



**KENYA EDUCATION MANAGEMENT INSTITUTE
TEACHER PROFESSIONAL DEVELOPMENT
PROGRAMME**



PEDAGOGY

LEARNER CENTERED METHODOLOGIES AND ICT INTEGRATION IN TEACHING AND LEARNING

Learning outcomes

- i. Demonstrate understanding of Gardener's Multiple Intelligence Theory on how learners learn
- ii. Enhance your knowledge and skills in the use of learner centered approaches
- iii. Develop and effectively implement ICT integrated lessons plans

How learners learn (Howard Gardner's Multiple Intelligence theory)

KWL on how learners learn

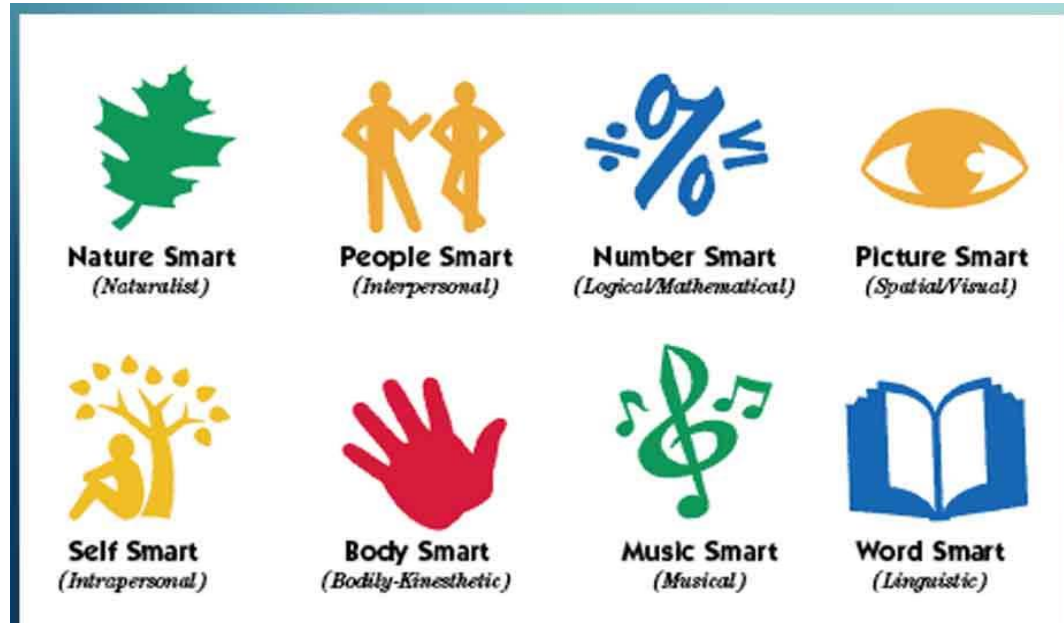
- **Know**.....Some things that I already know about understanding how learners learn (Howard Gardner's Multiple Intelligence theory)

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- **Want to Learn**.....Some things I would like to learn about Understanding how learners learn (Howard Gardner's Multiple Intelligence theory)

.....
.....

Activity



- The picture above illustrates the different types of learners you may have in your classroom.
- How can a teacher tell that a particular learner has a particular kind of intelligence?
- Identify learning experiences that a teacher can provide to cater for each type of intelligence.

Howard Gardner's Multiple Intelligence theory (1983)

- states that learners possess different kinds of minds and therefore learn, remember, perform, and understand in different ways.
- Gardner's theory advances the view that individuals have different ways of demonstrating intellectual abilities (people smart)
- He identified eight (8) intelligences: logical-mathematical, visual/spatial, bodily-kinesthetic, naturalist; verbal-linguistic; intra-personal; interpersonal; and musical/rhythm.
- There is recognition that integration of multiple intelligences has the potential to improve learners' learning and achievements.
- It requires a teacher to prepare learning activities which appeal to diverse intelligences among the learners with one or more of the eight intelligences.

Types of Intelligences

i. Visual / Spatial Intelligence

A learner has the ability to perceive the visual. These learners tend to think in pictures and need to create vivid mental images to retain information. They enjoy looking at maps, charts, pictures, videos, and movies.

ii. Verbal / Linguistic Intelligence

Ability to use words and language. These learners have highly developed auditory skills and are generally elegant speakers. They think in words rather than pictures.

iii. Logical / Mathematical Intelligence

Ability to use reason, logic and numbers. These learners think conceptually in logical and numerical patterns making connections between pieces of information. Always curious about the world around them, these learners ask lots of questions and like to do experiments.

iv. Bodily / Kinesthetic Intelligence

Ability to control body movements and handle objects skillfully. These learners express themselves through movement. They have a good sense of balance and eye-hand co-ordination. (E.g. ball play, balancing beams). Through interacting with the space around them, they are able to remember and process information.

v. Musical / Rhythmic Intelligence

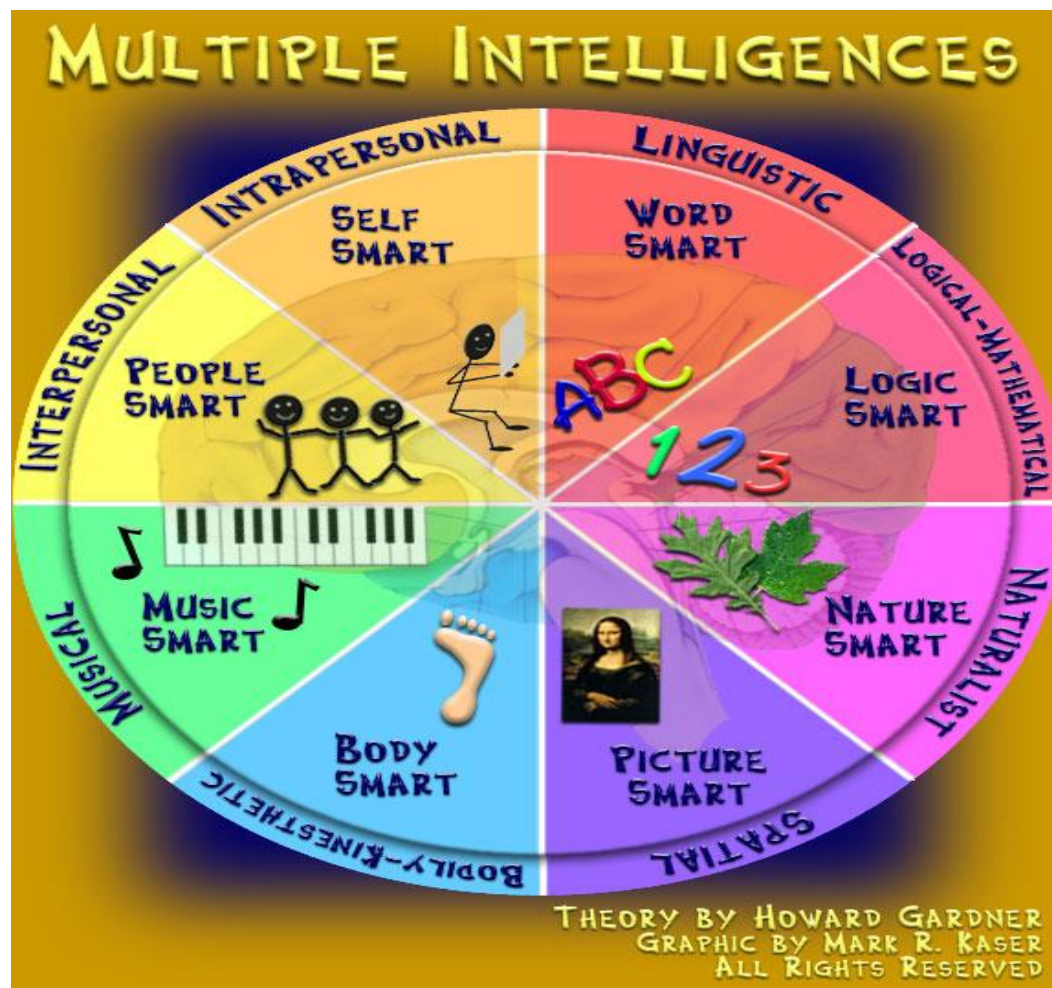
Ability to produce and appreciate music. These musically inclined learners think in sounds, rhythms and patterns. They immediately respond to music either appreciating or criticizing what they hear. Many of these learners are extremely sensitive to environmental sounds (e.g. crickets, bells, dripping taps).

vi. Interpersonal Intelligence

Ability to relate and understand others. These learners try to see things from other people's point of view in order to understand how they think and feel. They often have an uncanny ability to sense feelings, intentions and motivations. They are great organizers, although they sometimes resort to manipulation. Generally they try to maintain peace in group settings and encourage co-operation. They use both verbal (e.g. speaking) and non-verbal language (e.g. eye contact, body language) to open communication channels with others.

vii. Intrapersonal Intelligence

Ability to self-reflect and be aware of one's inner state of being. These learners try to understand their inner feelings, dreams, relationships with others, and strengths and weaknesses.



Application of gardeners theory

- Pedagogical approaches under this theory emphasize the importance of a learner centred classroom, self-directed learning and delivery of instruction via multiple mediums.
- Gardner says that these differences challenge assumption that everyone can learn the same materials in the same way and that a uniform, universal measure suffices to test student learning.

Group activity

- With your subject panelists at the school level, plan and implement a learning task that will involve application of the multiple intelligence theory.
- The activity may involve one or more classes.
- Take photos or recordings of the activity and post them on your e-portfolio.
- In your reflective journal, based on your experience in the activity above, put your thoughts on the effectiveness of the multiple intelligence theory and how it can be applied in a classroom situation.

Learner centered strategies/ approaches

Activity:

- KWL on learner centered strategies
- As we prepare to learn about learner centered strategies, write something you know and want to learn about the concept.

• Know:

.....

- What I want to learn:

.....

.....

Activity

I hear and I forget. I see and I
remember. I do and I
understand.

Confucius

quote
tab
.com

- What do you understand the above quote?
- Reflect on your teaching approaches and identify those that may refer to each situation mentioned in the quote.
- On a rating scale of 1-5, (1=never, 2 = rarely, 3=sometimes. 4= often 5=Always) indicate your usage of the teaching approaches you have identified above.

- A Learner-centered approach is the acknowledgement of the diversity among learners.
- *Teachers need to understand that each learner has a unique way of accessing, processing and applying information.*
- *It involves many varied intentionally designed instructional experiences; provides multiple ways of learners to access, process, interpret and apply information.*

- A “learner-centred” activity focuses on the learner’s needs, experiences, background, perspectives, preferences, and interests as they relate to learning.
- A learner-centred activity helps the learners make the connections between what they already know and new information.
- It provides the learner with opportunities to set goals, provide input into the learning process, and collaborate.
- It provides opportunities to share interests, perspectives, and opinions in a safe, supportive environment.
- Learner-centred activities increase the engagement, motivation, and success of the learners

Learner centered approaches include:

- i. **Cooperative learning:** This is a teaching strategy that involves learners working in small groups to complete a task or project. The tasks are structured so that each member contributes to the completion of the task.
- ii. **Group Discussion:** This is a teaching strategy that enables learners to articulate their views and respond to opinions from their own. The group may be structured as either a large or small group.
- iii. **Independent study:** This is a teaching strategy that promotes an individualized learning experience allowing the learner to select a topic of focus, define the problem, gather and analyze the information, apply skills and create a product to show and tell

- iv. Portfolio development:** This is a teaching strategy where learners are supported to gather, organize and illustrate examples of their learning experiences and accomplishments. It is a process of creating, collecting, reflecting on and selecting work samples that engage learners continuously.
- v. Journaling:** This is a teaching strategy that provides learners with an opportunity to record their thoughts, feelings and reflection on a variety of learning experiences. The journal enables learners to explore ideas and clarify their thinking. It promotes reflection and higher-level thinking.

- vi. **Venn diagram:** This is a graphic organizer that is used to compare and construct information about two or more objects, concepts or ideas. It allows learners to organize information and see a relationship.
- vii. **Community service-learning:** This is a teaching strategy in which a teacher designs a project where the learner will participate in service within a community that has a learning component and reflection.
- viii. **Inquiry-based learning:** This is a teaching strategy that provides learners with an opportunity to examine issues systematically that involves identifying the issues, planning action, evaluating the action and reporting the experiences for further action.
- ix. **Project-based learning:** This is a teaching strategy in which learners are guided to identify a project which is undertaken systematically and reported.

Note it!



- Telling the learners what they need to know through lecturing is not learner-centred. Lectures should be short, and most often, a preface to an activity that is meaningful.
- Having the learner simply read a chapter or a paper is not learner-centred activity unless we focus their reading by asking questions that help create links between the theory and the learner's jobs or interests or experiences.

Integration of Technology in Teaching and Learning

Activity

- As we prepare to learn about integration of technology in teaching and learning, write down something you know and want to learn about it.
- Know:
.....
- Want to Learn

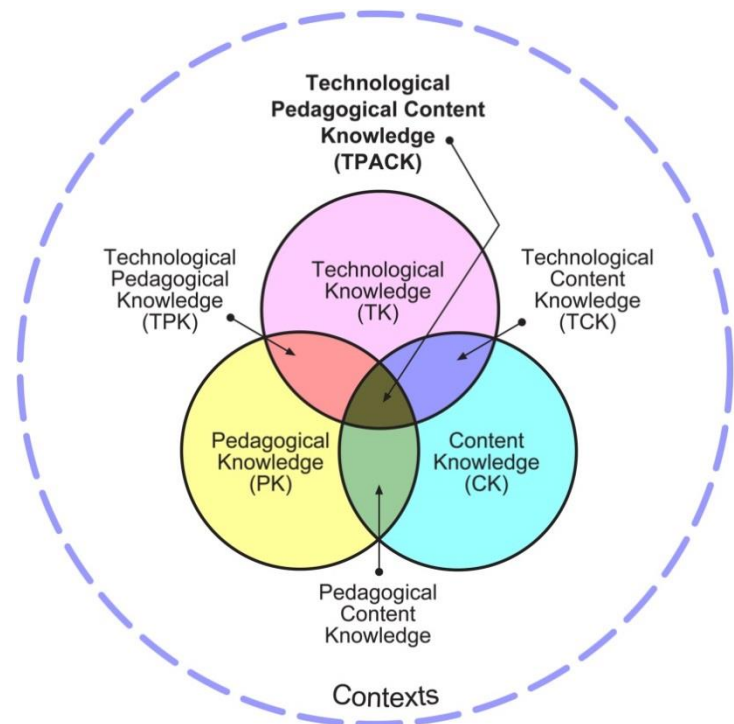
Integration of technology in teaching and learning

- This is the acknowledgement of the role of integration of technology in teaching and learning in the context of the 21st century.
- It is expected that teachers are digital literates who are capable of accessing, retrieving and designing lessons that integrate ICT in teaching and learning.
- It is expected that teachers have the knowledge, skills and attitudes in the use of basic computer applications and online platforms.
- The successful integration of ICT into the learning environment will depend on the ability of teachers to structure learning in new ways, to merge technology appropriately with pedagogy, develop socially active classrooms, and encourage co-operative interaction and collaborative learning and group work.
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- For many, this requires a different set of skills from those they currently possess.
- While, ICT integration aims to improve and increase the quality, accessibility and cost-efficiency of the delivery of instruction to learners, it also refers to benefits from networking the learning communities to face the challenges of current globalization.
- The use of technology in education contributes a lot in the pedagogical aspects in which the application of ICT will lead to effective learning with the help and supports from ICT elements and components.

TPACK-ICT Implementation Model

- Any effective implementation of technology in the classroom requires acknowledgement of the dynamic, transactional relationship among content, pedagogy, and the incoming technology – all within the unique contexts of different schools, classrooms, and cultures.
- A teacher can adapt the TPACK framework to different circumstances.



Activity

- Click on the link:
<https://www.ictesolutions.com.au/blog/why-schools-should-invest-in-ict/>
- Read the article on the benefits of ICT in education and then respond to the questions below:
- How can a teacher benefit from the use of ICT in teaching and learning
- How does a learner benefit from the use of ICT in learning?

- You may have noted that there are many positives with technology in the classroom which include:
 - The use of ICT promotes active and engaging lessons for learners' best learning experience. Therefore, learners are more active and engaged in the lesson. ICT provides the chances for learners to be active and take more parts or roles for their best learning experience.
 - The use of ICT also helps to broaden learners' knowledge where learners can integrate their prior knowledge into the current learning systems as well as share and exchange points of view with the teachers and classmates. ICT helps to provide the latest and current issues where learners can obtain it very easily and integrate it into their learning process.

- ICT helps learners to learn more effectively as well as helps learners to find related knowledge and information for learning. Technology always acts as a medium for learners to find related knowledge and information for their learning. It is best when the learners can gather information, relate it with what they have learnt and have a discussion on the information with teachers and their classmates so that they can see the relation of what is new and what the latest issues they need to catch up for effective learning.
- The use of ICT also allows learners to be more creative and imaginative. This shows that the use of ICT enhances learners thinking and enables them to think out of the box and make the best use of their learning process.

- Technology has caused a large shift in the field of education. With the number of learners engulfed with smartphones, learners are one touch away from the internet, music, Facebook, Twitter and YouTube videos. This increase has become quite a challenge for educators to keep up with various forms of media that are interesting to learners.
- With the advent of new technology, it is imperative that teachers not only possess this new technology but more importantly be able to navigate through and manipulate this technology to best meet the needs of their learners.
- The current educational practices need to prepare learners to thrive in an ever-changing technological society. This means that for learners to be successful in a global economy based on growing informational technologies, it has become more and more important for learners to have exposure to various media types.

Reflection

- Reflect on what you have learnt about how learners learn, learner centered approaches and ICT integration in teaching and learning.
- Fill the blanks below:

- I learnt that:

.....

- I want to learn more on:
