

ACTIVITY 4

ACTIVITY: APPLY PROJECT-BASED APPROACHES METHOD ON TEACHING

I. The reason of performance:

Project-based approaches (PBA) are an active teaching method, help students initiative and self-reliance in all activities to occupy knowledge lessons. When studying PBA, students have the opportunity to shape and develop the necessary study and social skills. Applying PBA is the right direction in teaching.

Technology (special agriculture) is a theoretic subject inextricably linked with empirical so using PBA in teaching technology is reasonable and necessary. To contribute to the development PBA in school, in school year 2011 – 2012, we conducted PBA method in Technology program in secondary to assess the effectiveness of this teaching method and apply PBA effectively on students.

* BASIC INFORMATION ABOUT ACTIVITY:

- Author: HO VAN MINH

Unit: Hong Bang Secondary School

Teaching Department: Technology 7

Position: Teacher

- Name of topic: project "Growing vegetables safely at home"

- The summary of the content:

1. Sphere of topic:

The topic is in junior high school level, grade 7, Technology 7, part of Cultivation, the first semester.

2. Basic contents of topic:

- The importance of growing vegetables safely at home
- The technique of growing vegetables safely at home
- The experiment of growing vegetables safely at students' house

3. Teachers and students participate in:

Mr. Ho Van Minh

Team of students: grade 7/4

4. The time and place of performance:

Location: Hong Bang secondary school, students grow vegetables at home

Duration: 4 weeks (from November 11th to December 9th)

II. Purposes:

- Recommend the process of PBA, and then apply PBA to organize studying and research for students. Thereby contributing to innovation teaching method in secondary schools and improve the quality of students' knowledge.
- Create interdisciplinary teaching form: students know how to apply knowledge from 3 subjects: agriculture - biology – computer science.
- Create interest in the learning of students, in addition to the traditional learning methods.
- Students acquire new knowledge easily and unforgettable.
- Give lessons into real life.
- Help students train many skills: teamwork, use of information technology, exploit information effectively and directly, present problem and logical thinking, etc.
- Use of project results makes students' semester examination results.

III. Plan:

Project: Growing vegetables safely at home

1. Project Description:

Nowadays, for us, it is not easy to ensure the safety of fresh vegetables. So the hand-planted fresh vegetables at home has many benefits and interesting for all of us

Students play an agricultural professional to introduce and guide the process of growing vegetable safe for school garden or a neighborhood in a large center. They will prepare a presentation in Microsoft power point or video clip.

2. Aim:

- Understand the benefits, the process of growing vegetables safe at home.

- Apply learned knowledge of cultivation into productive practice.
- Apply information technology into learning (knowing how to collect and exchange information over the internet, edit text, create slideshows, edit video, use the camera, ext.)
- Promoting skills: collect, process information from the Internet
- Promoting skills: creative thinking, problem solving, presentation.
- Promoting skills: independent work, teamwork.

3. Contents research:

1. The importance of growing vegetables safely at home:
 - + The reason of growing vegetables was applied widely at home nowadays?
 - + The benefits from growing vegetables at home?
 - + The food can be prepared from fresh vegetables?
2. The technique of growing vegetables safely at home:
 - + The tools and materials need preparing?
 - + The process of growing vegetables?
 - + Note to vegetable grows well.
3. The experiment of growing vegetables safely at students' house:
 - + Comparison of experiment of growing vegetables at students' house and the theory learned.
 - + Some evidences and comments.

4. Measures:

- Team leader assign tasks to your team.
- Collect information and data on the internet, magazines and reference books.
- Collect some illustrations.
- Take photo and filmed in the process. (Part of the experiment)
- Perform growing vegetables at students' home.

5. Required products:

- Presentation (in power point) or reportage (in video) about the content with images, videos or sound illustrations.
- The report (in word) about the content.
- Products: one kind of vegetables which students grow.

6. Implementation period:

- Week 1: (November 11th - November 18th) diffuse, guide, assign tasks.
- Week 2, 3: (November 21st – December 02nd)
 - grow vegetables at home.
 - collect, process, select information.
- Week 4: (December 05th – December 09th): complete and present products at class.

7. Scale:

- Product: presentations / reportage: 20%
- Product: report: 20%
- The process of cooperate: 20%
- Presentation at class: 10%
- Fresh vegetable product: 30%
- Work diary of group / personal: plus or minus points

IV. Methods:

- + Academic research methods:
 - Review theory issues related to growing vegetables at home.
 - Review theory issues related to project-based learn, how to organize, rate, ext.
- + Practical research methods:
 - Guide students how to use word, power point, film, video editing, and ext.
 - Guide students how to grow vegetables at home.
 - Observation: through students' activities, ext.
 - Conversation: find out about students' ability, ext.
 - Survey: by questionnaire, ext.

V. Performance:

PROCESS OF TEACHER AND STUDENTS' PERFORMANCE

Before the project		
November 11 th - November 18 th		
	Teacher	Students
Before deployment (November 07 th - November 11 th)	<ul style="list-style-type: none"> - Contact the teacher of class, expertise administrators. - Design rate panels, scorecards - Design some games - Prepare project records for each team 	
November 15 th	<ul style="list-style-type: none"> - Rate students' demand by survey questionnaire one => plan to divide groups - Rate students' ability by questionnaire of personal ability => plan to divide groups 	<ul style="list-style-type: none"> - Ask students to do survey questionnaire and questionnaire of personal ability before one day
November 16 th	<ul style="list-style-type: none"> - Establish the project team. Ask students to nominate leader (achieve teacher's requirements: have the ability of divide tasks, assign tasks accord with the individual strong point, oversee and rate each member, ...) - Ask students to participate in some small games about knowledge of cultivation - Ask student to discuss the guiding questions - Introduce the project scenario: project 	<ul style="list-style-type: none"> - Number of students: 34, divided into 5 groups of 7 students, (1 group of 6) - Leader of 5 groups: Group 1: Duc Minh (6 students) Group 2: Ngoc Nhu Group 3: Quynh Nhu Group 4: Tuong Vy Group 5: Gia Phuc - Review knowledge of cultivation - Discuss the guiding questions => comment the preliminary content - Group 1, 5: do reportage (in video),

	<p>planning, project description, duration, require of product, role play, and ext. (Group 5 had the camera at home, group 1 had no camera, borrowed from school)</p>	- Group 2, 3, 4: do presentation (in power point)
	- Introduce the criteria and how to rate products: report in word, presentation in power point (or reportage in video), fresh vegetable product, the process of cooperate, presentations, scale, ext.	- Watch for
	- Establish project schedule and diary form of groups and individuals daily, weekly.	- Watch for project schedule in order to plan for groups.
	- Guide students made KWLH chart.	- Make the first two columns of the chart.
November 17th	- Guide leader made action plan and how to divide the work according to the abilities of each member	- Leader assign tasks to team members
November 18th	- Ask each group to select one type of vegetables to grow.	<ul style="list-style-type: none"> - Group 1 => lettuce, peppers - Group 2 => sweet cabbage, Water morning glory - Group 3 => Jute Plant, Ceylon Spinach. - Group 4 => Garland Chrysanthemum - Group 5 => Luminaries.
	<p style="color: blue;">In the project</p> <p style="color: blue;">Week 2, 3 (November 21st – December 02nd)</p>	
	Teacher	Students
Regularly	- Regularly consult with groups on progress and help weak students. Each day, met one group about 10 minutes, continuously for 3 weeks (2, 3, 4.)	<ul style="list-style-type: none"> - The group record regularly their performed work to teacher oversee and feedback promptly if necessary. - The group check mail regularly or get

	<ul style="list-style-type: none"> - Monday: Group 1, 2 - Tuesday: Group 3, 4 - Wednesday: Group 5, 1 - Thursday: Group 2, 3 - Friday: group 4, 5. - Regularly borrowed the camera and laptop to support group to do video. 	meeting if necessary to feedback the results.
Week 2 Nov 21 st	<ul style="list-style-type: none"> - Create a general email address for the groups to the group report progress and difficulty. Regularly access to e-mail or have meetings to oversee the group. 	<ul style="list-style-type: none"> - Members begin to research and gather information and data.
Nov 23th	<ul style="list-style-type: none"> - Provide groups with the documents and the useful web-sites, (ex : where to buy material, tool, seed, ...) - Guide groups how to select, gather information and cite necessary documents. - Guide groups how to work independently and teamwork. - Guide groups how to solve problem, creative thinking, self-management, ... 	<p>(Regular)</p> <ul style="list-style-type: none"> - Research on the benefits and techniques for growing fresh vegetables. - Grow fresh vegetables at home - Write diary and record feedback on progress every day. - Share progress and writing at class - Review questions as necessary.
Nov 24 th	<ul style="list-style-type: none"> - Guide groups how to use the camera. 	<ul style="list-style-type: none"> - Practice using the camera.
Nov25 th	<ul style="list-style-type: none"> - Guide groups how to use Power-Director software. 	<ul style="list-style-type: none"> - Practice using the software.
week 3: Nov 28 th Dec-02 nd	<ul style="list-style-type: none"> - Regularly access to e-mail or have meetings to oversee the group. - Regularly consult with the groups about progress and help weak individual. - Regularly borrow the camera and laptop from school to support groups. - Remind groups look after vegetables regularly to not wilt. 	<ul style="list-style-type: none"> - Leader oversee members to rate the collaborative process. - Share progress and writing at class - Review questions as necessary. - Look after vegetables regularly. Keep researching.

After the project.		
Week 4 (December 5th – December 09th)		
	Teacher	Students
Dec 3rd Prepare	<ul style="list-style-type: none"> - Research related documents. - Prepare rate panels, scorecards - Arrange some teachers to attend for feedback: the teacher of class, expertise administrators, inspector from education department, teachers in group. - Prepare room, arrange seats for groups and attended teachers. - Check the projector, microphone, speakers, and ext. - Check presentation of groups on computer. 	<ul style="list-style-type: none"> - Keep finishing products and practice presentation. - Prepare the relevant documents. - Send group's presentation to teacher before 2 days to check.
Dec 09 th The day of presenta tion	<ul style="list-style-type: none"> - Give the time of presentation for each group (maximum 10 minutes) - Oversee and ask questions at the end of each presentation. (remind students to pay attention to the time and give points to other groups) - Ask groups draw for the order of presentation. 	<ul style="list-style-type: none"> - Each group present at class (approximately 10 minutes) in 1 presentation and display products. Groups 2, 3, 4 takes role play situations Group 1, 5 report in slideshows - Other groups watch for, ask questions and give points
	<ul style="list-style-type: none"> - Organize discussion about questions of lesson and questions of content. - Ask groups to finish the last two columns of the KWLH chart. 	<ul style="list-style-type: none"> - Discuss guiding questions.
	<ul style="list-style-type: none"> - Teacher rate and remark the presentation: + The group created a variety of situations (professional, agricultural engineers, journalists, food poisoning, and ext.), had fun situations, created feeling light, 	

comfortable, not cause stress during a presentation.

+ Two groups (1, 5) make video with appropriate content. But the cinematography and film editing is limited but this is the first time of the group should be considered well.

+ Groups (2, 3, 4) present in power point. Groups are still having status of looking at the screen and read, had not yet grasped the meaning which is presented.

+ When presenting the group had not yet paid attention to the time.

THE GROUPS' PRODUCTS OF VEGETABLE



Group 1



Group 2



Group 3



Group 4



Group 5

	<ul style="list-style-type: none"> - Watch for. - Give points to team points and individual points. - Collect rate panels, scorecards (evaluated by team leaders, journal, and ext.) - Comment the situation of each group: active groups, inactive groups, and ext. - Reward active groups. 	<ul style="list-style-type: none"> - Each leader rate members of team.
Dec 14 th	<ul style="list-style-type: none"> - Ask students to do the second questionnaire 	<ul style="list-style-type: none"> - Do the second questionnaire
	<ul style="list-style-type: none"> - Keep products to the following courses consult: report in word is stored in the library, presentations in power point are stored on the web, and fresh vegetable products are displayed in the garden. - Think about success and what to learn from experience. - Evaluate your teaching, understand the aspirations and needs of the students to have orientation for teaching activities. 	

VI. Results:

Results are shown through:

- The students' products: report, presentation, safe vegetable products => products achieve the criteria which teacher set out.

- The process of collaboration among the members in the group => majority of the members collaborates, support and help each other.
- Diary of groups and individuals => majority of the members record fully and timely.
- Take notes of teacher and leaders about the members: the group rate members well.
- Students understand clearly the lesson content; apply their knowledge to their lives.
- Students develop some skills that they need to study and research in their future.
- Students have chance to train more information technology: word, power point, make a video, ext.

* **Some results from survey questionnaire:**

- > 73.5% of students love project-based learning.
- 55.9% of students think that cooperative skill is most important.
- 73.5% of students ready to join the project-based learning at the following semester and the following school year.
- 58.8% of students think that they complete successfully of their work and support team members.
- 52.9% of students comment themselves well on the results of the group.
- 85.3% of students think that they learn how to apply information technology on learning.
- 50% of students think that the project-based learning is necessary and useful.
- 44.1% of students want to select Technology, 35.3% of students choose Biology, ext.
- Members' exam results achieved 75/100 points or more.

VII. Practices:

2011-2012 school year is the first to apply the PBA program. We have achieved many positive and substantial results. I get encouragement from administrators and I have continued to apply PBA program for the following school year, until now.

SOME PICTURES OF GROUPS' PRODUCTS

