Applied Learning (Senior Secondary Level)

2018-20 Cohort

Learning and Teaching

Subject Title : Computer Game and Animation Design
Area of Studies : Creative Studies
Course Provider : Vocational Training Council

In Computer Game and Animation Design, student-centred learning and teaching activities are designed to enable students to understand fundamental theories and concepts, develop their generic skills, and address their career aspirations in computer game and animation design.

Different modes of activities are employed to provide students with a systematic understanding about the context (e.g. lectures to grasp the overview of the computer game and animation industry, and fundamentals of computer game and animation productions) and eye-opening opportunities to experience the complexity of the context (e.g. industrial visits, visits to computer animation and game shows, and sharing by industry professionals to widen exposure and to develop appreciation of various computer game and animation products).

Students acquire an understanding of the requirements, fundamental knowledge and skills essential for further learning within the area through learning-by-practising opportunities in an authentic or near-authentic environment (e.g. hands-on activities in character design, illustration and programming for computer game with different kinds of industry standard software and hardware, and brainstorming activities to generate creativity in computer game and animation design).

Students are also encouraged to develop and apply conceptual, practical and reflective skills to demonstrate entrepreneurship and innovation (e.g. case study to evaluate critical factors for creating a successful computer game or animation with emphasis on character design, storytelling, motions, gameplay, and awareness of originality, copyright and intellectual property rights issues, and create computer game or animation proposals according to development of the industry). Students are given opportunities to integrate the knowledge and skills acquired and consolidate their learning (e.g. the integrated project provides students with the learning opportunity to develop a computer game or animation product from initial ideas generation; set-up of work schedule; application of the knowledge and skills in manipulating different digital media elements; and demonstration of analytical and critical thinking skills to evaluate the effectiveness and generate conclusions or recommendations for the product developed. The group project work allows students to demonstrate not only their collaborative and team building skills, but also enthusiasm, motivation, willingness to learn and ability to make improvement during the process of product development).
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Curriculum Pillars of Applied Learning in Context – Computer Game and Animation Design

Upon completion of the subject, students should be able to:
- understand the profile of the computer game and animation industry and its latest local and global development;
- apply various digital media skills and tools manipulation techniques; and pre-production and project management skills to computer game and animation design;
- integrate creativity, team working and problem-solving skills in creating computer game and animation products;
- recognise the importance of work ethics and responsibilities in the computer game and animation industry, including originality and awareness of intellectual property rights, and demonstrate positive values and attitudes;
- apply the knowledge in media literacy and skills in critics to the development of portfolios of studies in various computer game and animation products; and
- develop self-understanding for further studies and career development in the related field.

Through the specific contexts related to the subject, students have different learning opportunities, for example:

1. **Career-related Competencies**
   - describe the profile and characteristics of the computer game and animation industry;
   - observe the work ethics, workplace requirements and responsibilities of the practitioners in the computer game and animation industry, e.g. functions of different departments within a computer game and animation corporation and the role of individuals with the departments;
   - transfer practical and manipulating skills to different media, e.g. employ digital animation techniques and industry standard software to create computer games;
   - demonstrate creativity, critical thinking and problem-solving skills in creating computer games and animations;
   - illustrate the ability in multimedia literacy and presenting ideas and views effectively; and
   - identify the aptitudes and abilities required in computer game and animation industry and formulate the personal development plan for further studies, career planning and lifelong learning.
### 2. Foundation Skills
- demonstrate effective communication skills in a range of workplace tasks like communicating with production team members who have different areas of expertise and other specialists in developing and finalising a production;
- employ mathematical skills in determining appropriate format of different digital media elements or transforming a digital media element between different industry standard formats; and
- apply information technology skills in making use of appropriate computer hardware and industry standard software in different streams to create and manipulate different digital media elements.

### 3. Thinking Skills
- apply analytical skills when discussing the nature of the computer game and animation industry, and how the corporations in the field achieve success;
- demonstrate creative thinking skills in developing the concept for originating a project in the chosen elected stream (i.e. computer game design or 3D animation design);
- appreciate the benefits brought about by technological changes in the hardware and software associated with audio and visual effects; and
- apply problem-solving skills, decision-making skills and analytical skills in the process of planning, creating and producing computer games and animations.

### 4. People Skills
- demonstrate self-reflection skills and be receptive to advice or criticism upon receiving feedback from tutors and classmates during various learning activities such as class exercises, practical assessments, group discussions and presentation;
- show self-management skills in reviewing progress and adjusting priorities to meet deadlines during the preparation for tests, project progress reports and project presentation; and
- employ interpersonal, collaborative and team building skills which are essential for designers in brainstorming, group sharing, group discussion and presentation.

### 5. Values and Attitudes
- show honesty and integrity as well as respect for others and law and authority, e.g. identify the importance of originality, copyright and intellectual property rights especially in the planning, design and production of the project work;
- demonstrate positive attitude e.g. dependability and responsibility, enthusiasm and willingness to learn through the hands-on applications when they witness and involve in the evolvement of the project from ideas to finished work;
- show curiosity and motivation in appreciating various computer game and animation products and works; and
- demonstrate self-confidence and self-esteem in presenting ideas during group discussions and presentations.