
Philosophy of Instructional Technology and Education

Education is the most powerful weapon, which you can use to change the world.

~ Nelson Mandela

Role of technology in learning

✎ A contextual perspective of the school organization and the role of the instructional technology specialist within the organization

Instructional technology is problem solving through an architect's perspective. Our tool is not a vehicle but that of a medium to be used and formed. Communication in education has been researched time and time again through many channels and perspectives using a rainbow of lenses, but how learning developed using different methods of communication has radically changed more than just learning by itself. Instructional technology is an objective approach to the organization of learning. The instructional technologist by one's self is not as objective because it is easy to tangent into one aspect of the process because our experience leans us towards a few parts of the processes more readily. Instructional technologists try to step back from the process and analyze the big picture to develop the focus of a situation. Collaboration is necessary to develop the process of instructional technology well. Professional organizers of materials, perspectives, and understandings gather silver pieces, precious stones, iron, and sand in an attempt to capture and display time. Why are these materials not telling time accurately? The pieces are laid in the sand with a tall iron rod in the middle to allow the sun to cast its shadow, but the resulting sundial can only be used when close by. Instructional technology allows us to create something beautiful and effective by hammering the iron into cogs, gears and springs, melting the sand into glass, and incorporating gemstones and silver in the face of the watch. The user now owns an object that they are not only drawn towards, but can now be taken anywhere to allow them to display time. Each of the pieces – the silver, precious stones, iron and sand – are not very useful for telling time on their own, but can be recreated into something beyond themselves.

☞ The national, state, local, geopolitical, and social systems influence on the instructional technology specialist's role and responsibilities

There are many political, social, moral and economical factors that help mold the use of instructional technology. In both the education and business worlds, there is a demand for financially pleasing quick fixes that tend to be ineffective and unreliable. Instructional design provides the opposite - not a quick fix but an detailed and effective one. When it comes to education, variations in standards and priorities from local, state and national sources weigh heavily on instructional designers. There exists a variety of values held in different regions, legal systems and regulations developed through government, religious and ethical/moral organizations. Instructional technologists have an ethical and moral responsibility to uphold. They must balance this responsibility against the responsibility of basing their design on accessibility and availability. In direct conflict with this ethical and moral responsibility is the business model in regard to the funding of materials and cost-effectiveness - is the cost worth the perceived outcome for those businesses and individuals who are fronting the materials? Do they see the possibility of promoting change for the greater good, or do they look for income potential and social status? There is a choice in decisions of adding momentary hardship to see a process, which will reap a larger reward, which requires getting out of survival mode.

Profession Vision

☞ Establishing and sustaining a positive climate toward technology integration in a single school or school district

Providing sustainable technology integration is not really different than instructional design and learning theories. Training and technology does not improve technology integration (Glazer et al, 2005). The question is how to empower the educator or learner while placing the experience into context, like a teacher using the curriculum to reflect and influence the daily implementation of their craft (Carrigg, Honey, & Thorpe, 2005). Giving educators the opportunity to share successes, failures, and ideas in a safe supportive setting is necessary for progress. With available resources, a higher goal needs to be maintained but also supported through reflection of progression. This process reminds me of the action research process.

Development, implementation, and evaluation of curriculum and technology services

When it comes to curriculum, it is pertinent that the developers have an understanding of the standards that act as a basis for the learning organization. This places what the learner is expected to know in the forefront so that “we have always done it this way” does not start creeping in. Then, the developers determine the primary needs of the learning organization and the strengths and weaknesses in the current curriculum. This may include collaboration between grade levels, which allows curriculum issues to be found and fosters a professional learning community (DuFour, 2004). Community is necessary to obtain a variety of experiences to result in a better product. Assessment designs benchmarks, which also hones in the idea of backward design. But to implement change in collecting meaningful data, educators must know how to write assessments and collect data so that it is relevant to the learning organization. This can also be facilitated through multiple districts to enfold the idea of open learning and to create curriculum maps that show a conceptual perspective of assessments. This process can also be used to show an opportunity to develop cross-curricular concept and be used as an administrative tool for a check and balance system and professional development. The next step would be to seek out and evaluate materials and resources to use in instruction. Because the process of creating and implementing curriculum involves many facets of a learning organization, it is essential to keep all stakeholders in the process informed to prevent reactionary responses towards the process. Visual representations and vision is necessary for implementing new curriculum as well. Professional development that puts implementation responsibility at the building level has been proven more effective and an increasing amount of evidence shows that traditional approaches to professional development are ineffective (Joyce & Showers, 2002). Technology services follow similar guidelines and principles including collaboration, giving stakeholders ownership of their product or performance, maintenance through feedback and giving users a comfortable community to interact within.

Design, evaluate and implement program in an academic and co-curricular situation?

Whether the program is a school wide behavior support interventions or health promotion programs all programs or organizations have three objectives in sustaining a program: Obtaining, attracting and retaining resources whether it is personnel or material resources. The question is how to integrate learner’s skills and knowledge in the process to lead learners to be more sufficient self-learners.

The ADDIE model is an acceptable process to design, implement and evaluate an academic program or co-curricular program. Starting with Analysis: by conducting a performance assessment, identifying instructional goals, conduct a learners analysis, and determining appropriate resource/delivery analysis. The next step Design: develop a task inventory, create performance objectives, and determine return on investment (ROI). The third stage Develop includes: determine which instructional strategies to implement, what supporting media/resources to utilize, and determine what formative evaluations to use. The fourth step Implementation involves making learning resources accessible and available to the learners. The final step is Evaluation where it assures quality in the design, creates a tool to evaluate the process, and create a summarized evaluation of the process.

☞ Strategies and behaviors - management of services, staff, equipment, and other materials

The servant leader mentality is one of the hardest things to let go in leadership because the idea of self is a value that is attached so strongly to oneself. Self-insight and perception skills, the ability to analyze situations correctly, the ability to inspire, motivate, and lead, and personal flexibility and adaptability are the four skill sets, which are necessary for effective management. This is applied through identifying challenges so that behaviors can be maintained, improved or redirected. Next, identify the causes for the current behavior and choosing a solution or strategy to achieve set goals. Lastly implement strategies, monitor progress and then fine-tune adjust as needed. Paralleling the paradigm shift with learners in education the workforce is also changing. Management who are innovated thinkers that embrace diversity that are flexible and adaptable are necessary to maintain an effective working environment that will produce more effective affectively productive staff that are capable and more willing align to goals and standards.

☞ Applications of technology as a teaching, learning and administrative tools

Technology has many applications that are developed or eventually adapted and adopted by other interest groups such as education and administration. The diffusion theory has four factors that affect the process which are the process of innovation, communication of information, time, and social systems that introduce the innovation (Rogers, 1995). Technology such as the internet and the use of email has been a standard adoption along with the use of PowerPoint and learning management systems within not only education but also business. In my research of technology technologies that seem to have the biggest impact was adapted and

adopted into the learning industry.

☞ Build and maintain partnerships with administrators, faculty, students, parents and community

Building community within any learning environment is essential to success of that organization. The idea of shaping learners holistically and building partnerships is a collaborative endeavor. In past experiences getting multiple groups on board with an idea or initiative has always seemed to be a trickle effect where if waiting for the group to move will lead to nothing changing. The collective cannot function without having clear expectations, roles and responsibilities, and a clear method for communication. All stakeholders must also have the ability to be a productive member of the organization for a community to be created. The organization of the community must also ensure productivity especially when involving large groups of individuals. Subcommittees might be required for example with trust from others to be able to be the hands to allow change to occur. Also allow a variety of opportunities to participate with the different time commitment and skills that are brought to the table.

☞ Personal and professional growth and development

Applying my skill set into the medium for change is my foremost goal. I would like to develop my skills towards more in depth study of instructional systems. Short-term and intermediate goals would include employment at the collegiate level as an instructional technologist working with learning management systems and also finding a doctorate program to enroll. Long-term goals are not decided but I have interest in developing skills to stay at the collegiate level by teaching.

It is in fact a part of the function of education to help us escape, not from our own time for we are bound by that - but from the intellectual and emotional limitations of our time.

~ T.S. Eliot

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