RESEARCH BASED INTERNSHIP : AGENDA IN SERIOUS GAME FOR MORAL EDUCATION DEVELOPMENT AND MODEL ASSESSMENT

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ABSTRACT

Internship or also known as industrial training to equip students with necessary ability in multimedia and software production to take part in the enquiry, design, development and employment of the system using the software engineering methodology. Virtual internship considers all activities in traditional internship but takes place in an online professional atmosphere. Research-based internship is also a type of internship that focuses on research project conducted by research institution or research group including in the higher education institution. This paper demonstrates research agenda in virtual intership program to encounter serious game game development for moral education among children. The paper shares a case study of research based virtual internship to accommodate serious game development in morral education for preschool children.

Keyword: virtual internship, serious game, internship model

1.　　INTRODUCTION

An internship consider a real-life work experience of undergraduate students under a limited period of time to practice their knowledge. In software engineering program, internship allows intern to apply software development skills, starting from

planning to maintenance phase by adopting systematic, disciplined, quantifiable and an organised approach.

Internship is also known as industrial training to equip students with necessary ability in multimedia and software production to take part in the enquiry, design, development and employment of the system using the software engineering methodology. Internship appears to be appropriate occasion in undergraduate education to transfer and apply the learned skills or knowledge from classroom setting to real world application, to be exposed to sustainable learning (Burkšaitienė et al. 2021; Tractenberg et al. 2017).

Virtual internship considers all activities in traditional internship but takes place in an online professional atmosphere. Virtual Internship for software engineering education allows students to solve complex software engineering issues in a controlled and collaborated surroundings under the help of information and communication technology.

 Internship serves as a preparation programme for students to enter career world, and vast opportunities encourage students to apply academic knowledge to authentic situations and develop professional images (Hora et al. 2021). Research-based internship is also a type of internship that focuses on research project conducted by research institution or research group including in the higher education institution.

This paper demonstrates research agenda in virtual intership program to encounter serious game game development for moral education among children. The case study of virtual teams lead into discussion of opportunities for improvement and limitations as well as task design recommendations for virtual internships.

2.   Virtual Internship in Software Engineering Program

Virtual internship offers a practical solution to problems related to internship in the industry (Mia et al. 2020). Students report continuous difficulties to find appropriate placement of interns in the software engineering industries. Research based internship expose students with real-life experience gaining which minimise the risk of wasting time at the wrong place doing odd jobs. Next, it addresses difficulties regarding learning management process during the period of internship with the help of dynamtic research structure.

The software engineering curriculum inspire educators to train students and expose them to an additional level of depth in the written program. As an additional to the regular primary topic course, it calls for students to experience the medium or advanced topic (Schwänke 2008). Such behavior concerns softare engineering professional competencies (Semerikov et al. 2020). These professional proficiencies considers ability such as abstract thinking, analysis and synthesis; apply knowledge in real life and challenging situations; communicate in verbal and textual form, and acquire up-to-date knowledge. The framework aims for sustainable learning achievement in the long run (Nanjundaswamy et al. 2021).

3.   Virtual Internship via Research Track Model

The design of virtual internships based on research track should consider the program as essential experiences for university students. Much of the benefits of internship in software engineering should be highlighted in the task, to help students get ready in career path by developing transferable skills, create authentic situations of multimedia product edvelopment, and facilitate students' entry into the professions (Hora et al. 2021).

Technical skills development considers serious game project involvement with particular attention not only in designing and developing multimedia products, but also enquiry of solution to address problem and evaluate the outcomes (Wan irma Sabrina & Rafiza 2021). The game project trains intern not only to combine various multimedia elements to deliver a substance that encourage pre-school children absorb and apply high moral values in life, but also to carefully choose the suitable scenario to fit the message (Abdurasulovich et al. 2020).

Virtual internship should serves as platform to acquire and exercise soft skills, with emphasise on professional setting. These soft skills entail the ability to observe and apply key values in workplace circumstances, to socialise with fellow researchers, supervisors, society, users, technologies, and research community. The tasks embed development of interpersonal attributes such as responsibility, communication, collaboration, ethics, sustainable thinking and critical thinking (Bay 2021).

The proposed model is presented in Figure 1 as an ongoing cyclical steps where multiple factors interplay to provide interns with necessary exposure to equip them with skills soughted by industry. Such game development research based internship will complement software engineering curriculum to create an integrated and comprehensive education.
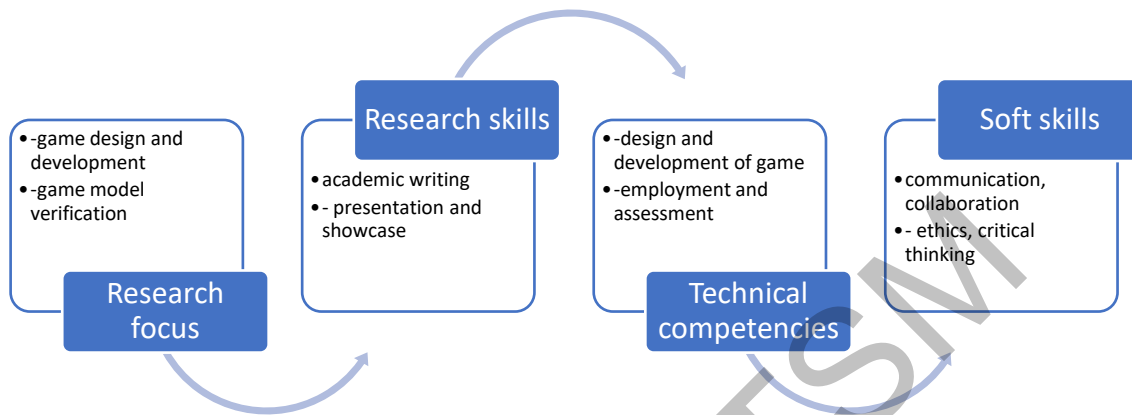
Figure 1 Research Based Internship Model

4. CONCLUSIONS

In order to create an effective research based virtual internships for students, key components should be addressed. Aspects like technical skills and soft skills development, research exposure and industrial surrounding should be given particular attention in research based internship (Koopman et al. 2021). Likewise, further concerns in virtual research based internship entails attention for enrichment, fair access, and quality assurance in higher education context (Hora et al. 2021).

The proposed model suggests substantial prospects for future work into the features of virtual internship from the traditional internships. The environment and surrounding of virtual internship has particular impact on learning outcomes and future career, and as well as to the software engineering curriculum. Issues such as the importance of virtual internships strategies by software engineering discipline would be addressed in coming works.

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