

**Understanding and Working with
Learning Styles**

Certificate of Adult and Continuing Education

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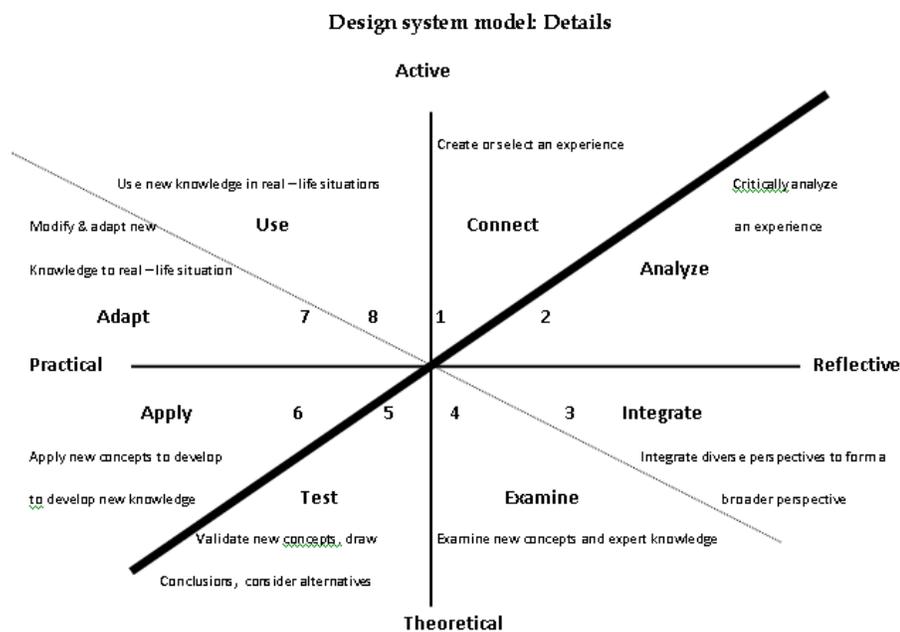
Introduction – The main reason for this paper is to adapt and use the theory and concepts I have learnt in the course to gain a better understanding of the information. All key concepts are explained in subsequent paragraphs and are bolded the first time they are used in the paper. According to the **Design system model** this assignment is part of ensuring that my **learning cycle** is complete because it gives me the chance to use my new knowledge in a real – life situation thereby ensuring a **high road transfer of learning** of the course. The classroom activities for the three days gave us the opportunity to go through the various components of the learning cycle with the writing of the assignment being the activity that completes the cycle. The second reason for writing the assignment is to enable me obtain the credit hours for this course in order to count it towards the requirements for the Certificate in Adult and Continuing Education (CACE) program.

This paper is based on the following theories and concepts:

Difference between learning and knowledge: When we learn a new thing/concept, we process the new information by going through our **preferred** - and **non preferred** zones of learning. The preferred zone is the knowledge and experience that we already have while the non-preferred is the new concept we are learning. The movement back and forth between preferred and non- preferred is a **spiral** and is known as the learning process or the **learning zone** because crossing the learning zone allows us to learn. The learning zone is characterized by uncertainty, questions as to why the need to even learn this new concept, stress, rationalizations etc so for individuals to be able to go through the learning process they need to feel **psychologically safe**. This implies creating the enabling environment that makes learners feel free to experiment, make mistakes and learn from their mistakes.

The **spiral of learning**: As individuals learn and create knowledge, they also create new and novel ways of thinking and knowing which makes learning continuous. The spiral is made up of different learning cycles.

The **design system model** shown below is found in (Herasymowych & Senko, 2003 p. 51). The model uses the learning, thinking and facilitation styles to determine how to design any learning opportunity for learners. The 8 numbers in the diagram shows the 8 elements in the design system. Each orientation has two elements and two tasks associated with it. For example, the **theoretical orientation** has 2 elements and two tasks: Element 4 – Examine and element 5 – Test. This model will be used to explain certain aspects of part 1 and 2 of my assignment choice.



High road transfer of learning: This is learning that ensures the transfer of concepts from one situation to another that is not directly related.

An **Expert learner** is a learner who does not give up when the learning gets tough and is able to transfer their learning across a wide range of applications thus deepening and broadening their learning experiences.

Learning principles: There are five learning principles according to (Herasymowych & Senko, 2003, p. 24), however this paper relies on three of these principles which is used to explain the design system and the learning cycle: Learners learn through real-life experiences; learning moves through action and reflection i.e. learning endures when learners reflect on their learning in a way that helps them to understand so that they can take action and make informed decisions, human beings are designed to learn i.e. learners become internally motivated given the right circumstances.

Performance outcomes: Outcomes that reflect what the learner is able to transfer to the workplace.

Learning outcomes: Outcomes that reflect what learners learn during the learning event itself (e.g. in the classroom)

Competencies: Outcomes that reflect the actual skills that the learner is able to do as a result of the learning event.

My assignment choice number three gives me the opportunity to demonstrate my understanding of the learning cycle and each of the **four learning styles/orientations**. It also gives me the opportunity to describe my learning style profile in part 1. Part 2 of the assignment allows me to apply the concepts and theory I have learnt in the course to design a course to address learning needs within my company. As a facilitator of workplace learning, I need to understand how people learn; their learning and thinking styles in order to enable me design courses that will achieve high road transfer of learning; turn the learners into expert learners which will in turn contribute to my company being a learning organization.

Part 1: Recognizing learning styles

2. Describe the learning cycle and each of the four learning styles

Learning cycle: Herasymowych & Senko, 2003 defines learning as “the process by which individuals create knowledge” (p 2). The learning cycle describes the behaviours that individuals in this case adults, go through to create knowledge from the new information they received. When individuals receive new information about anything, for complete learning to occur i.e. create the required knowledge, they need to go through four behaviours. These behaviours are reflected as learning orientations/styles. According to Herasymowych & Senko, 2003 (p. 27) these are: gather data on the action or new information, and critically analyze the data (**Reflective learning orientation**); make sense out of the data or new information by finding patterns using expert knowledge as well as theory and draw conclusions (**theoretical learning orientation**); make decisions that produce the desired results and plan the next steps (**Practical learning orientation**); and take action or apply and use the information in real life situations (**Active learning orientation**).

Each learning orientation in the learning cycle leads to the next, thus creating a circular dynamic. The design system model above shows the four learning orientations. One of the learning principles stated above indicates that individuals learn best by reflecting on the information and taking action. The heavier of the solid lines in the design system model above shows the division between action and reflection states of learning. The reflection state has two learning orientations; reflective and theoretical and individuals in this state spend time thinking rather than acting. In the action state, individuals spend time acting rather than thinking and it includes the practical and active learning orientations. According to Herasymowych & Senko, 2003 (p. 29), the two states of learning; reflection and action as well as the four learning orientations are in dynamic relationship with each other forming the spiral of learning explained above. Even though each individual applies various degrees of the four learning orientations/styles to how they learn, the learning styles where individuals exhibit strong

preference becomes their preferred while the weaker ones are their non-preferred style of learning. The learning cycle shows that for facilitators to ensure learners become expert learners, they must create the psychological safety that would allow learners to use both their preferred and non-preferred styles of learning thereby making use of the learning zone.

The descriptions of the four learning styles according to Herasymowych & Senko, 2003 (p.32 – 35) are:

Reflective: People with this learning style gather data or information, uses critical analysis to analyze and verify the accuracy and validity of the data and systems thinking when analyzing the system. They are open to new ideas and data which make them good listeners, highly tolerant and very polite. However, they have difficulty in bringing closure and are often called procrastinators.

Theoretical: People with this learning style make sense out of the data or information by relying on expert knowledge and theories before drawing conclusions. They are skeptical of new ideas that are not based on any existing theory or expert knowledge, excellent synthesizers of information, articulate and able to synthesize complex ideas into simple models. They generate ideas, alternative perspectives and scenarios using creative thinking and systems thinking when analyzing the system. However, they have difficulty being open to perspectives that are not grounded in theory.

Practical: People with this learning style are able to plan, take action on a plan and make decisions using creative thinking when generating alternatives to take action and strategic thinking to decide what to do and what not to do. They are action oriented, outspoken, and skeptical of anything that is not immediately relevant. They however, have difficulty being open to perspectives that are not relevant.

Active: People with this learning style are open to new ideas, will try almost anything at least once, are a lot of fun to be around and verbal, not afraid to talk and wants to be the centre of attention. In the midst of action they apply action thinking and use creative thinking when generating new ideas that may not have been thought of before. They however, have problems slowing down and taking time to think through things.

3. Description of my learning style profile:

According to Herasymowych & Senko, 2003 (p. 36), a learning style profile shows how the learning orientations work in combination to each other. After completing the Learning Style Questionnaire in the course guide in two different situations; without stress and under stress, my scores for the various orientations are in the table below:

Orientation	Without stress score	Under stress score
Activist	9 (moderate preference)	13 (Very strong preference)
Reflector	15 (Strong preference)	12 (moderate preference)
Theorist	12 (moderate preference)	18 (very strong preference)
Pragmatist	18 (Very strong preference)	16 (Strong preference)

Using the Understanding learning style results from the course guide, my scores show that without stress, I have a moderate preference for the Activist and Theorist styles, while I am a double dominant with strong preference for Reflector and a very strong preference for Pragmatist. According to Herasymowych & Senko, 2003 (p. 186) my learning style profile means my opportunity for learning or non- preferred approach for learning is the theoretical and active orientations. My profile is effective most of the time because I am strong in both an action - and a reflection- based learning style. I am able to make decisions, solve problems, take actions that are relevant and practical but my risk averseness makes me ineffective when the

situation calls for more definite conclusions and intuitive actions. I like planning how to implement an action and gathering information which makes me open to all sorts of information and ideas but deadlines puts pressure on me. My excuse for not using the active orientation is fear of ridicule and for the theorist orientation taking things at face value.

Under stress my learning profile is triple dominant i.e. very strong/strong in Activist, Theorist and Pragmatist (Practical) with a moderate score in the reflective orientation. According to Herasymowych & Senko, 2003 (p. 188), my under stress learning profile moves me to an action - based learning style where I am more willing to take action. It is interesting to note that it is deadlines that stress me most which makes it much more interesting as under stress I discarded the reflective orientation because it became a time wasting endeavour for me. Since without stress, I would have gathered information readily, at the time when I need to meet deadlines i.e. take action my stress learning style profile shows me as preferring to consider my options, draw conclusions and take action (relying more on the theorist orientation). Once those conclusions have been drawn it becomes difficult to change my mind.

In order to develop my activist style when I am not under stress, I need to avoid thinking too much over things before taking action. I also need to practice initiating conversations with strangers and at large gatherings, force myself to initiate and sustain conversations with everyone present. To develop my theorist style when I am not under stress, I need to practice asking probing questions by asking questions designed to find out precisely why something has occurred.

Part 2: Design a New Activity

4. Summary of my answers to the questions from Herasymowych & Senko, 2003 (p. 62 - 63):

The course I will be analyzing is about one of the products in our product line in our company.

The course is for four hours and is part of our new hire training program.

The purpose of this particular product course is to enable new hires acquire the knowledge and understanding of this product to successfully perform their work. There are various outcomes for the learners after the training: **Performance outcomes** and **competencies**: Every month the quality of their work is assessed. **Learning outcomes**: Participants are required to complete review exercises as well as an open book assessment after the course with a required pass mark of 80%. Participants who do not get the pass mark on the assessment are made to take it until they obtain the pass mark. **Competencies**: Performance is also assessed based on quantitative measures.

This product course is linked to two other products in the product line courses. As well, the knowledge in this product is linked to the business system courses in the sense that employees need to apply that knowledge to determine which fields in the system would have to be completed with what information.

5. Using the design system road map from Herasymowych & Senko, 2003 (p. 68), I have identified the design pattern I would like to use as interactive lecture because my goal is to introduce a new course in the product line that is to some extent different from the other product courses. Using the interactive lecture design pattern on (p. 82), whilst modifying some of the steps to meet my needs my design pattern is:

(4) → (2) → (3) → (6) → (7) → (5) → (8)

In the above pattern, the numbers/elements are the same as those used in the Design System Model above but the position of the element in my design pattern determines whether it is the

first, second or third etc step. In this situation (4) becomes the first step, followed by (2), (3) etc. until the final step (8).

Description of how the pattern will be used to design the lesson:

The first step is (4) examine new concepts and expert knowledge. This will be done through power point presentation of the information while allowing learners to ask questions and share insights as well as any stories they may have about this particular product. It will also be complemented with visual aids like pictures and the real product for participants to be able to touch and feel.

The next step in the process is to allow learners to critically analyze the information they obtained (2). This is done by asking participants to respond to the review questions that will be handed to them in class. The facilitator goes through the review questions with the whole group by reading out the questions and asking participants to provide the answers. Where the answer provided is not correct, facilitator asks for assumptions behind the answer and uses this as feedback on which concepts will need much more clarification. As well, participants are asked to note down any unanswered questions. Facilitator takes the unanswered questions and notes them down on a flip chart.

Since one of the important aspects of this course is to focus on the differences between this and the other products in the product line processes, the next step is to get learners to integrate the diverse perspectives to form a broader perspective (3). To achieve this, participants are asked to form two groups with one group discussing and noting down on a flip chart the differences between this particular product and the other two product's processes. Both groups are then asked to present the information to the class.

The next step will be to allow participants to apply the information they have been given about the product to develop new knowledge **(6)**. This is done by asking participants to tell their own stories or use metaphors to explain their understanding of the information. Participants are also asked to apply their knowledge to provide responses to the questions listed on the flip chart while facilitator guides learners to the right responses.

The fifth step is to enable participants modify and adapt new knowledge to real –life situations **(7)**. In small groups of two people, participants are asked to role play using real life scenarios that have been developed and distributed in class. Members of the group have to alternate the roles with one learner playing the role of a customer and another being the employee. Group members provide feedback to each other.

The next step is to validate new concepts, draw conclusions and consider alternatives **(5)**. This is done by asking participants to complete the assessment for this product. Participants who obtain less than the pass mark of 80% are asked to review the information and rewrite the assessment until they are successful.

The final step is to allow participants to use new knowledge in real life situations **(8)**. This is done by asking participants to sit with an experienced employee for an hour. Within the hour the learner is expected to listen and watch the experienced employee perform their work for 30 minutes. Then for the last 30 minutes, the learner performs the work while the experienced employee watches and where necessary assists the learner. The goal is to allow the learner to use the knowledge in real life with the experienced employee providing psychological safety to the learner.

Conclusion:

To conclude, this assignment has enabled me gain a better understanding of the learning cycle, the four learning styles and how individuals with different styles can relate effectively with one another to achieve common goals. This knowledge has enabled me understand myself as well as people I interact with better. As a facilitator, the course has also provided me with the tools to review and analyze the courses we offer at work in order to incorporate some of the strategies and patterns to ensure high road transfer of learning occurs for participants. The concepts will also improve my facilitation skills as it has provided me information on which learning styles can be matched with which facilitation styles. There are times when I facilitate one -on-one training/coaching session where the knowledge of the appropriate facilitation style to use based on participants learning style would have led to effective and efficient sessions.

I plan to continue to use the concepts in the course to improve on my course design and facilitation skills. I plan to discuss this with my manager and hope to review and revamp this particular product course to enable me apply some of the concepts I learnt. One of my suggestions will be to change the duration of the course from 4 hours to 6 hours. This allows us to incorporate the one hour period with an experienced agent and other activities in order to enable the necessary transfer of learning required. The concepts have also provided me with a better understanding of my team mates.

References:

Herasymowych, M., & Senko, H. (2003). Revving Up Thinking and Learning: Course Design Guide. Calgary: MHA Institute Inc.