Comparison of Learning Theories

	Behaviourism	Constructivism	Cognitivism	Connetivism	Andragogy
Key Researchers	• John B. Waston • Ivan Pavlov • B. F. Skinner	• Jean Piaget • Lev Vygotsky • Jerome Bruner	• Jerome Bruner • Albert Bandura	• George Siemens • Stephen Downes	• Alexander Kapp • Eugen Rosenstock-Huessy • Malcolm S. Knowles
Key Concepts	• Focuses on the observable behaviour of a learner excluding previous experiences or current mental states • Uses stimulus and response to assess learning • Classical and operant conditioning • 3 main types of Behaviourism: Methodological, Psychological and Logical • Positive/ Negative Reinforcement and Positive/ Negative Punishment	• Learners construct their ow learning and knowledge • Active engagement in the learning process • Zone of Proximal Development • Scaffolding • Social Constructivism • More Knowledgeable Other (MKO) • Spiral Curriculum • Discovery Learning	• Focuses on how information is received, organized, stored and retrieved • looks beyond observing behaviour and considers behaviour changes as only an indicator of what is going in the mind • Agency, Observational Learning, Imitation and Modeling • Cognitive Load Theory (intrinsic - extrinsic) • Self Regulated Learning • Self-Efficacy	• Theory for Digital Age • Explain complex learning in rapidly changing social digital world • Connections of nodes (learners) create networks define learning • Networks or connections are more important than the content as knowledge grows and access needs to grow accordingly • Know-where to get knowledge	• "The art and science of adult learning" • Knowle's 5 Assumptions of Adult Learners • Knowle's 4 principles of Andragogy
View of Learning	• Learners keep modifying their behaviour until they receive a positive reinforcement • Knowledge is transmitted from educator to learners a stimulus until learners show the appropriate response. • Instruction is teacher-centred and excludes previous learner's experiences and current mental states making them private aspects	• Learners construct their own knowledge through active engagement working on student-centred learning objectives of higher skills • Encouraging experiential learning that motivates exploring, reasoning, questioning and problem-solving • Social interaction and cooperative learning with more skillful others promote learning and moving to zones of learning beyond the learners' capabilities • Scaffolding and reducing the degree of assistance to push the learner to independent learning and mastering the skill is a key.	• Mind is considered as a computer processor where learners are involved in the way they process information • Knowledge in a mental schemata that when occurs, learning occurs • Short, long and working memories work together to receive, process, organise and retrieve information. • Observation , imitation and modeling are key aspects in processing and storing information • Learning motives are internally regulated with less but clearly present external motives	• Learners are nodes making connections creating networks that define learning • Learners recognize patterns and are influenced by the connections and ties and the context • Knowledge transfer occurs when nodes are connected and evolving more personal connections and networks • Distinction of what is important and unimportant and the capacity to learn is more important than the current knowledge • Individual knowledge feeds into network which in turn feeds into organizations and back to the person to make the loop • Learning is actionable knowledge where learners know why, how and where to get knowledge	• Maximizing learners' autonomy and reducing instruction with considering their previous experiences and backgrounds are key roles. • Relevance and motivation play an essential role in attracting and engaging adult learners to the learning experience • Adult learners learn more when they are part of planning and design and when receiving and giving continuous feedback. • Adults learn better when their experiences and ideas are considered and when the content is relevant and beneficial on solving a problem or offering a specific development.
Implications to ID	• Gamification is a proper and fun application to behaviourism that offers both meaningful and interactive learning experience in certain topics especially new ones. • Some learners need positive/ negative reinforcement feedback type at certain levels of the learning process where this theory becomes handy	• Students need to be engaged and share ideas and receive feedback from the MKO whenever needed • Creating collaborative activities that promote reasoning and problem solving skills like real life scenarios, case studies or reflective activities assist in reaching the learning goals • Updating the learning objectives continuously to consider the learners experiences and ideas • Giving more space to learners to reach the required skills unassisted	• Activities that help in scheming information and considering the cognitive load are important • Chunking data and microlearning are good applications that consider the cognitive flow • Multimedia diversity needs to be used carefully to give a meaningful experience or else the learner will falter • Learning goals and objective need to be clear to help in organizing information and the how and why concepts	• Creating channels and promoting networks are essential in the learning experience • Social media platforms help create connections and share knowledge	• Adult learners have different approaches to learning than young learners. They need motivation that works on their internal motives to approach the learning experience, thhis the learning experience needs to be precise, relevant, informative and attractive • Using multimedia and digital tools is not enough but clear learning goals, how, why and where learning is taking place are main considerations that is why learning models take us deeper into this part.