Analysis of CRE Learning Outcomes in correlation to Constructivist Ideas

Constructivism emphasizes the careful study of the processes by which students create and develop their ideas.

Several specific CRE Learning Outcomes of Student Company Programme (organized by Junior Achievement Hong Kong) are noteworthy.

1. The first is the nature of this programme which enables students to take their own control of learning.
- The whole programme reduces students' reliance on traditional school work routine.
- Whenever students encounter a problem in any stage, they go through the process of critically analyzing the problem and proposing the best solution on their own initiative.
- In the process students are led to focus on a problem and through the problem-solving activities, their critical thinking, communication, collaboration and study skills are developed. All these generic skills form a core part of the learning objectives which are being shared with the students throughout the programme.

2. Second, active participation are invited.
- It is very glad to notice that the whole team is initiative and the dialogue among individual evokes thoughtful active reflection in which all students are encouraged to take part.
- Our student company, Humane, went through the authentic business cycle with activities including electing the management team, researching and developing a product/ service, writing a business plan, raising capital through issuing shares, production, sales, keeping financial records, holding Annual General Meetings and finally, liquidating their company.

3. Third, active collaboration becomes the rule.
- It is common to observe one student tutoring another in a new procedure, or two students make recommendation for improvement in each other's work. In this open and supportive learning atmosphere, students come to view their peers not as competitors but as resources. As a result, students are readily to contribute and to work with others with diverse backgrounds.
- More important is that they are willing to receive constructive criticism and correct mistakes in the light of evidence.
- Without prompting, students' meta-cognitive thinking skills are developed as they are being aware of the processes of learning and problem solving; and are ready to put effort in regulating and controlling these processes to improve their performance.

4. Fourth, feed back and comment profound a positive effect and became valued.
- In the second stage, written feedback given to individual department based on their proposals serve the purpose to challenge their ideas and help them to reflect on their work.
- During the final stage, the students' performances in trade fair, annual report and CANJAC competition are evaluated publicly. Scores are awarded according to the pre-set criteria. The students are guided to see why some groups are awarded higher scores than others.
- This practice not only serves as helping them to reflect on their work and re-evaluates their performance, but also get them to attribute success to stable and controllable factors - strategy and effort.

5. Fifth, the assessment targets change from purely cognitive to inclusive skills, attitudes and knowledge.

- The continued assessment through presentation during meeting captures qualitatively different, and much more detailed, information about student's actual competence.
- As the assessment is made on the basis of a group rather than individual, this helps to facilitate cooperative learning and also alleviates the unnecessary pressure.
- Students activate their existing knowledge on environmental sustainability in designing their products on their own. According to SOLO Taxonomy, the students' learning competence is at the relational level in this case.
- Feedback collected from interim and final evaluation questionnaires suggests that students' perseverance, confidence, integrity and participatory attitudes are also cultivated in line with the acquisition of business knowledge.

6. Finally, the last but not the least is their outstanding and highly reflective output.

- Our students' company, Humane, actively participated in the inter-school events. At the Company Programme Trade Fair held on December 15, 2007, Humane set up a sale booth to present their creative products or services to the public, and practice their sales and marketing skills in a real marketplace at the HSBC Ground Plaza.
- After liquidating their businesses, Humane, treasured the opportunity to review their programme experience and present their business case and learning at the Final Presentation Competition held on April 5, 2008.
- Humane did a great job in both sales revenue and corporate citizenship. They won the CWGC Alumni Creativity Award in recognition of their high quality work and the Corporate Social Responsibility Award from JA for their contributions to sustainable development of society through promotion of good governance and well-being of their employees, community and the environment.
- The nominations of the international CANJAC competition became one of the eight finalists.

One more aspect that worth to mention is that my role throughout the whole process has become significantly more complex, as I have many roles: programme manager, tutor, and lecturer. Most often, I am a member of the team, and not the focus of the classroom. Students generally turn to me for assistance when needed, but otherwise my role is more that of a colleague than of a supervisor. This provides me time and opportunities to realize students' potential and also to forge stronger bonds with them. On several occasions, I have been surprised when students invent new ideas that I had never thought of before – indeed, I am learning from them!

Organizing CRE programme is time and effort demanding, yet our students surely deserve it! There is absolutely nothing to match the reward of seeing a balanced student leaving our classroom with a positive attitude to his future and armed with a comfortable awareness of himself and his own skills and capabilities.

~ To teach is to touch the future.~