VIMSIA Notes from the Head of School **Education Reform**

The United States once had a highly ranked education system. Today depending on the measure, the US ranks at best in the top 12 at worst 32nd in global education. Finland is universally acknowledged as the leader in education. Since the early 1980s the US has been undertaking various efforts to improve its education system. Three principles that are now widely being adopted are:

Cognitive Learning, Self-Discipline and Collaboration.

1. Cognitive Learning:

Jean Piaget (1896-1980), a French scientist, is credited with first identifying the concept of cognitive learning. He wrote about stages of development: assimilation, equilibrium, new situation, disequilibrium, and accommodation. He identified that children learn at different rates as they progress through the above stages. Jean Piaget taught about discovery learning; the idea that children learn best through doing and actively exploring. He emphasized "individual learning, flexibility in curriculum [and] the centrality of play in children's learning, [as well as] the use of the environment, learning from discovery and the importance of the evaluation of children's progress. Teachers should not assume that only what is measurable is valuable." (McLeod)

Piaget stated that assimilation and accommodation require an active learner, not a passive one, because **problem solving skills cannot be taught, they must be discovered**. Within the classroom, learning should be student-centered, an accomplishment through active learning. **The role of a teacher is to facilitate learning, rather than direct tuition**. Teachers should focus on the process of learning rather than the end product. Teachers should use collaborative as well as individual activities so children can learn from each other.

The cognitive learning traits of humans have been recognized for a long time, and now US education reformers have identified cognitive learning skills as a foundation of quality learning. And, yes, **cognitive learning skills are a foundation item of a Montessori education**. A Montessori classroom is designed to maximize cognitive learning and Montessori teachers are educated to facilitate cognitive learning.

2. Self-discipline:

Claire Watson quotes J. Ellsworth, "Research indicates that students who are self-motivated, who have a major stake in decisions, and who self-assess and self-discipline will be successful in learning concepts, creating ideas, and becoming successful citizens". She herself states "classroom management has traditionally... been seen as controlling student

behavior... demanding a student sit in their chair, raise their hand [and be quiet, and failure to do such prompts coercive action]". Such is not conducive to learning for as soon as coercion is introduced the student teacher relationship becomes adversarial. If we want students to become thinkers and to understand knowledge and not merely memorize information, one needs them to understand their own behavior...self-management, self-monitoring, self-responsibility, self-direction, self-reliance all become self-discipline. Self-disciplined students go on to be productive members of society without the need for external compasses and external directions. Long before Watson, Plato asked "What man is most fit to govern a town? He that can well govern himself."

3. Collaboration:

"Group projects encourage children to cooperate, improve social and interpersonal skills and help them to better understand the material at hand through discussion and a team learning effort. Students must communicate effectively, work as a team and demonstrate self-discipline while working collaboratively with their peers. This, in turn, can increase their learning and maximize the educational experience." (Loop). "They will have a deeper understanding of the material you have assigned to them and will retain it for a longer period of time than if you had 'taught' it to them. You'll find a measurable improvement in their critical thinking abilities." (Banerjee)

One will also appreciate the increase in confidence levels and sense of self-worth. One will see students turn into individuals with improved inter-personal communication skills.

Collaboration teaches students to appreciate diversity of thought and expands perspectives of opinions and knowledge. Students learn to question knowledge from various perspectives rather than merely memorize readings and thoughts. They will learn to process conflicts of knowledge and opinions and indeed develop a greater sense of respect for others and themselves.

Collaboration will teach students how to learn and not to simply regurgitate knowledge or memorize.

Collaboration will help students become better members of society with enhanced academic skills.

Student learning: all decisions in an education system or school must be made with the impact on student learning as the guiding factor; not politics, not folklore, not tradition.

Quality teachers are the foundation of any quality education system. Who is a quality teacher? Not merely one that is "certified". If a school does a survey of its teachers, parents and students one will be able to identify quality teachers. The survey results will depict the obvious. A quality teacher knows their subject and teaches their subject, they are passionate about their subject and they have an ability to transfer their passion to their students.

The above words, concepts and thinking are indeed not mine, but merely the gathering of

collective ideas of what works best in education.

And, yes, they are foundation concepts of the VI Montessori School and Peter Gruber International Academy.

Our school also stands on the concepts of:

The Three legged Stool: parent, teacher, and student working together to improve education.

The Growth Mindset: education and intelligence are and can be acquired.

Regards,

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