Spiral Curriculum Model
Bruner proposed, that during a child’s cognitive development, there are three learning modes in acquiring information. These modes were applied at specific ages of a child’s early years of development. However, their application and recognition as a mnemonic device are not limited to pedagogy; they are clearly evidenced in andragogy learning environments, as a means of encoding memory.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Age Range</th>
<th>Description</th>
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<tbody>
<tr>
<td>Enactive</td>
<td>0-1 Years</td>
<td>This is action-based learning, where physical acts inform and guide. Action and tactile input is converted into muscle memory.</td>
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<tr>
<td>Iconic</td>
<td>1-6 Years</td>
<td>This is the recognition of images, where the learner begins to recognise and understand their depiction of the physical.</td>
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<tr>
<td>Symbolic</td>
<td>7+ Years</td>
<td>Abstract thoughts start to form through the understanding of symbols and codes. Language can now manipulate the 'Iconic'.</td>
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**Scenario:**
- **Enactive**: Playing with building blocks.
- **Iconic**: Seeing images of building block.
- **Symbolic**: Drawing structures of building blocks.
In the 1960's, the American Educational System, approached child development in stages, where it was believed that complex subjects could only be taught at certain periods of a child’s development. This may have hampered development for some learners, where they were not challenged enough with a level based approach.

Bruner argued this, where he suggested that any complex subject could be taught to a child at any stage.

'We begin with the hypothesis that any subject can be taught effectively in some intellectually honest form to any child at any stage of development'.

(p. 33 - The Process of Education)

This notion formed Bruner's 'Spiral Curriculum' theory, which took complex ideas and broke them down into simplified chunks of information; which once they have gone through a learning process, they can be revisited at higher levels throughout the child's development. The subjects would go through a gradual increase in their complexity, constantly revisiting them and improving upon their foundations.
In Bruner’s book, ‘The Process of Information’, there is no visual representation of his ‘Spiral Curriculum’ theory. There are many interpretations of it; where typically a spiral/ribbon is present, with an evolving taxonomy of learning styles and applications listed. In all cases, the ribbon spirals upwards, to what commonly appears to be the end of the learning cycle. Due to this interpretive approach in visualising the model, there were no consistent examples to use as a logical reference.

In response, I have formulated my own, Spiral Model. My hybrid design, still utilises a spiral/ribbon as its foundation; yet, I have added a conical shape at the center, to represent the increasing complexity of the specialist subject. The spiral itself, represents the core skills, which would be required in developing a broad range of communication tools to support the primary specialist learning. Each rotation of the ribbon, represents the next evolution in complexity of the specialist subject.
Advantages

• With each complex evolution, the student can recap, learn, analyse and then develop their prior knowledge.
• The spiral design, does allow for a logical progression in the complexity of the subject material.
• It supports, prior knowledge and experience as being fundamental in the learners cognitive development.

Disadvantages

• Based upon the complexity evolution, some learners may find the next step too easy and become uninterested.
• The reviewing of prior learning, could potentially use up valuable time that could be spent on new material.
• The repetitious nature of the primary subject, may become uninspiring and not exciting for the learners.
BRUNER, J. S. The process of education

BRUNER - LEARNING THEORY IN EDUCATION | SIMPLY PSYCHOLOGY
Available at: https://www.simplypsychology.org/bruner.html [Accessed 23 Nov. 2017].

Research Into Practice - The Spiral Curriculum
Available at: https://files.eric.ed.gov/fulltext/ED538282.pdf [Accessed 25 Nov. 2017].

ADAPTIVE LEARNING: JEROME BRUNER & THE SPIRAL CURRICULUM | McGRAW-HILL EDUCATION CANADA
Available at: https://www.mheducation.ca/blog/adaptive-learning-series-jerome-bruner-the-spiral-curriculum/