TECHNOLOGY TO SUPPORT LEARNING

ICT 3030

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Cooperation Strategies: learning is a cooperative process which social interaction.

Cooperative learning involves the utilization of small groups in an educational setting in order to foster interpersonal communication skills amongst students.

Cooperative learning means that students support each other in working to reach a common result. This happens in pair or group work. Create a pleasant learning environment. Cooperative learning is useful for all kinds of students. For example, silent students who often take the outsider position in class and children with attention deficit or hyperactivity disorders can be integrated into the learning group more easily.

Studies across the world have consistently proven the immense benefits of students engaging with one another in small groups (Hua Nan, 2014).

According to Daniels & Billingsley (2014), today's students are spending an average of 35% of their working day using computer and phone based technology. This is likely to be no surprise for many of us, who find ourselves constantly absorbed in our phones throughout the day between classes, on breaks at work, or just in our casual free time.

Use of social media:

The use of social media outlets has shown to be increasingly popular in aiding the cooperative learning experience. While many critics might say that social media has crippled modern students, it is argued that by embracing their inevitable usage can “contribute to engaging students with limited attention spans" (Rambe, P., 2012).

Through the use of **closed-groups**, students are able to communicate in a consistent and relatable setting where they may contribute to discussion or seek clarification for their assignments.

Video Modeling and the Integration of Special Needs Students

Further, studies have shown that the inclusion of learners with special needs in a general education setting can serve an important role in their social and academic development (Alquraini, T., & Gut., 2012).

While cooperative learning has often proved to be most difficult for students with special needs, studies have shown that the use of **video modeling** can help students better understand how to participate in a cooperative group setting (O'Brien & Wood, 2011). By using videos often created by teachers, students can be presented with examples of how to, and how not to interact with each other in order to directly correlate appropriate social skills.

What is Video Modeling?

This the use of visual/video examples of someone performing a targeted behavior or skill and then imitating the behavior/skill watched.

How is Video Modeling Used?

1. The individual watches the video demonstration of the skill/skills.
2. After watching the video, the individual performs the skills from the video.
3. With consistent repetition, the individual begins to generalize or utilize that skill in all environments.

Why Use Video Modeling/Video Tours?

- Motivating method of presenting information
- Simple means of accessing information (computer, phones, tablets)
- Short videos can be presented in a quickly, and "on the go."
- Allows for independence of learning (minimal direct person-person instructions required)
- Visual learners are naturally attracted to video and other visual means of receiving information.
- Cost/time effective means of teaching
- Video Modeling can assist in teaching a variety of skills (daily living, behavioral, school skills, community skills, etc.)
- Individuals with autism are typically visual learners, naturally drawn to video and other visual inputs. Video modeling for children with autism is an ideal fit for teaching all types of skills.

Elaboration Strategies: What is problematic about all learning and knowledge-gaining processes is integrating new knowledge into an existing, cognitive structure (cf. Friedrich & Mandl 2006).

Much contemporary cognitive research is directed at analysis of learning from written texts and verbal discourse.

Elaborative techniques encourage both the understanding and remembering of new knowledge since they create links between new information and the already existing stock of knowledge. (Read: Generation and Precision of Elaboration: Effects on Intentional and Incidental Learning).

Motivational and Emotional Strategies: The learner's motivation is mostly regarded as a central condition for successful learning. However, other factors like intelligence, previous knowledge and interest play an important role as well.

Rheinberg describes motivation as an activating orientation to a target status which is regarded as positive.

In a school context this means that the extents of learning motivation affects whether a student learns at all and if so, for how long (intrinsic and extrinsic motivation).

Actions which are intrinsically motivated are especially interesting, exciting or challenging for learners and show positive aspects of experience. In contrast, extrinsically motivated actions have an instrumental function as they are used to reach positive consequences, for instance praise of the parents or good grades.

Revision Strategies: Students are confronted with a large amount of information each day at school. The more detailed the subject matter, the

more important is the revision of what has been learned as a pre- condition for remembering.

The significance of revision was first investigated by Atkinson and Shiffrin in the 1960s and has been focused on ever since in the academic world (cf. Friedrich & Mandl 1992, 11; Atkinson & Shiffrin 1968).

Active repetition and reciting helps to store particular facts in the long-term memory.

Organizational Strategies: By using organizational strategies important information is identified or depicted visually, details are combined and clustered and thus a deeper understanding of the new subject matter is achieved.

Utilizing organizational strategies is generally beneficial for students of different personalities, skills and needs.

Control Strategies: Effective learning needs strategies controlling one's own learning and thinking. Competent learners are able to plan, monitor, check and reflect the results of their leaning and thinking processes.

These strategies are called metacognitive strategies as they operate above and perform the function of regulating one's own information processing (Mandl, 2006).

Control strategies help to check the learning progress, for instance whether a text was understood in detail. Regulation strategies are useful to adapt

one’s learning to the demands of the task, such as reading a difficult section of text once more.