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MOTIVATORS FOR EXTRACURRICULAR RESEARCH PROJECT PARTICIPATION AND PERSPECTIVES OF INTERNATIONALISATION: CRIMINOLOGY STUDENTS' PERSPECTIVES OF VERTICALLY INTEGRATED PROJECTS AT MALMÖ UNIVERSITY

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Abstract

Research-based teaching methods foster an environment that cultivates new knowledge to tackle real-life challenges. Vertically Integrated Projects (VIP) utilise this pedagogical approach to promote collaboration among students and researchers in multidisciplinary teams at the faculty level. This supports the development of soft and hard skills, teamwork, and leadership abilities. However, VIP is not easily accessible for international students in non-English-speaking universities due to language barriers and structural constraints. The present study employs a qualitative focus group method to explore the motivations and barriers faced by Criminology master's students in participating in extracurricular activities like VIP, their perspectives on international opportunities at Malmö University, and whether VIP could enhance

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internationalisation. The findings indicate that students recognise the benefits of VIP and extracurricular activities; however, various factors, including misconceptions, affect student participation. Moreover, a desire for international collaborative research was expressed.

Keywords: extracurricular activities, internationalization, motivators, research-based teaching, Vertically Integrated Projects (VIP)

Sammanfattning

Forskningsbaserade undervisningsmetoder främjar en lärandemiljö som utvecklar nya kunskaper som kan användas för att lösa utmaningar i det verkliga livet. Vertically Integrated Projects (VIP) sätter denna undervisningsform på sin spets och möjliggör för studenter att arbeta tillsammans med forskare och andra studenter från olika utbildningsnivåer att bedriva forskning i multidisciplinära arbetslag på fakultetsnivå. Detta främjar utvecklandet av hårda (ex. metodteknisk kunskapsutveckling) och mjuka (interpersonell utveckling och kommunikation) färdigheter såväl som teamwork- och ledarskapsförmågor. VIP har upplevts ha en begränsad tillgänglighet för internationella studenter vid universitet i icke-engelskspråkiga länder på grund av språk- och andra strukturella barriärer. I denna studie genomförs en kvalitativ fokusgruppundersökning för att utforska motivationer och barriärer för kriminologistudenter i ett internationellt masterprogram att delta i aktiviteter utanför programmet, såsom VIP, studenters upplevelser av internationella möjligheter, samt reflektioner om huruvida VIP skulle kunna bidra till internationalisering vid Malmö universitet. Resultaten visar att studenter kan se fördelarna med VIP och aktiviteter utanför programmet, dock lyfts andra faktorer som påverkar studenters deltagande vilka diskuteras i föreliggande studie.

Nyckelord: aktiviteter utanför utbildningsplanen, motivation, forskningsbaserat lärande, internationalisering, Vertically Integrated Projects (VIP)

Introduction

The Vertically Integrated Project (VIP) initiative was founded at Georgia Tech in 2009, with its core component being the engagement of students in collaborative and team-oriented research project work, typically characterised by vertically integrating students, which involves maintaining a blend of undergraduate and graduate students (Coyle et al., 2006; Ferri et al., 2017). This initiative seeks to enhance collaboration in research between faculty and students in university settings. These projects allow students to assist and conduct research as part of a team, emphasising individual and team accomplishments (Carlson et al., 2022). They provide an opportunity to gain real-life research experience.

The VIP programme promotes the exchange of knowledge between teachers and students, fostering the generation of new knowledge and solutions to real-life challenges; this approach is known as research-based teaching (Carlson et al., 2022). Research-based teaching is one dimension of the teaching-research nexus, a defining feature of higher education (Griffiths, 2004; Healy & Jenkins, 2009). This framework has four teaching dimensions: research-tutored, research-led, research-oriented, and research-based (Griffiths, 2004; Healey & Jenkins, 2009). Research-based teaching promotes the development of both hard and soft skills, including generic skills like problem-solving and effective communication, the ability to work under stress, and manage uncertainties (Wessels et al., 2018; 2020). Developing these skills enables students to establish ‘personal capital’, which is attractive to employers (Brown & Hesketh, 2004, p. 34), and be more active in the consumption of knowledge (Lambert, 2009). Research-based teaching is also seen to utilise problem-based learning (PBL) and challenge-based learning (CBL), which uses real-world problems to promote student learning, which is the topic of this special issue.

Research-based teaching, such as VIP, often broadens the scope of research to encompass multidisciplinary projects, creating environments akin to those found in the workplace (Sonnenberg-Klein et al., 2017). In VIP, students can engage with the same project for multiple semesters and even years to gain experience and competence in research (Ferri et al., 2017). Engaging in projects over an extended period encourages students to develop leadership skills, with senior VIP students mentoring new incoming VIP students as they join an ongoing project (Sonnenberg-Klein & Coyle, 2022; 2024). Several advantages have been noted for engaging in VIP, including enabling and encouraging students to make meaningful research contributions, creating an integrated environment that facilitates peer leadership between graduates and undergraduates, and facilitating collaboration across academic years (Coyle et al., 2006; Sonnenberg-Klein et al., 2017).

Students participating in VIP have been reported to find it helpful to collaborate across different disciplines and academic years (Miktia et al., 2023). While widening participation and including minorities and marginalised groups of students is one of VIP’s goals, especially for international students at non-English-speaking universities, VIP has not yet utilised international collaboration to a significant degree, to our knowledge. However, VIP involves students from diverse backgrounds with different expertise and experiences, an essential prerequisite for international research collaboration. Involving national and international students in research encourages a deeper understanding of various cultures and the development of global networks that promote knowledge exchange and future support (Luo & Jamieson-Drake, 2013), which may create positional advantages in the employment sphere (Roulin & Bangerter, 2013). It has also been noted that engaging in international research collaboration increases students’ likelihood of developing teamwork skills, cultural awareness, and working with individuals from different academic levels and backgrounds while managing the challenges of conducting international research (Adriana et al., 2019). This strengthens the existing hard, soft, and transferable skills gained through research conducted in this matter.

VIP Implementation at Malmö University

VIP was introduced to Malmö University (MAU) in 2019 by Maria Engberg at the Faculty of Technology and Society. VIP was implemented at the Faculty of Health and Society (HS) and the Department of Criminology in 2022. The current paper concerns only the VIP implementation at HS and the Department of Criminology specifically. In the fall of 2022, HS consisted of four VIP teams (VIPs) within Biomedical Sciences, four at the Department of Criminology, and one at the Department

of Care Science. Some VIPs are long-term and thus more sustainable than other VIPs. There are also differences in accessibility to the different VIPs for international students, which pertains to the focus of the current paper. While several VIPs in the Biomedical Science Department are open to international students, only one was open to international students within the Department of Criminology at MAU in the fall of 2022. Most VIPs at HS are primarily for Swedish-speaking students, as the data is commonly collected in Swedish. The Department of Criminology does have an international master's programme; hence, VIP generates curiosity and interest among this international student population too. For non-Swedish-speaking students, five VIPs (of a total of nine) at the Department of Criminology have been open to apply to since the start of VIP in fall 2022. One of these projects opened up for non-Swedish-speaking students during spring 2024 (the current study was initiated at this time), one in fall 2024, and one additional one in spring 2025. So, the possibility of engaging in VIP for international students has been somewhat limited. However, during the last two semesters, the chance to apply for international students has increased, but accessibility is still not equal for non-Swedish speaking students.

VIP at the Faculty of Health and Society (HS)

At HS, the VIP Program is organised as an extracurricular activity, meaning that students do not earn credits like the traditionally credit-bearing United States model of VIP. The motivation for students to join VIP at HS is the experience itself and the provision of a supplementary diploma (Certificate of Research Merits, CReMe) at the end of the experience. The diploma is available in Ladok, the educational administrative system where students' participation and results are documented in higher education (HE). Students must have completed 60 credits in HE before entering their first VIP semester, and they are expected to participate in their VIPs for two to four hours per week. Additionally, students are required to participate in four faculty meetings across each semester that ensure the multidisciplinary aspects of the VIP programme and highlight the *general* scientific research process, methodology, and common research activities (ethical considerations, drawing jams [communicating your research by illustrating it by drawing pictures], pitching research, and other research presentation techniques and science outreach events, hackathons, and thesis defences), and each student's VIP membership *specifically*. This extracurricular workload means that not all students can engage in VIP if they do not have the time or means to dedicate to VIP. However, it also means that those involved are motivated and are specifically interested in learning how to conduct research. In the current paper, we are interested in learning more about how the students at the Department of Criminology perceive the VIP Program opportunity at HS.

Research Aims

This paper explores and identifies students' understanding of the VIP Programme and the opportunities available for criminology students. It examines what motivates or prevents students from participating and their interpretations and ideas for internationalisation at Malmö University. These aims are particularly relevant to the international students in the VIP 'Research Engaged Students for Pedagogical Advancement' (RESPAvn), as many VIPs at the Department of Criminology are inaccessible to non-Swedish-speaking students.

Methodology

Initially, RESPAvn was developed to explore and understand student involvement and opportunities for participation. It also aimed to enhance opportunities for student engagement to create a sustainable VIPs that enables research opportunities for *all* students. The project evolved rapidly and refined its research to investigate the potential motivators and barriers for students wishing to engage in VIPs.

Four main areas of inquiry were established as a means of investigation:

1. Students' motivations for wanting to participate in extracurricular research teams such as VIP,
2. Whether any barriers to participation in VIP exist,
3. Criminology students' thoughts about international opportunities at Malmö University, and,
4. Whether VIPs could contribute to internationalisation.

Material and Procedure

RESPAvn conducted two focus group interviews with first-year students enrolled in the Criminology Master's Programme at Malmö University. The master's programme features an international cohort, comprising national and international students. In contrast, the bachelor's programme consists solely of Swedish-speaking students, with some Danish students attending who can read and understand Swedish; thus, the master's programme was chosen for the study. At the time of the research, second-year master's students were conducting their theses, which meant that they were infrequently present on campus, making it challenging to conduct focus groups with this cohort. These focus groups were regarded as the first step in the broader study (Porcedda et al., 2025) to establish a baseline understanding of students' perceptions and develop survey questions about the needs and desires of students within the department across all years and programmes. Therefore, national and international students were included.

A convenience sample was utilised, in which the authors attended two mandatory seminars of the first-year Criminology Master's programme in the early Spring semester of 2024 to approach and gather participants. A total of 10 students participated (nine females and one male), five in each focus group interview (of a total of 41 students registered for the course). Seven of the students reported speaking Swedish, whilst three students did not. The focus group interviews were conducted on university premises in the same room where the seminar was conducted. Participants were asked about their knowledge and motivations regarding extracurricular activities, specifically the VIP Program, and whether they believed the VIP Program could contribute to internationalisation opportunities. Each focus group lasted around 30 minutes, and the approach was informal and semi-structured (see the semi-structured interview guide in Appendix 1).

Ethics

The Ethical Review Act does not require an ethical application to be submitted in a study like this (SFS 2003:460, Sveriges Riksdag, n.d). However, the students were informed that participation was voluntary and that the questions to be reflected on did not contain sensitive issues of a religious, political, or sexual nature. The guiding principles of ethical research were utilised, with students asked to sign an informed

consent form outlining the purpose of the study to ensure participants were aware of any potential risks or benefits; verbal consent was also gathered at the time of focus group recording. Students were assured of confidentiality, with all identifiable information removed from the transcripts, and were informed that they could withdraw from the study without repercussions (Swedish Research Council, 2017).

Data Handling and Analysis

The focus groups were audibly recorded using a microphone connected to a secure, internet-free device. The audio files were later transcribed in MS Word and will be deleted upon publication. Data is securely stored in a hidden and password-protected folder at MAU, accessible only to the study authors. All data will be destroyed upon completion of this research.

Once the audio files were transcribed, the data were analysed using thematic analysis to capture recurring and overarching themes in the participants' responses. Therefore, after becoming familiar with the data through transcription, the transcripts were re-read, coded by marking meaning units, sorted in an iterative process, and then organised and redefined into overarching themes. Relevant and illustrative quotes accompany the themes and subthemes where applicable (see Table 1 below).

Table 1: Examples from the analysis process

Meaning Units	Code	Subcategories
“I feel like it is a really good experience and also if you were interested in doing a PhD later (...)”	Motivators	To Participate
“But truly I think it could be really beneficial to participate in those projects since our studies are so theoretical, social sciences (...)”	Motivators	To Participate
“I am looking for a job and I did not know how many hours I would have and how much I would have left over... and also I live far away so it takes such a long time to come down here... for meetings and stuff here.”	Motivators	NOT To Participate
“(...) But also getting money of course that would be an add-on, nice.”	Motivators	Misconceptions

Analysis and Results from the Focus Group Interviews

Three key themes encapsulated the participants' perspectives on VIPs at the Department of Criminology and Internationalisation of Malmö University. These themes were identified through thematic analysis to interpret the data and underscore significant patterns across the participants' narratives. They encompass possible motivators to participate, or refrain from participation, in VIP and

internationalisation at Malmö University, as well as the extent to which VIP could enhance internationalisation.

Theme 1: Motivations for Participation in VIP

1.1 Motivators to Participate in VIP

The analysis illuminated the participants' perspectives and motivations for engaging in extracurricular projects like VIP. The students expressed enthusiasm, highlighting the valuable practical research experience and the usefulness of VIP in advancing their academic careers, which emphasised the opportunity for personal and professional growth.

“But truly I think it could be really beneficial to participate in those projects since our studies are so theoretical, social sciences... so actually getting hands-on experience”

“(...) I feel like it is a really good experience and also if you were interested in doing a PhD later I feel that this a really good start to know if a PhD is something for you or not.”

“(...) it seems like a really good life experience.”

1.2 Motivators NOT to Participate in VIP

However, a barrier for many participants is the additional workload and commitment to extracurricular activities, which results in insufficient time to devote to tasks. Academic and personal responsibilities, work obligations, and living arrangements also hinder individuals from joining projects, even if they are interested in participating.

Additionally, a recurring issue is that the students lack motivation because they receive too little in return for their engagement in the projects, especially if they are not interested in pursuing an academic career through a PhD or working in research-related fields.

“I mean for me personally, I work, so I don't really feel like I have the time. But if I didn't work, I feel like it would be interesting.”

“Yeah, I feel the same way. Err like 4 hours might not be that much but it is still something that you have to think about.”

“I am looking for a job and I did not know how many hours I would have and how much I would have left over... and also I live far away so it takes such a long time to come down here... for meetings and stuff here.”

“Um, for me personally, I don't feel like I would do this, I'm not working but it just isn't, doesn't seem like something I would. I don't understand exactly what I would *get* out of it, *unless*, I was going to continue to doing, to PhD studies. At this point, it doesn't feel like it would give me like practical experience that I *will* need out, like working. But if I was going to continue PhD studies then I feel like yeah I would.”

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1.3 Misconceptions about Participating in VIP

The results indicate that some students lack knowledge and, consequently, have misconceptions about VIP. These misconceptions suggest that students are not informed about the VIP initiative and lack a thorough understanding of the requirements and benefits associated with participation.

“(…) but also I did not think it was four hours, I thought it was six to eight.”

“How does it work is it like, is it already groups that have certain things that they want to research and then you just get divided into one of them? Or?”

“If I could use it as my master thesis. But if you could use that data”

Further misconceptions involve students’ desire for additional incentives to participate in extracurricular activities, such as additional diplomas and monetary rewards. However, monetary incentives undermine the true purpose of extracurricular activities.

“I don’t know but maybe a diploma at the end of that you have participated.”

“(…) but also getting money of course that would be an add-on, nice.”

“I want something that I can show to my future workplace and when I am searching for jobs”

Theme 2: Internationalisation at Malmö University

Furthermore, the research investigates students’ views on international opportunities at the university. Significant differences arose between Swedish and non-Swedish students; Swedish students exhibited little consideration of international opportunities, and some seemed surprised by the presence of the international student population when they enrolled in an international master’s programme after completing a purely Swedish undergraduate programme.

“It is interesting because I did a bachelor in here but I didn’t even know it was an international school but that is because I am Swedish...the bachelor’s is really Swedish-focused, but I did not really reflect on it because I am Swedish, but then starting the masters and there are many people that are not Swedish, so that is an eye-opener that it is pretty much Swedish-focused.”

“Yes I agree and perhaps because I am Swedish I haven’t thought about the international aspects. Even at my bachelor’s, I did not think about international aspects and VIP even though I knew that the programme was in English.”

International students recognise international efforts and initiatives such as the Buddy programme and the Certificate of International Merits. Furthermore, international opportunities are typically seen as accessible, but similar to VIP, there appears to be a widespread lack of knowledge and misconceptions among students.

“I mean they have the Buddy Programme and CIM, that is quite international. But other than that, I haven’t thought -Ah well this is so international. But the CIM is a good way to get international experience.”

“I don’t know if I feel like there’s more international opportunities compared to other universities but I do feel like they are more accessible here, and I also feel like, I think [University Teacher], right, she like makes the effort to like come to classes and like inform and make it accessible and I feel like that might have been missing at other universities. I can’t like on the top of my head think about like what other international opportunities there could be I guess there could be like an internship abroad that could like, you could do instead of an exchange year that would be interesting.”

“I do feel like they could do better with information, like I guess, per se I don’t know that one was also kind of by chance because that spot was very open, and in my head, I thought we just choose a course and other courses at Malmo. I didn’t think you could choose other courses in Sweden so I didn’t know that. It was mostly by chance because I was like oh, I don’t know what to choose and some others were like oh I’m going to go to Lund. Oh, Lund, why would you? Like can you do that? And they were like yeah you can do anything even an internship and I was like oh.”

Theme 3: Could VIP Contribute to Internationalisation?

Lastly, the participants shared their ideas on how VIP could further contribute to the University’s internationalisation. Suggestions included sharing datasets with universities worldwide and fostering collaborations with outside researchers or research teams. Not only could these connections enable more interesting projects conducted in English, but they could also provide an opportunity for more guest lectures.

“I feel like I would like more guest lecturers, I feel like that could be interesting. I feel like I can notice an effort to international aspects to the lectures where they maybe mention like oh in Brazil, this percentage is like what it is for what they are discussing and I feel like oh okay but that doesn’t really tell me anything. I feel like, er, inviting different, er, researchers like gives more in depth, er, understanding of different topics would be interesting. And maybe VIP can provide that because maybe they have connections, I don’t know.”

“I mean if we had more VIPs that are in English we would probably get more people that are from different backgrounds but at the same time the projects are conducted in Sweden and then it is important to speak Swedish, but it depends on the method, if we are doing interviews and stuff maybe they have to know Swedish, I think it is difficult, I mean how are we supposed to handle that?”

Discussion

The results highlight what motivates students to participate in extracurricular research teams, such as VIP at the Department of Criminology, MAU, alongside their interpretations of internationalisation at MAU.

First, the findings indicate that students recognise the benefits of engaging in extracurricular activities, such as personal or professional growth. This aligns with the outcomes of research-based teaching, as students develop ‘personal capital’ (Brown & Hesketh, 2004, p. 34) in environments created to be akin to workplace environments (Sonnenberg-Klein et al., 2017).

Second, VIP does not address additional motivational factors identified by students, such as monetary rewards; therefore, VIP may not be suitable for every student. This indicates that some students have other priorities or face time constraints that impact their decision to participate in extracurricular activities. The latter is particularly crucial for students who live far from campus. Thus, external

concerns could affect their perceptions of what VIP entails, what it requires, and what is expected of them.

Third, this study illustrates students' misconceptions about VIP. The findings revealed that there is an understanding among students that research conducted in Sweden often requires Swedish language skills, particularly if students are to engage with the data. However, this is not always the case. These misconceptions may arise from students not being sufficiently informed about the initiative and what is expected of them should they wish to participate in projects, or from students' general lack of interest. In the fall of 2022, students were informed about VIP opportunities through announcements on Canvas (the MAU learning platform) and by the VIP coordinator for Criminology, who attended seminars and lectures. Students were also directed to a specific web page for more information on VIP, which includes a video clip and text outlining VIP's goals and missions, the available projects, and the expectations for students wishing to get involved. We suggest that the misconceptions indicate that students are experiencing information or email overload, particularly at certain times during a programme or semester, therefore, they may fail to stay informed. The methods used to inform or recruit students warrant further examination.

Finally, this study highlights students' desire for increased international research collaboration among various VIPs globally. An interactive research environment would facilitate the development of informative and supportive networks, fostering intellectual growth (Adriana et al., 2019; Luo & Jamieson-Drake, 2013). Whilst students are aware of the challenges associated with internationalisation as previously noted, Luo and Jamieson-Drake (2013) suggested that students can gain a deeper understanding of cultures and create broader networks for knowledge exchange and future support through international collaboration, fostering a better learning environment. Students within this study have endorsed this standpoint, indicating a preference for international experts discussing the subject matter, as it would offer *a more in-depth understanding of different topics*.

Limitations

While the study highlights students' reflections on VIP implementation and internationalisation at the Department of Criminology, certain limitations may influence the results and their interpretations. Firstly, the study employs a convenient response sampling method based on voluntary responses, which, combined with the small sample size, raises concerns about the generalisability of the findings. Thus, the findings are relevant to the specific department where the study was conducted and during the study period. Furthermore, the participating students are studying at graduate level within the university and may not represent the broader student population, particularly bachelor-level students. The student sample could also overrepresent those generally more motivated to engage in academic and extracurricular activities, which might skew the results. Moreover, one of the authors of this study studies in the same cohort as the participants, which may have influenced their willingness to participate. Familiarity with the author could also introduce potential bias, as students who sympathise with the author may be more likely to participate. In contrast, those who do not wish to support the author's goals might be discouraged.

Looking Forward

Since the study, several initiatives have been implemented to better inform and recruit students for VIPs, such as having current VIP students attend seminars and lectures to provide a student perspective of participating in VIPs. Furthermore, students are actively invited to VIP events, including poster sessions showcasing the current VIPs. Further research would be required to determine whether these initiatives have improved students' knowledge of VIP or recruitment. Nevertheless, Malmö University should aim to efficiently and adequately inform students about VIP to facilitate interest in extracurricular activities.

Furthermore, future research could replicate the study by employing a random sampling technique and aiming to increase the sample size, thus enhancing the generalisability of the findings. Further investigation is necessary to determine the origin of misconceptions regarding students' understanding of extracurricular activities at HS. A follow-up study would also evaluate the effectiveness of VIPs in contributing to the internationalisation of the faculty. Additionally, conducting similar studies at other universities that offer VIPs would enable a comparison of the findings, providing a deeper understanding of the impact and implementation across different institutional contexts.

As previously discussed, VIP does not currently engage in international collaborative research to a significant extent; however, it serves as a prerequisite for such collaboration. VIP is a unique educational tool that allows students to gain real-world research experience otherwise unavailable to them until they produce theses or enter the employment sphere, such as becoming a research assistant or a Ph.D. student.

The VIP programme has the potential to increase its popularity by broadening its international opportunities and enhancing international collaboration within the VIP network (VIP Consortium or the European VIP Hub). There are current discussions with other universities to create collaborations for VIP students, enabling them to participate in joint research projects. This initiative, which would offer participants cross-cultural experiences, would improve academic outcomes and personal development and will be explored further.

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Appendix 1: Interview Guide

Q1: Have you heard about Vertically Integrated Projects (VIP)?

(Short statement on what the VIP Program at HS is and on current VIP teams)

Q2: Would you be interested in participating in a research team as an extracurricular activity?

Q3: What would you like VIP to offer you to participate?

Are there any other incentives that would motivate you?

Q4: Do you think there are enough international opportunities? (At Malmö University)

Q5: Do you believe VIP could contribute to internationalisation? And in what ways?