	
Weeks 3 & 4	2) Mathematics	2) Mathematics	2) Mathematics	
Weeks 5 & 6	3) Human physiology – Animals, Plants, Bio-Geography, Mineralogy	3) Human physiology – Animals, Plants, Bio-Geography, Mineralogy	3) Human physiology – Animals, Plants, Bio-Geography, Mineralogy	
Half term				
Weeks 7 & 8	4) Physical Science	4) Physical Science	4) Physical Science	
Weeks 8 & 10	5) History	5) History	5) History	
Weeks 11 & 12	6) Geography Natural to Human: from nature to economy, political and cultural.	6) Geography Natural to Human: from nature to economy, political and cultural	6) Geography Natural to Human: from nature to economy, political and cultural	



There may of course be any number of ways to implement this sequence. Assuming a 36 week school year, one option might be simply to have six main lesson blocks of six weeks over the school year:

Weeks 1 to 6	1) Language/Literature / Literacy
Weeks 7 to 12	2) Mathematics
Weeks 13 to 18	3) a) Human Physiology – Animals (3 weeks) b) Plants & Bio-Geography, Soils & Mineralogy (3 weeks)
Weeks 19 to 24	4) Physical Science
Weeks 25 to 30	5) History
Weeks 30 to 36	6) Geography Natural to Human: from nature to economy, political and cultural

Sequence

I have presented the case that, in accordance with Steiner's educational philosophy, every subject can be taught in any year. The above sequencing of the subjects is derived from a consideration of the subjects **across** the years. It is then suggested that this sequence is valid for each and every year. **But this is conditional**. In convergence with the minor phases of child development, these subjects need to be adapted, formed and modified to meet the needs of the children in each phase. For the lower school this means:

	Major Mode of Pedagogy / Learning: Imaginative		
Minor Mode of Pedagogy / Learning	Imaginative Anthropomorphisms Classes 1 to 3	Imaginative / Living Facts Classes 3 to 6	Imaginative Causes and Effects Classes 6 to 8

This can then be related to the tables we saw earlier for a system encompassing the whole of the lower school (classes 1 to 8):

The Evolving Education: Main & Subject Lesson	Sub-Phase 1 Learning Method: Imaginative Anthropomorphisms Classes 1 - 3	Sub-Phase 2 Learning Method: Imaginative approach to the Perceptual-Factual Classes 3 - 6	Sub-Phase 3 Learning Method: Imaginative approach to Ideas, Concepts, Causes and Effects Classes 6 – 8
Spiritual, Moral, Social, Cultural Education. Integrated throughout.	SMSC & PSHE located in Imaginative Stories	SMSC & PSHE located in Imaginative depiction of Biographies & Events	SMSC & PSHE located in Imaginative depiction of Reasons and Ideas.
English, Literature, Drama	English Literacy, Literature and Language through Imaginative Stories	English Literacy, Literature and Language: Grammar	English Literacy, Literature and Language: Syntax and the Subjunctive.
History	History in Imaginative Story Form	History as Biographies of whole personalities & imaginative descriptions of events.	History as Symptomology: Ideas, Structures and Impulses.
Geography	Home Environment: 1) Geography through stories	Descriptive- Factual Geography	Geography through imaginative explanations and concepts
Nature Studies: Human, Animal, Plant & Environment	2) Plant and Animal studies through Anthropomorphisms. 3) Foundations of Agriculture. 4) House Building	Humans, Animals and Plants through Imaginative Facts Foundations of Agriculture.	Humans, Animals and Plants through Imaginative Ideas and Explanations. Foundations of Agriculture.
The Physical World: Physics, Chemistry, Technology. Building	5) The Physical World through Imaginative stories and Experience	House Building Physical sciences: an Imaginative approach to Facts	House Building Physical sciences: an imaginative approach to cause and effect.
Mathematics	Mathematics through Imaginative Stories	Descriptive Mathematics	Mathematical Proof

Designing the Lesson Time Forms; Leading to the Time Form of the Week.

Having considered the one year and eight year curriculum in broad strokes, including a brief indication of the main lesson blocks, we can now turn to the days, main lessons and weeks that make these up. In other words, we can now consider the parts of that whole. In module 5, we saw how the individual lessons, of the school day, can also be formed on the basis of "threefold learning" derived from threefold human nature. From out of this, and with further considerations concerning the days, we can gradually design a basic form for a week of teaching. Teachers in consideration of the design of the day form will need to consider what they wish to bring and at what time.

Designing the Time Form of the Day

The main lessons are of course integrated into the whole day of schooling, so we need to say a few things about this. The design of a form for the whole day is really a whole school affair. It requires the working together of colleagues across the school as it spans all types of teachers and not just the main lesson teacher. Having said that, the basic model for the day is derived from an understanding of body, soul and spirit and their relationship to each other in the course of a day. The basic pattern for the day involves designating the more cognitive / thinking type lessons to the morning and the more artistic and physical subjects to the afternoon. But, there are nuances as discussed in module 5 and which are represented in the next slide. The overarching goal of this pattern is to provide a balanced approach to the learning of the different areas of education in terms of cognition, feeling and willing. Through this a kind “breathing” in the learning process is established:

Day Form: Time Frame Possibilities	Type of Lesson	Focal Human Faculty / Learning Method
8.30 – 10.30	Main Lesson	"Knowing", but also with Feeling and Will.
11.00 – 12.30	Subject Lessons: Languages, World Views (e.g. Religion), Crafts.	"Thinking", but also with Will and Feeling.
13.30 – 15.30	Artistic / Physical Lessons: Gym, Eurythmy, Farming / Gardening / Building.	Will and Feeling, but also with Thinking.

Designing the Time Form of the Individual Main Lesson

As the following slide shows, the two hour main lesson is also divided into three in accordance with an order to the learning faculties of thinking, feeling, willing, imagination and perception (to be understood as the unity of the inner processes of that which Steiner calls the "soul"). In the first slide, as can be seen, in the first stage all faculties are engaged and then this changes as the process advances. In the second slide, the teaching & learning activities are represented (more details on this are to be found in module 5, L1a, L1b, L1c). On the basis of this design, the teacher will need to make choices as to the content and activity of each stage. In the third slide, the form of a possible week is presented on the basis of the three stage & two day process:

The Main Lesson Time Form over two Days

1) The first stage of the learning process begins by appealing to the "whole human being", i.e. in that perception, thinking, feeling and willing are all engaged at an initial level.

2) The second stage is without the perceptual element, but involves memory, feeling and thought on a second level, this includes a question and answer element, i.e. a basic discussion (but it is not reflection as such).

3) The third stage, on the next day, is a predominantly a thinking or an age specific cognitive activity. This is a kind of reflecting on what has been done activity. (This can also be extended over greater periods and would usually include pupil activities and thereafter assessment, see power point L1f on Pupil Assessment p. 4).

Main Lesson Form (8.30 to 10.30)		Focal Human Faculties appealed to:
Part 1: Poem or a song preview. **Teaching Activity:** Telling a story, showing an experiment, recounting history, etc. **Pupil Learning:** Cognitive, Artistic, Practical Activities.	Sequence	**Whole Human Being:** Head, Rhythmic, Metabolic / Limb Systems: - Perception, Memory / Feeling, Thinking, Will.
Part 2: Recall / Discussion – Feeling Activity		Rhythmic System: - Memory with Feeling, but also with thinking.
Part 3: Contemplative Activity (age phase appropriate type) on the second day of the process. This can also be extended to further periods of time and include pupil learning activities.		Head System: Cognition – Thinking.

The Time Form of the Week

From out of the previous, we can then derive the basic time form of the week. As can be seen, this is conditioned not only by the overall design of the year, but also by the one-day principle just described:

Days of the Week. The 2 hour main lesson.	Main Lesson Elements in a Week
Day 1 Monday	**Part 1: (new material):** Poem or a song preview. Teaching Activity - Pupil Learning: Cognitive, Artistic, Practical Activities. **Part 2:** Recall / Discussion – Feeling Activity
Day 2 Tuesday	**Part 3:** Contemplative Activity – Deeper Pupil learning activities. **Part 1:(new material) :** Poem or a song preview. Teaching Activity - Pupil Learning: Cognitive, Artistic, Practical Activities. **Part 2:** Recall / Discussion – Feeling Activity
Day 3 Wednesday	**Part 3:** Contemplative Activity – Deeper Pupil learning activities **Part 1 :(new material) :** Poem or a song preview. Teaching Activity -Pupil Learning: Cognitive, Artistic, Practical Activities. **Part 2:** Recall / Discussion – Feeling Activity
Day 4 Thursday	**Part 3:** Contemplative Activity – Deeper Pupil learning activities **Part 1: (new material) :** Poem or a song preview. Teaching Activity - Pupil Learning: Cognitive, Artistic, Practical Activities. **Part 2:** Recall / Discussion – Feeling Activity
Day 5 Friday	**Part 3:** Contemplative Activity – Deepening pupil learning activities leading to possible assessment **One possibility at this point is that the pupil's work may be assessed and documented by the teacher.**

From out of this, we can now look at the question of a form of aims, progression and assessment that are in accord with the development of human nature.

Exercises

1) Chose a particular year from the lower school period. Consider the sequence of the main lesson blocks and how you would come to a design for this whole year.
2) Consider one main lesson block covering a 6 week period. Design a week by week sequence of sub-topics. For example, suppose you we going to teach a history main lesson on the age of revolutions (1750 to 1900), what sequence of sub-topics would you have and why? Let's assume that you have decided to do one sub-topic per week.
3) Continuing on from this, how would you design a weekly sub-topic in accordance with the previous power-points?
4) How would you design the individual 2 hour main lessons in line with the above?