

Research seminars promoting department research and doctoral studies

Mika Nieminen, Antti Rissanen & Kalle Saastamoinen
NDU, Department of Military Tech., Finland
Working group: Military Education

Introduction

Research seminars serve many good practices. They provide a platform for researchers to share their work and findings with their peers. It makes it possible to present research methodologies, experimental results, and conclusions to a knowledgeable audience. This sharing of knowledge fosters collaboration, sparks new ideas, and contributes to the overall advancement of knowledge in the scientific field. It is a good opportunity to receive constructive feedback and evaluation from peers. Presenting in front of an audience helps researchers improve their communication and presentation skills. They interact with other researchers, discuss common research interests, and explore potential collaborations. These interactions can lead to valuable partnerships, joint research projects, and future collaborations that likely will advance their research agenda. Seminars allow researchers to stay up-to-date with the latest advancements and trends in their field. Overall, research seminars play a crucial role in fostering a vibrant research community by facilitating knowledge sharing, peer feedback, professional development, networking, and keeping researchers abreast of the latest research in their field.

Typically, seminars are carried out following expert-to-novice setting, another possibility is peer-to-peer setting [1]. Here we introduce our department of military technology research seminar setting, which is a combination of these two types.

Implementation

Since 2021 we have had three research seminar rounds (or academic years). Structure of the seminars has been unchanged. Each of the four annual meetings focus on a specific and active research theme at the department. The aim is to extend the connection between knowledge from research toward future researchers as well for learning. Learners consist from graduate students of the Department of Military Technology up to doctoral candidates. Each meeting starts with a keynote from one or two senior researchers working on seminar day's theme. In the second part of the seminar, visitors or students present their research. In connection with the seminars, the actual graduate study seminar is held after the research seminar, where graduate students are offered the opportunity to present their own research situation, the status of their article/dissertation, and receive feedback and guidance from professors/docents and peers. Credits are awarded for postgraduate seminars in accordance with one's own personal study plan. Some of the listeners are following the seminars purely on interest to the subject without need for credits to academic studies.

Based on educational arrangements during the pandemic years, all sessions are available for distant education. Most of the participants come through Zoom-meeting service. This has been effective way to carry out this seminar. We also record all the presentations with discussions and lecture materials. Most of the listeners cannot come to the university campus during a normal working day. Moreover, PhD candidates get more questions to answer due the larger audience. Also, Professors presentations on their research themes are available to ponder what type of things are active at our department. Effectiveness of this new approach need an additional analysis.

Remarks

Seminars are a form of interactive teaching that has several applications and also objectives. In our seminar, main goal is to give each student possibility to present their own learning results. At the same time, student has the opportunity to raise up possible issues for which they want to get guidance. Perhaps

less common aspect in institute specific post-graduate seminars is keynote presentations, where senior researchers share ideas for listeners.

It is essential that all presentations have been prepared carefully and considered to support further discussions. In this way information exchange and opportunity to acquire skills to present one's own contrivance so that seminar listeners can understand the information shared by the presenter. This kind of educational setting provides an opportunity to discuss the themes raised by the listeners.

Approximately one to two graduate students have been able to finish their PhD thesis annually since the year 2021, before this number was approximately one. This seminar has worked well as a collaboration point of view and it has been a starting point of various scientific articles. Amount of post-graduate students have also more than doubled. We aim to keep on having generally interesting topics in our seminar with popularly interesting presenters.

References

[1] Aguilar, M. 2004. The peer seminar, a spoken research process genre. *Journal of English for Academic Purposes*, 3(1), 55-72. [https://doi.org/10.1016/S1475-1585\(03\)00043-2](https://doi.org/10.1016/S1475-1585(03)00043-2)