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Jakubik, M. (2018). Masters Bring Business Benefits – Proved by Finnish Managers. The Turkish Online Journal of Educational Technology, Special Issue for INTE–ITICAM–IDEC, Vol. 2, 65–86.

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Please cite the original version:

Jakubik, M. (2018). Masters Bring Business Benefits – Proved by Finnish Managers. The Turkish Online Journal of Educational Technology, Special Issue for INTE–ITICAM–IDEC, Vol. 2, 65–86.

The final version is available online: http://www.tojet.net/special/2018_12_3.pdf

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Masters Bring Business Benefits – Proved By Finnish Managers

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Abstract

In this empirical research paper, I seek to answer the question: *How does working life benefit from UAS master's theses?* My goal is to demonstrate how master's students of the Degree Programme in International Business Management (IBMA) at Haaga-Helia University of Applied Sciences (UAS) in Finland bring business benefits to organizations with their master's theses as work development projects. For this purpose, I collected and analyzed qualitative data from 91 organizations during the period of 2007-2016. This qualitative, thematic analysis shows that organizations benefit from UAS master's theses. The benefits proved by Finnish managers are very tangible ones, such as internationalization strategies, digital marketing plans, market research and analysis, training programs, communication plans, and so on. The empirical contribution of this paper is significant to employers of UAS master's graduates, UAS business educators, and educational policy makers. The findings increase the awareness and competitiveness of UAS master's graduates in the job market. Furthermore, they show how and why business and academic collaboration is critical.

Keywords: *Master's thesis, business benefits, business and academic collaboration, university of applied sciences*

Introduction

In the knowledge economy, the traditional university faces new challenges and opportunities because it cannot be considered anymore as the sole contributor to knowledge creation. 'For universities the question is not only how to create usable research knowledge or find the needed knowledge, but also how to become a partner, act in dynamic innovation networks, combine knowledge from several sources and co-create it with other organizations to contribute to industry innovation and society as a whole' (Laine et al. 2008, 9). Nowadays knowledge is perceived more broadly, i.e., epistemology of knowledge is extended to practical, empirical knowledge. While traditional universities play an important part in basic research as producers of theoretical knowledge, universities of applied sciences (UAS), by focusing on applied research, produce knowledge that brings practical benefits for businesses.

The topic of academic and business collaboration is not new, but it has become more important as the benefits of collaborative, social learning and knowing become imperative. Wenger (2005, 214) argues that communities of practice as living contexts are places not only for knowledge acquisition, but also for knowledge creation. Tulkki's view is that 'Universities of applied sciences are in a key position in guiding and enriching the flows of knowledge ... (they) act as the testers and forerunners of learning wisdom' (Tulkki 2008, in Laine et al. 2008, 124-5). The master's thesis in a UAS is an excellent example of social, collaborative learning in practice in a rich learning context, in an ecosystem where business problems are solved together (Jakubik 2017).

Since August 2005 in the Finnish higher education system, both traditional universities and universities of applied sciences (UAS) provide master's degrees. However, Ojala (2017) in her doctoral dissertation argues, 'Compared to the master's degree from traditional universities graduates of the UAS master's degree believed that the degree generates more competence than competitiveness.' Ojala surveyed UAS master's graduates and employers. Based on a survey of 72 employers in 2012 Ojala concludes, 'Employers indicated that the increased value of the UAS master's degree was its focus on work and practice, as well as increased specialist expertise.' She adds, 'Employers ... were satisfied with how the education responds to the requirements of working life.' My objective in this paper is to verify her cross-sectional (2012) results with an extended, longitudinal, 10-year qualitative data analyses based on feedback from 91 Finnish managers, employers of UAS master's graduates.

This research is needed because of the different status and competitiveness of master's degrees from traditional universities and universities of applied sciences on the labor market and because there is a need for more clarification of the business benefits for employers of the UAS master's degree and thesis. Furthermore, I strongly believe that there is a need for making the UAS master's degree better known to employers because it would increase the competitiveness of UAS master's graduates. Therefore, in this paper, I focus on the business contributions of the UAS master's theses. I seek to answer the question: *How does working life benefit from UAS master's theses?*

The paper has seven sections, including an introduction, appendices, and references. After presenting the need for this study in the introduction, I describe the goal and process of the master's thesis as part of the curriculum of the Master's Degree Programme in International Business Management (IBMA) of Haaga-Helia UAS, Helsinki, Finland. Next, I focus on the thesis assessment criteria. Then, I present my data collection and research approach. Next, I demonstrate the findings of the 91 Finnish managers' assessment of business benefits brought by UAS master's students. The contributions of the work development project as a thesis is based on ten years of feedback from employers. In the conclusions, I answer the research questions, highlight the business and educational implications of my longitudinal, qualitative research, indicate its limitations, and suggest future research areas. Finally, in the appendices, I present a summary of the immediate (table 1) and future (table 2) business benefits of the UAS master's thesis sought by Finnish managers.

The Goal And Process Of The Master's Thesis

The Master's Degree Programme in International Business Management (IBMA) of Haaga-Helia UAS in Helsinki started in autumn 2007. According to the Students' Guide (2018), 'The goal of IBMA is to develop students' international business management competences through variety of work development methods and tools, international business management courses, and through tutoring them in an applied research and work development project as their master's thesis.' Working on the thesis starts from the very beginning of studies. Students are expected to act as facilitators and leaders of change by applying in practice their international business knowledge that will make them and their organizations competitive players in international business.

The three main objectives of the IBMA Programme are as follows:

1. to satisfy the increased demand of organizations for employees with practical and current international business knowledge and competencies
2. to provide a career opportunity for bachelor's graduates by continuing and upgrading their education in international business management
3. to encourage students to apply their international business management skills and knowledge in their everyday work in order to create and extract value for their organizations' (Students' Guide 2018).

The master's thesis is a 30ECTS (810 hours) work development project. Its goal is 'to develop and demonstrate the ability to apply the selected research strategies and methods in the identification and solution of an authentic, work related, international business management problem. Furthermore, the objectives of the thesis are to develop international business management skills, competences, and qualities of students that would make them competitive in the global job market' (Master's Thesis 2018).

In this master's programme the emphasis is on cooperation with working life. 'Learning during the programme happens by addressing international business management problems in case studies, research, and in the master's degree thesis that is a work development project with international business dimensions. The thesis, as an applied research and development project, is a substantial part of the studies to be implemented in close collaboration between students, their workplaces and Haaga-Helia UAS' (Students' Guide 2018).

The master's thesis process in the IBMA has four phases: planning, implementing, assessing and developing (Master's Thesis Process 2018). In this paper, I focus on the assessment phase of the thesis process because my goal is to demonstrate how the master's brings business benefits to the organizations involved. This is the phase when employers, i.e. Finnish managers, are involved in the assessment. 'Here employers assess the learning of the student during the development project. They also indicate how the organization has benefitted from the thesis, what was implemented in practice, and what the possible long-term impact and value are for the organization' (Jakubik 2017, 55). Next, I will present the assessment criteria of the master's thesis.

Thesis Assessment Criteria

As its web-site states, 'The thesis will be assessed by the HAAGA-HELIA thesis tutor, the inspector, and by the company contact person for the work development project. The thesis assessment form and criteria are available in Moodle and MyNet. A thesis grade will be given after the maturity exam is completed. The self-assessment of learning does not have an impact on the grade and it will be used for developing the thesis process' (Master's Thesis 2018). This three-party assessment of the UAS master's thesis is necessary because in this way both academic and business contributions are evaluated. Work life assessment by Finnish managers ascertains the business benefits for the employer.

The same assessment form is used for master's programmes in English at Haaga-Helia. The six assessment criteria are as follows:

1. topic and objectives (significance and currency; objective and scope; work life orientation)

2. conceptual framework/theory (literature review; conceptual framework; definition of concepts)
3. methods (planning and implementing; evaluating outcomes)
4. outcomes (correspondence between objectives and outcomes; value contribution)
5. reporting (structure consistency; clarity and readability)
6. project management (planning; implementation; analysis and reflections)

Each criteria is assessed on a scale from satisfactory (1), through good (3), to excellent (5). To help the assessment there are statements developed for each criteria and each scale. For example, criterion 1 is assessed as excellent when: ‘The topic involves innovative perspectives and it is important for the organization. The objective and scope have been defined excellently. The topic is strongly related to working life development.’ Criterion 4 is weighted double and it is assessed as excellent when: ‘The outcomes correspond to the objectives excellently. The value contribution of outcomes is excellent. The conclusions are justified excellently. Suggestions for further development are very valuable for the organization.’ This UAS master’s thesis assessment grid is very practical and it has proven to be useful in the assessment process.

In addition to the thesis assessment grid in the IBMA, the work life representative, i.e., the Finnish manager, is asked to fill out a feedback form. Next, I present the content of this form because it is the source of data collected for the purpose of this paper.

Data Collection And Research Approach

Employers of UAS master’s students, i.e., Finnish managers, involved in the thesis assessment process answered the following five questions when they assessed the master’s thesis (figure 1). The bold arrows on figure 1 indicate the focus and scope of this paper.

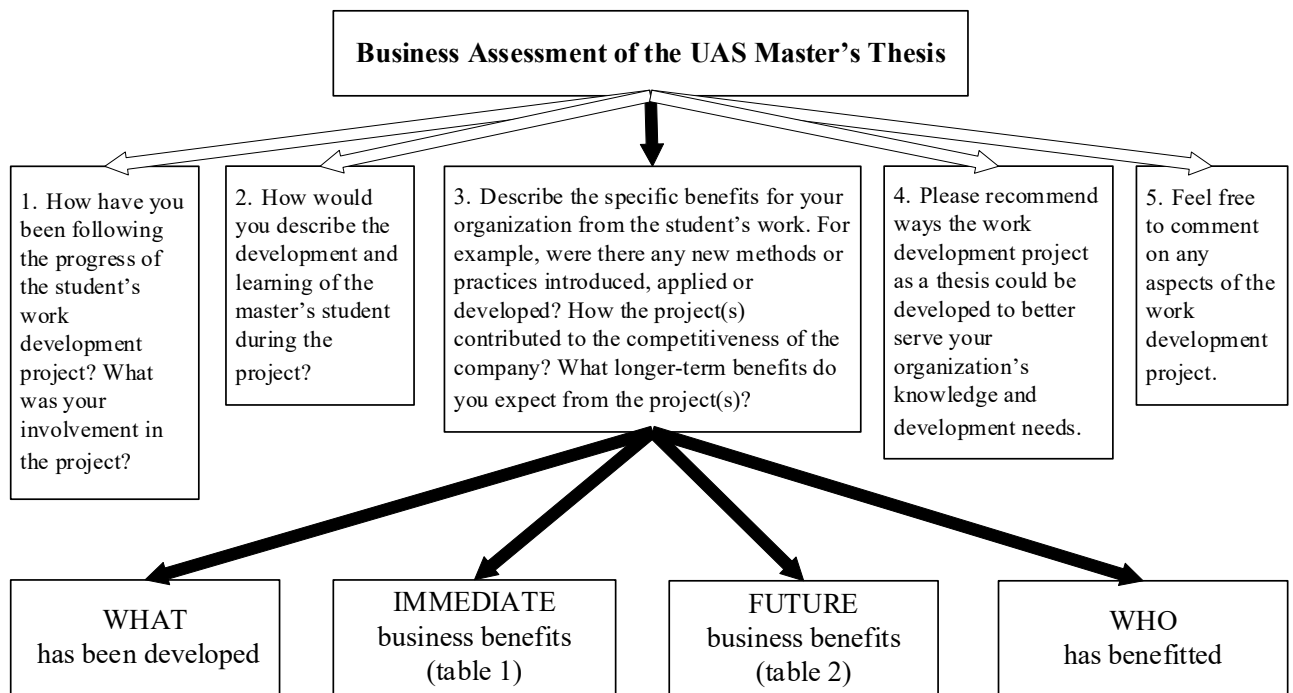


Figure 1: UAS master’s thesis assessment (source: created by the author)

To answer the research question ‘How does working life benefit from UAS master’s theses?’ I analyzed the feedback on question 3 above provided by 91 managers from 2007-2016. The thesis feedback document is a secondary source of data for this paper because the feedback was primarily collected for thesis assessment and not specifically for the purpose of this paper. Following the ethical principles of research, I make sure that none of the organizations or managers could be identified and traced to the feedback they provided.

Feedback was given by different (international, domestic, small, and large) organizations from different business sectors. For example, managers from Accenture, Basware Oyj, Danone Finland Oy, Danske Bank Oyj, Ericsson Finland, Ernst & Young Oy, Fazer Food Services, Hartwall, Hewlet-Packard Oy, InterCall Sweden Ab, KONE Corporation, Nokia Oyj, Reaktor, Trawise Oy, and so on answered the feedback form.

Finnish managers who provided feedback have the following titles and positions: CEO, CFO, Director of Learning & Development, Global HR Line Manager, Head of Product Development, Information Manager, Managing Director, Process Development Leader, Program Manager, Sales and Customer Service Manager, Sales Manager Finland, Senior Account Manager, Senior Executive, Senior Manager People Advisory Services, Technical Director, and so on.

I applied the thematic analysis method for analyzing the feedback answers to question 3 above, because it is the most common, generic method when dealing with unstructured qualitative data. ‘The essential purpose of this approach is to search for themes, or patterns, that occur across a data set’ (Saunders, Lewis and Thornhill 2016, 579). According to Saunders et al. (2016) thematic analysis helps in the following areas:

1. to comprehend often large and disparate amounts of qualitative data
2. to integrate related data drawn from different transcripts and notes
3. to identify key themes or patterns from a data set for further exploration
4. to produce a thematic description of these data, and or
5. to develop and test explanations and theories based on apparent thematic patterns or relationships
6. to draw and verify conclusions (ibid.: 579).

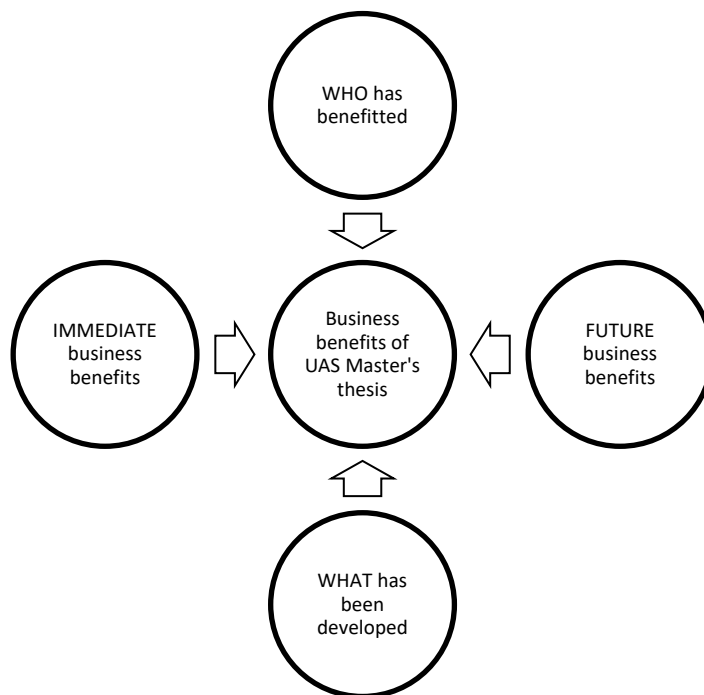


Figure 2: Four themes of the benefit analysis (source: created by the author)

My purpose in this paper is to produce a thematic description of the large amount of qualitative data collected over a 10-year period. First, I transcribed all 91 answers and then, I conducted a benefit analysis, based on the four themes identified in Finnish managers’ feedback on the UAS master’s thesis (figure 2).

In brief, I presented here the content of the master’s thesis feedback form (cf. figure 1) answered by Finnish managers. Then, I briefly introduced the profile of the organizations, and the position of the manager who provided the feedback. Further, I argued for the selection of the qualitative data analysis method for thematic analysis. In the next section, based on the four themes identified (cf. figure 2), I will present my findings.

Findings

Here, I present the business benefits of the UAS master’s thesis of the IBMA programme. I show the findings identified from the large data set of my analysis of 10-year qualitative data according to four themes (cf. figure 2).

Theme 1: What has been developed - What product/service has been developed in the master’s theses? What are the specific benefits for the organization?

From the business world feedback, I identified 101 specific benefits provided by the UAS master’s thesis to organizations. They could be grouped in the following way:

- market research and market entry:** a framework for the expanding of R&D activities to Russia, an internationalization framework, e-learning market potential, evaluating the most effective ways for entering the market, understanding the market and its different segments, a new intensive market study, risk analysis, market research, a market entry study to Russia, researching target markets, a foreign market analysis, a framework for evaluating expansion to new labor markets, SWOT and competitor analyses, an internationalization strategy for start-ups
- marketing:** marketing and customer support, a marketing strategy, a B2B marketing plan, marketing and branding development, defining the brand identity, a theoretical framework for global marketing campaigns, selecting distribution and promotional channels in marketing campaigns
- communication:** the change communication process, methods to improve communication, an IT system for reporting, developing business reporting, visualization and communication aids, the documentation of concepts, an overview of social media channels, strategies developed around audience engagement
- human resources:** training material, information about how personnel think, useful suggestions, questions for development discussions, an implementation plan for career counseling, a spirit of teamwork, respect and empathy, a framework for HR and change management, a framework for motivation, documenting an HR job satisfaction project, new ways of conducting performance reviews, analyzing the commitment of a unit's employees, a proposal for new training programs for salespeople and sales managers, using a new approach
- leadership and management:** the ten most important leadership features, guidelines for managers without authority, a survey on team leaders' working methods, exploring the difficulties in projects, a model promoting emotional intelligence
- organizational change and development:** an overview of the business, the current situation, suggestions for improving language courses for immigrants, new methods to develop processes and operations, new business models, creating a scorecard, a scorecard for the company, a strategy plan, up-to-date information, ideas for new digital ways of working, recommendations on how to increase our business value, business modeling tools, the Blue Ocean Strategy framework introduced as a tool, a comprehensive analysis of activities, a value network within the organization
- innovation:** recognizing intellectual capital, new ideas and knowledge, combining theory and practice, ways of developing knowledge transfer practices, a global study about how people see development
- sales and services:** information on consumers' buying processes, developing sales opportunities, development opportunities in sales practices, remote selling, workshops for sales teams, tools and ideas on how to change our mindset in sales processes, gathering customer feedback, collecting feedback from guests, factors influencing the service sector and customer satisfaction, conducting a user experience and expectations survey, subsequently analyzing the data, a customer experience survey, a service model, new service developments
- collaboration:** an implementation plan for partnerships, an outsourcing decision model, an online value proposition, collaboration, information about offshore resources, identifying the important factors in onshore and offshore cooperation, F2F interviews with key account customers, partner relationship management (PRM) theory and practice, a survey of international members' positions at universities and places of business in Finland, a new complaints and feedback process, new and valuable insight about the perception of the unit's internal customers, its role, performance, cooperative approach and ideas for further improvement, experts' views

Theme 2: *Immediate business benefits - Have the findings of the master's thesis been implemented/used? What are the immediate benefits and impacts of the master's thesis for the organization?*

The benefit analysis resulted in 153 immediate business benefits, which are summarized in table 1 in the appendices. Here, however, I present a few quotations from managers as illustrations.

- 'Benefits for the company are a greater understanding of the needs from the end-user of the CRM system and validating some of the directions already taken for the development of the system.'
- 'The most substantial benefit for the company has probably been the face-to-face interviews with strategic customers' key accounts.'
- 'The thesis provides interesting information on motivational themes and how the organization's personnel reflect on these motivational elements.'
- 'The main benefit of this work was to document an HR project, which was challenging and partly abstract.'
- 'The main benefits for our company are the global contacts that were created during his project.'
- 'Our performance review meetings are no longer just a chat, but rather a systematic discussion where all relevant issues are made compulsory to discuss.'
- 'Understanding the interdependencies between employee and customer satisfaction is very important in our

- organization.'
- 'The project has provided a new and a very valuable insight into the perception of the unit's main internal customers, its role, performance, cooperative approach, and areas for further improvement.'
- 'The thesis has been extremely helpful for the company in order to evaluate the most effective ways for entering the market, as well as understanding the territorial limitations, cultural and socio-economic aspects, and different segments.'
- 'This is a very important learning outcome for us and we already decided that at this stage we will just sell smaller modules and gradually build up the whole concept.'
- 'The thesis has been a useful leadership tool for global leaders in our organization.'
- 'The thesis gives an overview of suggestions on how to increase our business value.'
- 'It was very useful in thinking forward to remote selling in our company.'
- 'With this project we are able to share knowledge and most importantly, a customer service oriented attitude with other key persons in the company.'
- 'Developing internal practices, synchronizing operative processes, assessing the knowledge and training needs of personnel, and improving communication are the specific benefits for us.'
- 'We know the importance of HR and change management but we do not have a unified view of doing it. Now, we can use the framework as one of the tools to handle such situations.'
- 'The benefits for the organization are new ideas and knowledge.'
- 'The research results allowed us to better understand our market segment and find better ways to cooperate.'
- 'The research has fundamentally changed the way we engage with brands and developers.'
- 'Conclusions of the thesis about marketing strategy provide useful information about priorities in selecting distribution and promotional channels in our marketing campaigns.'
- 'The best thing is that the thesis includes eight themes and an implementation plan.'
- 'Thesis work helps us to understand the value networks within the organization and within specific projects.'
- 'It made visible the common issues between different business units.'
- 'It helped us to shape the project in a slightly different way and therefore it clearly influenced our onboarding process.'
- 'The work has increased the efficiency and cooperation between countries and shared services centers.'
- 'This project and its results are useful in our marketing and customer support.'
- 'The thesis helps in outsourcing decisions.'
- 'For the first time there is detailed information of how personnel think about the company.'
- 'The developed framework was the key input for two organizations in planning expansion of R&D activities to Russia.'
- 'The development project resulted in new job opportunities.'
- 'The marketing plan is written in a way that is easy to understand. We were especially pleased with our new online value proposition.'
- 'The thesis summarized the position and difficulties we have locally and how we need to change our mindset in the sales process to stay competitive in a challenging market place.'
- 'The thesis contributed to the development of the management system, with concrete opportunities and practical suggestions.'
- 'As a result of this project, we learned that operations are not prioritized as one of the key processes of the unit, and that the mutual understanding regarding ways of working are not shared. This has had a negative effect on the unit's efficiency.'
- 'Benefits to the organization include a crystalized and more explicitly articulated strategy when it comes to talent management.'
- 'The findings are interesting, especially now that digitalization and startup companies are hot topics in the Finnish marketplace.'
- 'The documentation of the concepts was useful because it has allowed us to revisit the concept for later business development.'
- 'There are some kinds of blind spots in a self-managed organization that could be improved, and this thesis has helped us to find them. When we recognized these blind spots, we can put more efforts into knowledge sharing, with both new and experienced employees.'
- 'Utilizing the different business modeling tools added value in local operations in Vietnam.'
- 'The practical suggestions gave our organization good ideas on how to approach the market, and how to better find potential partners.'
- 'The survey results of user experience and expectations were immediately utilized as inputs in the selection of chat-based collaboration tools.'

Theme 3: Future business benefits - Are there any plans for using the outcomes of master's theses in the future?

Finnish managers in their feedback on the master's thesis indicated 76 future business benefits, which are presented in table 2 in the appendices. To illustrate the findings I present here a few quotations from the feedback provided.

- 'We will use the findings from the thesis. Its findings will be communicated to all employees.'
- 'General management program is a very critical element in developing future leaders in our organization, so clearly this project work will be utilized in further program development.'
- 'As sales agents have the best possible help and have the tools at hand, this will evidently affect the competitiveness and profitability of the company.'
- 'It has fair value for our organization in the long run because it puts together a number of existing theories and creates an easily understandable and unambiguous model which can be used straight away.'
- 'After this thesis, we are able to assess brand functionality better and be more precise in giving instructions to co-operative companies (e.g., advertising companies).'
- 'As longer-term benefits, this work will be used when going through some developmental steps in the near future, when we develop our services.'
- 'For the longer term, the master's student has been able to develop a profound market study which will work as a framework for us in future developments.'
- 'Longer-term benefits come from the understanding of how important is to listen and involve employees in creating and maintaining job satisfaction.'
- 'It shows us important data in order to make our communication strategy in the future. It shows the subjects we have to consider when thinking about our communication strategy.'
- 'We could easier recognize the intellectual capital inside the organization and then be able to utilize it.'
- 'In long term, it will have meaning as a sales and support tool.'
- 'As a result we will be getting better ROI from partnerships, as consumers will appreciate and use the stored content more.'
- 'Based on this thesis we started to build our e-learning network and the findings may be used in the identification of new sales opportunities.'
- 'There are many good suggestions in the thesis that we will take into consideration.'
- 'We will change our development discussions according to the findings of the thesis.'
- 'The thesis will be used in leadership, management and work community training.'
- 'The ten most important leadership elements compiled by the student will be applied in our workshops for locally employed staff.'
- 'The next annual staff survey showed an increase of motivation in our service department, which we viewed as a success of master's students' activities.'
- 'Based on this thesis we started to build our e-learning network.'
- 'The thesis was the starting point for our company to develop a brand and marketing strategy, and to help us mature as an organization.'
- 'The information could benefit our organization and business by producing more accurate selection profiles and more qualified selections during the recruitment process.'

Theme 4: Who has benefitted - Who has benefitted from the master's theses? With whom have the findings been shared?

Inside the organization: employees, the management, business units, product developers, designers, brand managers, the marketing department, leadership, teachers, colleagues, new employees, team leaders, team members, subordinates, the HR manager, the career counseling team, CRM system users, project managers, the development team, the international office, internal customers, the research team, start-ups, salespeople, sales managers

Outside the organization: customers, consumers, partners, onshore partners, offshore partners, market segments, group companies, sales representatives, sales agents, the community, language learners, users, key accounts customers, network contacts, global contacts, advertising agencies, joint-venture partners, clients, international researchers, alumni, bloggers, market segments, experts, guests

The findings presented in this part of the paper provide evidence of business benefits from the UAS master's thesis. These findings are derived from the feedback of 91 Finnish managers involved in the thesis process. In this way, the research findings are validated and the business benefits of the UAS master's thesis are also ascertained by the business world.

CONCLUSIONS

The aim of this empirical research is to answer the research question: *How does working life benefit from the UAS master's theses?* As the findings of my analysis of the four themes (cf. figure 2) demonstrated, the master's thesis brings very specific, immediate (cf. table 1), and future (cf. table 2) business benefits to working life. These benefits are provided not only to internal, but also to external stakeholders of the organizations.

Another outcome from the research is that the paper clearly demonstrates why business and academic collaboration during the thesis process is necessary and valuable (cf. Jakubik 2017; Laine et al. 2008; Tulkki 2008; Wenger 2005). This paper shows the benefits of a collaborative learning approach. I see three value contributions of this paper:

1. It brings value to employers by making explicit the benefits that UAS master's students bring with their theses to their employers and the business world.
2. It increases the awareness *and* competitiveness of UAS master's graduates in the job market.
3. It brings value to educators of UAS and educational policy makers by demonstrating that working life values the contributions from the UAS master's thesis.

I would argue and disagree with Ojala's (2017) conclusion in her doctoral dissertation that 'Compared to the traditional university's master's degree the graduates of the UAS master's degree believed that their degree generates more competence than competitiveness.' My longitudinal, 10-year, qualitative research indicates that the UAS master's degree/thesis creates not only competences but also competitiveness for UAS master's students in the job market. Based on 91 Finnish managers' feedback about the business benefits of the UAS master's thesis I am confident that the competitiveness of UAS master's degree in the Finnish job market is strengthening.

My empirical paper has implications for managers, researchers, educators, and educational policy makers. The *managerial* implications are that the UAS master's thesis proved to be very useful and valuable, not only for students, but also for organizations as employers of master students. From the managers' feedback, it is obvious that they also learned and benefitted from this collaboration. Because this paper made very explicit the business benefits brought by the UAS master's thesis, managers are encouraged to be open to providing future developmental projects for master's students, to providing them career development opportunities, and to continuing close collaboration with UAS.

Implications for *researchers* are that they should continue working on promoting the benefits of the UAS master's thesis, and on increasing the awareness of the differences between master's degrees from traditional universities and universities of applied sciences. The scale of the research could be extended to other master's degree programmes and UAS in Finland and abroad.

Educators in UAS would need positive feedback of their master's thesis tutoring work and they need appreciation from the business world. *Educational policy makers* in Finland could consider if it is wise to have both the traditional university master's degree and the UAS master's degree in the future. The master's degrees of these two different kinds of universities are converging, and both make valuable contributions to knowledge. Policy makers need to make more clear distinctions between the degrees; they should think about how to increase the acceptance of UAS master's degrees in the job market.

As with every paper and research, this one also has limitations. The thesis feedback from businesses was analyzed only for one UAS master's degree programme, i.e., for the Degree Programme in International Business Management (IBMA) of one UAS, i.e., Haaga-Helia University of Applied Sciences, Helsinki, Finland. This limited scope makes it difficult to generalize the findings based on 91 Finnish managers' feedback. However, it provides opportunities for future research. Extending the research scope to other master's programmes and to other UAS could be one direction in research. Another limitation is that my empirical research paper has limited theoretical sources that could be improved by developing theories or by finding relevant existing theories to support the findings and answers to the research questions. In spite of these limitations, I am convinced that the findings are original, interesting, and valuable in academic research.

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Appendices

Table 1: Immediate business benefits of the UAS master's thesis

IMMEDIATE BUSINESS BENEFITS			
has increased the efficiency and cooperation between the country and shared service centers	practical suggestions on how the organization will benefit	has started to build our e-learning network	having more systematic program follow-up and impact measurement
Has allowed us to better understand our market segment and find better ways to cooperate	impact on customer and user satisfaction	has started preparations for getting funding	a more systematic and coordinated process between talent management and leadership development
has fundamentally changed the way we engage with brands and developers	problem areas where the management system needs to be developed	helps in our marketing	increasing our international impact
we will be getting better ROI from partnerships	several development suggestions were implemented right away	we got new contacts already	we are able to provide a tool set to our project managers enabling them to better manage this challenging part of the project work
consumers will appreciate and use the store content more	how the organization and its practices need to be developed	new channels opened for promoting Finnish e-learning knowledge	we are able to better assess brand functionality
higher consumer satisfaction, retention, and sales	developing internal practices	new business model	we are able to give more precise instructions to advertising companies on how our company should be seen
help in outsourcing decisions	synchronizing operative processes	immense benefits of deploying a scorecard: articulating the value of the output and its delivery	has helped us to implement a thank you event
realizing that knowledge sharing must be extensively promoted	assessing knowledge and training needs of personnel	better understanding of what every individual does in order to contribute to the unit's strategy	new research topics have emerged

confirmed our planned marketing procedures	improving communication	implementing the suggested strategy plan into our work in Finland	gaining real research based data on the topic to support further development, tools and organizational decisions
knowing conditions when buying legal services	using the framework for HR and change management	new insights into our daily work and planning for the future	providing more experience to customers
helping to make our workshops more concrete and comprehensive	helping to understand entertainment industry challenges	making us act locally	we have gained more structure for our loose practices
changing our development discussions	information about motivational themes	starting phase two of the PRM strategy	has helped us to visualize the things we need to improve
have gained useful connections	information about personnel's reflections	having a short presentation about the CRM / PRM for our team members helped us to focus on essential things	has helped us to find the blind spots that need development
successful cooperation projects between Nokia and Russian universities	new method of marketing efficiency	the framework helps our business	understanding the rational and irrational divers on the potential target market
using the suggested internationalization framework	hearing team leaders' ideas, new ways of doing things to enhance communication and collaboration	huge efficiency gains	good ideas on how to approach the market and identifying potential partners
has resulted in new job opportunities	recognizing that we have effective teams	a better understanding the problems in our unit	we are able to re-evaluate the market, when and how to approach it
development of business reporting	getting extra benefits in our offshore projects	presenting the findings has been very positive and this has been a major asset to our company	the documentation of the concepts was useful because it has allowed us to revisit the concept for later business development
contributes to our competitiveness	using specific practices suggested by the thesis	the main benefits for our company are the global contacts that were created during this project	utilizing the different business modelling tools added value in local operations in Vietnam
knowing our brand image	improved sales results	showed us the potential of LinkedIn marketing	using the findings in our incentive design projects
starting point for developing our brand and marketing strategy	a focus on sales initiatives	suggestions support our company very well	have utilized it in our reward training
has increased awareness about our customers' experiences	a team-building exercise	helps to comprehend the overall business challenges of IoT	new knowledge about our international members
has generated discussions about the ways we conduct business	information about our position and difficulties	we benefited from the recommendations	has increased knowledge about our services
opportunity to enhance our organization and services	useful findings for the career counseling team	the findings influence our communication, streamline and simplify how often we communicate to teams about change	new international researchers joined us
service quality become a major goal for us	new information on working life topics was useful	realizing what needs to be done before we are ready to hit the market with this educational concept	has increased interest toward us

improving our offerings of language courses	support our every-day business operations and customer relations	we decided to sell small modules and gradually build up the whole concept	our performance review discussions become more systematic, relevant issues are made compulsory to discuss
improving interactions between learners and native speakers	sharing the knowledge and customer-service oriented attitude in the company	we gained a better picture about the factors influencing the service business and customer satisfaction	the new way helps preparation for performance meetings
helps immigrants to integrate faster	customers appreciated our interest in their feedback	better understanding of the interdependencies between employee and customer satisfaction is very important in our organization	new insights and views were developed
acting more professionally	greater understanding of the needs from the end-users of the CRM system	analyzing the survey results has been beneficial for us	have decided to open a new Facebook-page for our alumni
providing benefits for our customers	validating our development directions	motivating colleagues	the worked proved that our earlier decision to close our Facebook account was wrong
the model provides established theories that can be used straight away	concrete opportunities	increase in motivation in the service department	we are looking for bloggers and technical solutions for our communication
has developing the next round of general management programs	increased awareness of theories, customer needs, competitors' offerings	more articulated strategy of talent management	it has had a great impact on our actions
demonstrated that our company is interested in new service development and it actively listens customers' ideas and needs	we have now a more in-depth understanding of the new approach on contextual feedback	now our start-up has an internationalization strategy	because of the work, we are now aware of the lack of internal communication
some ideas the team were able to implement and set targets	it helped us to see the big picture of internationalization	we are already using some of the outputs of the thesis	we have already implemented new forms of communicating internally (e.g., SKYPE, new Intranet, internal weekly reports)
has been a great base for renewing our training framework	it is easy to implement the delivered strategy	the student has been an additional resource for us	differences among countries are especially interesting to us
has been a useful leadership tool for global leaders	we started to look for a business developer who would also take care of communication	we gained valuable input on what really worked and what did not with our previous approach	validated our assumptions
findings about the market potential and recommendations for future work	utilizing it when pitching or selling our services	it helped us to shape the project in a slightly different way and therefore it clearly influenced our onboarding process	got evidence of some weaknesses in our current approach to collecting feedback
it gave a possibility to the team to learn many new methods	it helped to crystallize our long-term focus	the framework has been applied to Bulgaria	currently we are developing a training program with the help of master's students
the recommendations have helped us to further	it has been a huge leap toward professional business	it helped us to look at our data differently	the most important benefit for us is the identified gaps

develop our export of education			that needed to be addressed
the results are valuable for us			

Table 2: Future business benefits of a UAS master's thesis

FUTURE BUSINESS BENEFITS			
using in creating training materials for employees	development trends in CRM systems in the future	it has helped us to expand our reward business	helps in identifying new business opportunities
considering the findings in developing communication strategy	promoting the export of Finnish education	improves the quality of daily project work	we will start looking into different ways to start promoting this new business opportunity
utilizing the value network explored	help in better understanding similar projects from personnel's point of view	planning to organize teambuilding workshops regularly	the market study developed will work as a framework for future developments
writing articles and publishing them on LinkedIn and Twitter	using LinkedIn marketing as part of our marketing strategy	publishing the findings in the organization's member magazine	information, methods and practices provided long term benefits to the team
using in our future projects	implementing suggestions in our new coming complaint process	bringing more positive credibility to us	we will be seriously considering developmental ideas as they support our current strategies
applying the model in our all group companies	implementing recommendations involves strategic challenges and will be discussed internally	strengthening the bond between the company and its existing strategic customers	using a market study when decisions are made about expansion to Russia
using in new sales opportunity identification	expecting that our communication about changes will be clearer and more straightforward	The outcome of this work will be published for management	recommendations of the thesis will save us a lot of time and help us to move in the right direction
using in planning promotions	believing in saving a lot of money	the work is a good basis for starting to act	using it for improving our employee commitment
introducing suggested practices	recommendations will be taken into account when planning future actions	we will apply the suggested actions	help us to improve our current approach
using implementation and change management processes presented	implementing the same survey on a yearly basis	using the outcomes of the work in planning future events	helps us to systematically further develop our activities
using in leadership, management and work community training	important in developing future leaders in our organization	using it in streamlining the organization's working methods to achieve efficiency and effectiveness of our work	after reviewing the recommendations, our team will consider possibilities for implementation
applying in workshops for locally employed staff	utilizing it in future program development	helps identify possible improvement opportunities	the idea of internship is great and it will be implemented in the short term
extending the framework to other countries (India, China)	supports internationalization of the field and assessment of its impacts	using when planning the marketing budget	launching a full new process in the next few weeks

impacting the financial side of future projects	utilizing in developing our business	next step is to code the working prototype	we will continue to use the findings for the next 12 months
using development suggestions	Actively using change management tools	increase in the effectiveness of daily work	we intend to use the framework when expanding into new markets
using when developing our services	material business benefits by using the change management model	impact on the competitiveness and profitability of the company	the framework will be used for the USA this year
helps in the recruitment process in selecting more qualified applicants	we can apply the same event framework outside Finland all over the world	recognizing the importance of listening and involving employees to create and maintain job satisfaction	we will soon pilot the new training program
we will continue to use the renewed structure of performance meetings in the future	we could put more effort into knowledge sharing between new and experienced employees	planning to develop a proposal for improving the follow up of our members' interests	the new training program will improve the competencies of salespeople that will result in better performance
helps to evaluate activities	expecting an increase in sales	using it as a sales and support tool	gaining better sales results

Material Design And Teaching Technologies Course To The Teacher Candidates

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Abstract

The aim of this research is to examine the views of the students taking Instructional Technology and Material Design course. In this study, one of the qualitative research approaches, “special case study method was used, and the obtained data were collected by“ semi-structured student interview form. The analysis of the qualitative data was evaluated by the content analysis method.

The aim of this course is social development, the perspective of educational environment, material development project, material use competencies and the reasons for seeing the teacher training program. It also analyzes the demographics.

The study group of this research consists of a total of 200 students studying at the faculties of Near East University, Sports Sciences.

Introduction

Nowadays, the candidates in the teaching department of the universities are taking courses in the education faculties they study in order to gain the skills and behaviors required in their professional life after graduation. These courses offered in the faculties aim to provide students with the necessary competencies for their own fields as well as having sufficient equipment and confidence in the field. It is seen that one of the educational courses, Instructional Technology and Material Design course is one of the important courses in the teaching formation.

Teaching is the regulation of information and the environment to create learning in general. The environment includes not only the place where teaching is, but also the methods, techniques and tools necessary to convey information and direct the student's work. Information and the environment may also vary depending on the teaching objective in the program. Learning is a product of life and a relatively permanent track behavior change.

There should be an environment for learning-teaching. It is important to create appropriate environments in order to provide training that is considered as a process of behavior change. The field of learning-teaching is called the training environment (Soytekini & Yinal, 2017). Educational environments should be differentiated according to the conditions of the individuals to be educated. A different educational environment should be established for the courses in each level of schools, programs and programs in schools. It can easily be said that if the school, building classrooms and laboratories and the teaching technology and materials are not available or if they are inadequate and almost identical, the educational environment is not suitable.

In general terms, the communication between the sender and the receiver is called a communication that is shared with a shared shopping relationship. This process starts with the message being sent to the recipient by the source and ends with the recipient receiving and evaluating this message and reacting accordingly. A number of behaviors must be performed to achieve communication. There are five basic elements to be considered when examining the communication process. These; source, message, channel, receiver, and return. The source of the communication process in education is the teacher and the recipient. The content of the message program is the textbook or the voice of the teacher, the teaching process of the channel or the methods, technical tools and materials used in the process. Teachers benefit from three types of communication methods. These types of communication are communication with the help of oral, non-verbal and other technological equipment. In order to be a good educator in the education system, it is necessary to know the communication process very well. In the teaching-learning process, a trainer needs to establish a healthy communication with his / her students in order to teach an issue effectively. Communication related to education is related to the interaction of the student and the environment. Detection occurs when the student's senses respond to the message and the effect of the message. As long as individuals reach the consciousness of themselves and the world, it is called perception.

Technology and materials can be made more economical. With the teaching of technology and materials, less time is spent to determine the needs of students and to adjust the teaching accordingly. Less time spent by teachers and students positively affects the speed and cost of schooling. Fast and more economical schooling means that students should leave the school earlier and learn more about the time they stay at school.

If teachers are uninterested or inadequate about using technology and materials, it can be said that the education program will not be successful in ensuring students' learning. Teachers' attitudes and abilities related to technology and material use are effective in students' learning. Some teachers may not have sufficient knowledge of using technology and materials in their courses. Some teachers may also be reluctant to use new technology and materials. In addition, some teachers feel that it is difficult to use technology and materials, they may feel under pressure, or they can rely more on traditional strategies and traditional technologies and

materials. In order to eliminate all these drawbacks, teachers should be given the necessary information on how to benefit from the products of educational technology. In order to meet the three basic requirements in educational applications, educational technologies and materials are used.

In the faculties of education, pre-service teachers are enabled to feel ready for the profession with affective aspects along with cognitive gains. For this reason, it is important that teacher candidates have positive attitudes towards the ÖTMT course which is one of the teaching professional knowledge courses and they are important in terms of designing materials for their own fields and transferring them to students as appropriate (Akay ve Argün, 2006).

It is thought that the use of a skill that includes complex mental processes in this process by the trainee teachers will contribute positively to the future professional lives of the students and the success of the students. For this purpose, it is considered important to examine the relationship between creativity perception and attitude variables towards the course.

Purpose of the Research

In this research, it is aimed to examine the opinions of prospective teachers about the teaching of Instructional Technology and Material Design (SCT) course in different aspects. For this purpose, the following questions were sought;

1. What are the perceptions of teacher candidates who take Teaching Technologies and Material Design course?
2. What are the material design, self-efficacy belief levels of teacher candidates who take Teaching Technologies and Material Design course?
3. What are the attitude levels of prospective teachers who take Teaching Technologies and Material Design course towards the ÖTMT course?
4. Do the teacher candidates' perceptions of creativity differ according to the department?
5. Are the teacher candidates who take Teaching Technology and Material Design course differentiate according to the department?
6. Is there a meaningful relationship between the creativity perceptions of the prospective teachers who take Teaching Technologies and Material Design course and their attitudes towards Instructional Technology and Material Design course?

Method

Research Model

The aim of this study is to examine the opinions of prospective teachers about the teaching of Instructional Technology and Material Design (ITCT). In order to present the views given in this sense, one of the qualitative research approaches, el Special Case Study i method was used.

In this study, it was carried out with the holistic single case design of the special case study because it was the subject of Instructional Technology and Material Design as a single unit of analysis (Yıldırım & Şimşek, 2005). The case study is carried out in a natural environment, such as a class or an organization, and aims to take a holistic approach to the events and environments that are the subject of the study (Phillips and Burbules, 2000).

Working group

Working group; It is comprised of 300 students studying at Lefke European University in the Turkish Republic of Northern Cyprus. As a sample representing the universe, undergraduate students from the Faculty of Sport Sciences of the European University of Lefke were enrolled.

Data collection tool

In order to determine the attitudes of pre-service teachers who took STSM courses towards ÖTMT course, 2013 Attitude Scale for Instructional Technologies and Material Design Course mek which was developed by Çetin, Bahçeci, Kınay and Şimşek (2013) was used.

Attitude Scale Validity

The first step in the development of the ÖTMTDYTÖ was to examine the literature by the researchers and form a pool of substances with statements indicating attitudes towards the instructional technologies and material design course. The item pool consisted of 46 items. Then, 5 experts in the field of educational sciences were interviewed for the superficial (appearance) and scope validity of the scale. According to expert opinions, 5 items were removed from the scale and 3 items were changed (Çetin, Bahçeci, Kınay and Şimşek, 2013). After these processes, the scale was finalized with a 5-point Likert-type rating, which I strongly disagree (1), I disagree (2), I am undecided (3), I agree (4) and I strongly agree (5). The validity and reliability studies of the scale were conducted on three different groups of students who studied at Ziya Gökalp Faculty of Education in Dicle University in 2012-2013 Fall Semester and who successfully completed the course.

The first group consisted of 358 (174 males, 184 females) in which the construct validity, internal consistency reliability and item analyzes of the Attitude Scale for Instructional Technology and Material Design Course were conducted, and the second group of 79 (42 males, 37 females) in which the compliance validity study was conducted, and the test was repeated. The third group consisted of 106 (52 male, 54 female) students. In order to

conduct the validity study of the scale, Attitude Scale for Instructional Technologies (ÖTYTÖ) which was developed by Metin, Kaleli Yılmaz, Coşkun and Birişçi (2012) was used (Çetin, Bahçeci, Kınay and Şimşek, 2013) Explanatory Factor Analysis for construct validity studies. and Confirmatory Factor Analysis (CFA). The KMO value of the scale was found to be .948 and the Barlett Sphericity test was significant ($p < .05$, $Df = 528$). According to these results, it was determined that the data set was suitable for factor analysis. After the data set was found to be suitable for factor analysis, it was seen that 33 items were collected under 3 dimensions explaining 53,83% of the total variance by AFA as a result of principal components technique and direct oblimin rotation technique. The first dimension is defined as ş usefulness ve, the second dimension is eci liking etin and the third dimension is called olarak denial boyut (Çetin, Bahçeci, Kınay and Şimşek, 2013). The correlation between the Attitude Scale for Attitudes towards Instructional Technologies and the Correlation Scale for Instructional Technologies were examined. A positive and significant correlation between the two scales was found. 535. The calculated internal consistency (Cronbach Alpha) coefficient was .94 for the whole scale and .78 to .95 for the sub-dimensions of the scale; test-retest reliability was calculated as .90 for the whole scale and .76 to .88 for the sub-dimensions of the scale. The findings obtained from the item analysis show that the corrected item total correlations of the subscales ranged from .319 to .710. (Çetin, Bahçeci, Kınay and Şimşek, 2013)

Data Analysis

Descriptive statistics were used to determine attitude levels and creativity perceptions. One-dimensional analysis of variance (ANOVA) and multi-dimensional analysis of variance (MANOVA) were used to determine whether there was a significant difference between the attitude levels and creativity perceptions of the students. Pearson correlation coefficient analyzes were performed to determine whether there was a significant relationship between the scores of the scales.

Findings And Comment

In this section, the findings related to the sub-problems of the study were presented and then comments on the findings were discussed and compared with the results obtained in the literature. The views of prospective teachers studying in the Department of Physical Education and Sports in the instructional technologies and material design course were examined in different dimensions. "Professional (, ili contribution to individual and social development alma," material development project esi, "material use competencies değişim," the necessity of taking the course in the program ", instructional technologies and material design (ÖTMT) has been tried to determine the opinions about the course.

Table 1. Descriptive Statistics On The Creativity Perceptions Of Prospective Teachers Taking Instructional Technologies And Materials Design Course

Creativity scale	N	\bar{x}	SS
The whole scale total score	200	44,07	14,70

When Table 1 is examined, it is seen that the teacher candidates who take the ÖTMT course have arithmetical average value (\bar{x} alan = 44,07) of the points they get from the ar How Much of Your Creator den scale. Based on this finding, when the inin How Much Creativity Scale (score is taken into consideration (0-116), the mean of the answers of the teacher candidates who took the ITMT course on the scale of how much creative they have (\bar{x} = 44,07) is higher than the mean (40-64 points). They have a level of creativity perception.

Table 2. Descriptive Statistics Related To The Attitude Levels Of Teacher Candidates Who Took Instructional Technologies And Materials Design Course Towards ÖTMT Course

Courses at ÖTMT			
	N	\bar{x}	SS
Attitude Scale			
Delectatn	200	3,44	0,85
Abnegatn	200	4,07	0,95
Benefit	200	3,75	0,67
Full Scale	200	3,72	0,63

When Table 2 is examined, the arithmetical average value of the attitude scale for the Instructional Technology and Material Design course (= 3.44); It is observed that the arithmetic mean value (= 4.07) of the sub-dimension and the arithmetic mean value (= 3.75) for the usefulness sub-dimension. Based on these findings, "Attitude Scale for Instructional Technology and Material Design Course boyut is a 5-point Likert-type scale. It can be said that the average values of the items are positive because the values that can be taken by the items of scale (1) vary between T Strongly Disagree adayı and (5) M Totally Agree neden and therefore teacher candidates who take the ÖTMT course have developed a positive attitude towards ÖTMT lesson.

Table 3. ANOVA Results Showing Whether Teacher Candidates' Creativity Perception Scores Differ According To Their Sections

Variance Source	Squares	sd	Squares	F	p
	Total		Average		
intergroup	901,916	10	90,192	,410	,941
inter-group	81301,171	190	219,733		
Total	82203,087	200			

p<0.05

Table 3 is examined, it is seen that there is no significant difference between the perception of creativity perception of teacher candidates who took Instructional Technology and Material Design course according to the part studied $F(10, 200) = 0.41$ $p > 0.05$. It can be stated that the teacher candidates' scores on the perception of creativity are not affected by the department variable they study. It is possible to explain the reason for this situation as the teacher candidates are being trained in a similar education system in the faculties of education.

Table 4. MANOVA results showing that teacher candidates' attitude levels towards ÖTMT course differ according to their departments.

ÖTMT Attitude
For The Course
Section

Scale Bottom Dimensions	N	\bar{x}	SS	sd	F	p	d	
useful	Social Knowledge. Inst.	17	72,6	14,13				
	Classroom Teacher	36	77,5	10,12				
	English Teacher	20	66,86	15,63				
	Painting Teacher	7	70,5	8,89				
	Science Inst.	16	69,45	11,31				
	Special Education Inst.	25	68,37	17,33	10-370	2,74	0,00	0,07
	Turkish Teacher	18	71,97	13,65				
	Mathematics Teachr	8	74,55	11,09				
	Bote teacher	20	70,09	11,63				
	Music Teaching	11	70	6,21				
	Preschool Teacher	22	67,55	12,66				
	Abnegatin	Social Knowledge. Inst.	17	21,02	4,76			
Classroom Teacher		36	21,94	5,59				
English Teacher		20	19,96	3,65				
Painting Teacher		7	20,66	3,78				
Science Inst.		16	18,85	3,3				
Special Education Inst.		25	19,72	5,61	10-370	1,35	0,20	0,04
Turkish Teacher		18	20,11	4,76				

Mathematics Teacher	8	20,36	4,68
Bote teacher	20	20,25	4,73
Music Teaching	11	19,42	5,35
Preschool Teacher	22	20,7	4,54

Dimensions

Social Knowledge. Inst.	17	34,34	9,96			
Classroom Teacher	36	36,1	5,83			
English Teacher	20	28,13	8,03			
Painting Teacher	7	28,38	4,92			
Science Inst.	16	29,07	5,6			
Special Education Inst.	25	30,54	9,37	10-370	5,76	0,00 0,14
Turkish Teacher	18	30,54	6,04			
Mathematics Teacher	8	31,52	7,18			
Bote teacher	20	28,12	7,39			
Music Teaching	11	29,15	6,3			
Preschool Teacher	22	28,61	6,84			

Table 5. Education Technologies and According to aAttitude Points to Intended Material Desing Turkey Test Findings

Sub-dimensions of the scale	(I) Section	(J) Section	Averages			
			Difference (I-J)	p		
useful	Classroom	Social Knowledge. Inst.	4,9032	,735		
		English Teacher	10,6464*	,010		
		Painting Teacher	7,0085	,602		
		Science Teacher	8,0561	,061		
		Special Education	9,1301*	,025		
		Turkish Teacher				
		Mathematics Teacher	5,5370	,606		
		Bote teaching	2,9558	,989		
		Music Teaching	7,4147	,212		
		Preschool Teacher	7,5085	,464		
		Turkish Teacher	9,9497*	,012		
		delectatin	Social Knowledge. Inst.	Classroom Teacher	-1,7596	,986
				English Teacher	6,2042*	,024
				Painting Teacher	5,9532	,136
Science Teacher	5,2707*			,048		
Special Education						
Turkish Teacher	3,8016			,456		
Mathematics Teacher	3,7992			,479		
Bote teacher	2,8158			,838		
Music Teaching	6,2171*			,017		
Preschool Teacher	5,1842			,281		
Preschool Teacher	5,7245*			,036		
Classroom Teacher	Classroom Teacher			Social Knowledge. Inst.		
				English Teacher		
				Painting Teacher	1,7596	,986
		Science Teacher	7,9638*	,000		
		Special Education	7,7128*	,004		
		Turkish Teacher	7,0303*	,000		
		Mathematics Teacher	5,5612*	,013		
		Bote teacher	5,5588*	,016		
		Music Teaching	4,5754	,089		
		Preschool Teacher	7,9767*	,000		
		Preschool Teacher	6,9438*	,014		
		Social Knowledge. Inst.	7,4840*	,000		

p<0,01

Table 5 is examined, it is seen that the teacher candidates' attitude points towards Instructional Technology and Material Design course show a significant difference according to the departments they study [Wilks Lambda (λ) = 0.823; F (3, 368) = 2.49 p <0.01. When the usefulness subscale of the Attitude Scale for Instructional Technology and Material Design Course is examined, it is seen that the attitude points of the teacher candidates towards the Instructional Technology and Material Design course show a significant difference according to the departments they studied [F (10, 370) = 2.74 p <0.01, d = 0.07]. Similarly, when the sub-dimension of the Attitude Scale for Instructional Technology and Material Design Course is analyzed, it is seen that the attitude points of the teacher candidates towards the Instructional Technology and Material Design course show a significant difference according to the departments they studied [F (10, 370) = 5.76 p <0.01, d = 0.14]. Finally, when the subscale of the Attitude Scale for Instructional Technology and Material Design Course is examined, it is seen that the attitude scores of the teacher candidates towards the Instructional Technology and Material Design course did not show a significant difference according to the departments they studied [F (10, 370) = 1.35 p > 0.05, d = 0.04]. Within the frame of these findings, it is possible to say that teacher candidates who

study in different departments and who take Instructional Technologies and Material Design course have differences in teaching technologies and material design, and find differences in their level of enjoyment.

Table 6. Pearson Correlation Analysis Results Showing Whether There Is A Significant Relationship Between The Teachers' Perceptions Of Creativity And Their Attitudes Towards Instructional Technologies And Material Design Course.

	NKY	YD
NKY	-	
YD	,070	
H	,057	,312**
YR	,046	,247**
BMH	,121*	,121*
ÜBMT	,068	,155**
BMT	,149**	,085

*p< .05; **p< .01

Not: NKY: How creative are you; YD: repudiation; H: Ho lanma; YR: Yararlılık

When Table 6 is examined, it is seen that there is a low, positive and significant relationship between the self-efficacy belief levels and the creativity scores of two-dimensional material design from the sub-dimensions of düzey Material Design Self-Efficacy Belief Scale boyut. = 0.15, $p < 0.01$); Although it was seen that “Material Design Self-Efficacy Scale δ was a positive and significant relation between self-efficacy belief levels and creativity levels about computer material preparation sub-dimension ($r = 0.12$, $p < 0.05$). There is no significant relation between self-efficacy belief levels and creativity levels for three-dimensional material design ($r = 0.07$, $p > 0.05$) (see Table 4.9). According to this, it can be said that pre-service teachers have an increase in their level of creativity, or that an increase in their level of creativity affects the level of self-efficacy belief in material design.

Discussion, Conclusion And Suggestions

In an accreditation study conducted in the USA, the awareness of the technology and materials used in the teaching of the faculty members in the university and the evaluation made in the course of the course showed that the instructors' technology awareness and use on the basis of fields differed (Hora and Holden, 2013). This result is effective in the emergence of differences in the application of ÖTMT course which teacher candidates receive by field educators or educational sciences expert.

Uncovered in studies with teachers in Turkey; negative results such as inadequacy, self-confidence and lack of knowledge, theoretical method and similar results were also observed in studies conducted abroad. As a result of a study conducted by the Office of Technology Assessment in America, teachers and candidates stated that they felt they were inadequate in instructional technologies, did not receive effective training in in-service training, and did not learn the technologies to be included in the teaching (Yanpar, 2011). In addition to this evaluation, it was found that 75% of the universities in the study conducted by the researchers in some states was not a subject related to instructional technology in teacher education (Yanpar, 2011).

Yaman materyalin (2007) in his study with the Turkish teachers stated that they felt inadequate in terms of material design in their fields. It should be noted that the field educator's contributions to the candidates on their professional gains. English teachers who take the ÖTMT course from the education sciences specialist and the other instructors are the most ineffective gain of the course. Erol (2012) 's) Elementary Education II. In this study, it was found that there was no significant difference between the use of instructional technologies and the use of instructional technologies according to gender variable. It is thought that male teachers in the sample may be more interested in using technology than women, and this situation is reflected in education-training environments.

In his study, farklılık A Study of the Instructor of Technology Integration in the Classroom. Draheim and Weber, (2005). he found no significant difference in the use and integration of technology according to gender variable. This result may be due to the fact that 84% of the participants were male and 16% were female. As a result of the study of Dobbins, (2009) there was a difference between teachers' views in terms of gender variable. In the study there is a difference between the use of educational technologies and differences in the use of computers, books, multimedia, audio cassettes, tapes and data projections. According to this, it is concluded that male teachers say that they use more new technologies such as computers and multimedia compared to female teachers.

In a study by Dikici and Sağnak (2010), it was found that the teaching proficiency scale had a positive but low correlation ($r = .126$) between the general teaching sub-dimension and attitudes towards teaching profession, and this correlation decreased when other variables were controlled ($r = .125$).). In addition, it was found that there was a low negative relation between the sub-dimensions of the competency scale and the attitude towards individual teaching and teaching profession ($r = -.124$) and a low negative relationship between the self-confidence of the other sub-dimension and the attitude towards the teaching profession ($r = -.007$). Similarly, in a study conducted by Çelikkaleli and Akbaş (2007), it was found that teacher candidates' self-efficacy beliefs about science teaching accounted for 39% of the attitude variance towards science lesson. In addition, in a study by Özkal (2013), it was found that 6th and 7th grade students' self-efficacy beliefs towards Social Studies course were a strong predictor of positive attitudes. It was found that the self-efficacy belief scores for the Social Studies course could explain 16% to 22% of the variance in the positive attitude towards the Social Studies course. In this context, it is possible to say that there is a similarity between the findings of the eighth sub-problem and the findings from the literature.

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