Voices and Pictures from an Online Course and a Face to Face Course

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Abstract—In light of the technological development and its introduction into the field of education, an online course was designed in parallel to the 'conventional' course for teaching the "Qualitative Research Methods". This course aimed to characterize learning-teaching processes in a 'Qualitative Research Methods' course studied in two different frameworks. Moreover, its objective was to explore the difference between the culture of a physical learning environment and that of online learning. The research monitored four learner groups, a total of 72 students, for two years, two groups from the two course frameworks each year. The courses were obligatory for M.Ed. students at an academic college of education and were given by one female-lecturer. The research was conducted in the qualitative method as a case study in order to attain insights about occurrences in the actual contexts and sites in which they transpire. The research tools were open-ended questionnaire and reflections in the form of vignettes (meaningful short pictures) to all students as well as an interview with the lecturer. The tools facilitated not only triangulation but also collecting data consisting of voices and pictures of teaching and learning. The most prominent findings are: differences between the two courses in the change features of the learning environment culture for the acquisition of contents and qualitative research tools. They were manifested by teaching methods, illustration aids, lecturer's profile and students' profile.

Keywords—Face to face course, online course, qualitative research, vignettes.

I. THEORETICAL BACKGROUNDS

STUDIES conducted around the world indicate an increased development of online teaching through the Internet. Moreover they point out a rapid pace of online course introduction into education systems and higher education institutions [1]-[4]. References [5]-[7] argue that factors such as increasing the learner population in higher education institutions, saving of infrastructures and teaching method innovations motivate the development of online courses. This fact is validated in academic colleges of education which are in charge of pre-service teacher education and their preparation for induction into the education system; promotion of teachers' professional development towards higher academic degrees; shaping education in Israel. Hence, building an online course of qualitative research teaching is part of an academic college of education's vision of introducing fundamental technological changes in teaching methods and changing the structure of academic curricula not only regarding new and advanced contents but also in the way the various courses are taught [2], [8], [9].

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The culture of learning in an online environment with all its hues and levels in academic colleges of education are grounded in pedagogical and organizational foundations, emphasizing unique needs of teachers' education and professional development. According to [2] and [3], online learning encompasses five key features:
1. Physical distance – there is a physical distance between learners and teachers.
2. Gap in time – learners and teachers conduct the dialogue in different times.
3. Independent learning – learning transpires when learners build knowledge based on various information sources.
4. Accessibility – there is easy accessibility to varied written and computerized information sources.
5. Interactive communication – a text-picture-voice integration between learners and teachers and between learners and learner communities for the purpose of mutual feedback.

Thus, online learning is first and foremost a pedagogical concept and then a methodology of implementation /performance.

Online courses built as part of the academic curriculum should faithfully represent the learnt consents and subjects, facilitate students' mastery and comprehension of the learnt material rather than turn them into 'computer games' or an online gimmick [10]. Technology is designed to provide the experience of learning and acquiring the course contents without the basic options of lecturers and students being in one space whereby one can ask, deliberate and clarify studied issues and discuss 'on the spot' any point which requires elaboration. The built 'Qualitative Research' course attempted to cope with the challenges set by the technological system, namely including all the materials, presenting them in a way which is intriguing, clear, stimulating, interesting and insight-attaining. At the same time it devised creative activities which highlight the students' cooperation in acquiring the contents and competences required for conducting a qualitative research. The online course had to find a way of bypassing the limitation of lecturers not being present during students' learning and of being unable to see what happens to the learnt material delivered to students.

The qualitative research online course had to cope with the change of online learning culture as well as change in the research approach and in the comprehension of the paradigm and the research tools. Thus they would be individually useful and applicable to every student wanting to implement the qualitative approach. The course in the two teaching-learning cultures had to rise up to the challenge of being learnt in an

academic college of education within the framework of professional development of in-service teachers studying towards an M.Ed. That is, be relevant to teachers' professional life during the studies as well as applicable later on [2], [8].

The present study illustrates the voices and pictures perceived by the students in the two teaching-learning cultures: the conventional, face to face culture and the innovative, online culture.

II. METHODOLOGY

The present study was conducted according to the qualitative-interpretive approach of the case study type used in studies of teaching and learning [11], [12]. Reference [13] presented the method of Multi-Qualitative Research or Multiple Case Studies, i.e. a theoretical representation of case series which are inter-connected. These studies facilitate a general pattern or a different interpretation than by analyzing a single case study or the parts thereof [14]-[16].

The qualitative-interpretive approach applied in this study enables understanding, description and interpretation of what transpires in the field, including covert aspects from the viewpoint of the participants themselves [17]. The fundamental assumption was that procedural occurrences associated with culture and society can be fully comprehended only when they are studied from the participants' viewpoint and as they are perceived by those who are actively involved in them. Moreover, data collected from the participants allow understanding of and penetration into the questions: What does a small group 'think and feel'? What is related to the group members? What do they need? What is their attitude and approach [14], [17].

A. Research Population

The research population comprised 72 M.Ed. students in four learning groups: two groups of 40 students in face to face courses and two groups of 32 students in online courses. The groups included 52 females and 20 males; 62 Jews of which one quarter were religious and observant and 10 Arabs. The students learnt together for a year and were able to relate to their perception of themselves as learning the qualitative research as a concept shaped out of a personal experience.

B. Research Tools

The questionnaire was an open-ended, based on a questionnaire from a study conducted by [18]. This questionnaire was validated by a group of peer-specialists and was administered at the end of the academic year. Furthermore, the students were requested to write 'vignettes' [19] and briefly describe a meaningful picture which they took with them from the 'Qualitative Research' course. "A vignette is a short picture which reflects a behavioral pattern or occurrence which are recurrent." [14] The interview with the lecturer was a semi-structured interview [20]. The interview comprised questions related to the role perception of teaching in the online course and a face to face course.

C. Data Analysis

Analysis of the open-ended questions, reflections and the interview were content analyzed at two levels: a normative content analysis for identifying prominent trends and a qualitative-interpretive content analysis in order to expose essential meanings, perceptions and to learn various insights. The analysis was triangulated by two researchers [22].

III. FINDINGS

The most prominent findings are: differences between the two courses in the change features of the learning environment culture for the acquisition of contents and qualitative research tools. They were manifested by teaching methods, illustration aids, lecturer's profile and students' profile.

A. Course Description – General Trends

The face to face course consisted of several single learning sessions in an online environment. However, most of it was delivered as a 'conventional' course. The syllabus and the varied learning materials were planned and developed with an option to change emphases in the contents and subjects according to the composition of the learning group and to the pace of progress in order to engage much more in deep approach to learning and relevancy to the learners. At the same time, an accessible course-based website was built including the learning materials and an extensive bibliography list. A special emphasis was placed on the workshop learning in the course which was based on learning by inquiry and developed independent learning competences.

The online course necessitated planning, meeting with computer experts, developing unique learning materials which had to meet the double challenges of changing attitudes towards empirical approach through acquaintance with contents; personal experiences; gathering sources on the Internet; precise division of contents into learning units along the academic year; building learning units; including bibliography and focused assignment in every learning unit; building a course website with links to the learning materials and content enrichment by means of multimedia. Uploading the course to the Internet was done before the beginning of the academic year. The teaching-learning units were opened to the students according to a timetable during the year. Each unit had to include extensive material for self-reading according to instructions and to independent learning by directed questions in order to check the understanding, elaboration and distinction between concepts and processes. The students who had registered to the course received a personal induction letter with an invitation to a one-on-one meeting with the lecturer and a computer expert. The purpose was to orient the students in the intricacies of the course, including passwords, procedures and mutual work methods between them and the lecturer. The syllabus and all the specified guidelines, including innovations in the online distance learning constituted part of the course website. Moreover, all the operational instructions, definite timetable for submitting assignments online and in writing throughout the course; ways of communicating with the group, the lecturer and the IT

support appeared on the course website. The website displayed also a special presentation of online learning as well as personal acquaintance with the online course lecturer.

B. Teaching-Learning Features of the Courses

The findings relating to the learning features manifested by the questionnaires of the students of the two learning environments indicated a differentiation between them. The findings show that most of the differences between the courses stem from the learning environment which differs from one course to the other. Acquiring contents and qualitative research tools was done in a different way. The differences between the two courses in the demonstrated learning features are: learning environment and teaching methods, illustration aids, lecturer's profile and students' profile.

1. Face to Face Course

Learning environment and teaching methods – sessions which became direct encounters were conducted in the classroom. The learning materials were conventional and consisted of worksheets, presentations, lectures, discussion, workshop learning for individuals, groups and the full class quorum, while integrating learning by inquiry and independent learning.

Illustration aids – the illustration aids comprised simulations in which the students took part, e.g. the topic of observation, issues of the interview and focus group. One of the prominent examples which were meaningful to the students was working in groups in class and building an interview for figures that starred in a movie that the entire class watched. The movie presented a case of immigration absorption and discussed the overall communication space, i.e. the home and parents, school: teacher, head teacher, classmates, violence and multiculturalism. One of the students expressed the way she felt: *"I felt identification up to the bottom of my heart when I formulated the semi-structured interview questions for the child-protagonist, his teacher, his sister and the violent friend"*. Additional topics mentioned as valuable for the learning emerged during the workshop stage of learning, whereby the workgroups conducted discussions which were brought to the full class quorum. The discussions engaged in the formulation of qualitative research questions which were appropriate for various pictures and situations as well as data analysis of field note segments from different sources. The students found that the enrichment sheets were 'useful' for them. They can use them in their practice in different educational frameworks and conduct 'mini-studies' or 'minor research' which can constitute exploratory studies for them. To use one of the student's words: *"The experiencing and enrichment sheet broaden my mind. On the one hand they demonstrate the importance of the qualitative approach and on the other they provide a useful and real research tool which I the junior researchers can implement tomorrow morning"*.

Lecturer's profile – the lecturer in the frontal course is characterized as a charismatic figure who brings her personal experiences as living examples of the studied subjects. For

example: observation of the various Bedouin tribes, an illustrated interview with Ethiopian immigrants, follow-up of head teachers and teachers who develop unique curricula, ethical issues in research of Holocaust survivors. As one of the students attested, *"I enjoyed listening to the qualitative experiences of the lecturer's personal studies, her personal narratives brought life to the course. They oriented me in the entrance stairway to the world of qualitative research and built the trust in this manner."*

Students' profile – students attending the face to face course feel involved in and partners of the learning. They like the situation whereby they can ask questions and receive an immediate feedback, as remarked by one of the students: *"I failed to acknowledge the qualitative research as scientific, It seemed to me as articles in a newspaper. When I received an example of an article about immigration absorption, research report about absorption and a paper published following the research report, the penny finally dropped"*. Students enjoy that personal touch in the course. Their voices attested to "associative interactions" and "humor" which made the learning "interesting, diversified and experiential "like in illustrations of qualitative studies from their areas of interest when they presented a report as part of their course assignments. One of the students pointed out: *"At first I was apprehensive about the report. I worked hard on it and I was pleased I could bring to the entire group the study which engaged exactly in problems which preoccupied me in my practice"*. Another student said: *"When I got the approval to present a study dealing with a political issue I could not predict what would happen in class. At any stage of the research which I presented the discussion in class was charged and heated. The qualitative methodology facilitated openness which were unknown to me in academic discussions. I felt that the qualitative research entailed a critical and constructive reflection and raised challenging issues and ideas for the research of cases whereby only the qualitative approach could present the participants' thoughts and emotions. It was an instructive lesson for me and for the entire group"*. Another student's statement emphasized the contribution of the course: *"The qualitative research tools led me to additional view and upgraded my work. Learning in the course made me look at the occurrences from various perspectives, be more open "*.

Assessment methods – assessment in the course was given according to pre-defined criteria which were indicated in the course syllabus. For example: active attendance in class, exercises and assignments, observation, interview, data analysis, research questions formulation, oral and written report – critical analysis of an article dealing with qualitative research, self-assessment, peer-assessment and the lecturer's assessment.

Advantages – as manifested by answers to the students' questionnaires: lecturer-student personal contact and immediate feedback; direct and continuous interaction by clarifying things on the spot; reading theoretical materials parallel to lectures in class; focusing learning processes on subjects studied in class as well as amendment and

improvement options; involvement and personal acquaintance among group members as a result of experiences which requires openness; conducting debates rich with different opinions and multiculturalism; acquiring an empirical work method both in theory and practice which is suitable to research areas of education sciences.

The findings illustrate that through the learning process the face to face course helped students to acquire knowledge and tools and to accept the qualitative research approach as a response to the quest for meanings and insights of the investigated occurrences.

2. Online Course

Learning environment and teaching methods – an undefined physical place for the course. The learning materials are online and can be found on the course website. Teaching transpires through teaching units formulated as a series of qualitative research learning subjects. For example: 'Comparison of positivist and post-positivist research', 'Traditions and currents in qualitative research', 'How to formulate qualitative research questions', 'Data collection', 'Research tools', 'How to perform data analysis', 'Ethics in qualitative research' and 'Naturalistic generalizations'. Every unit has definite reading materials and assignments to be submitted to the lecturer according to a pre-determined schedule. The assignments should demonstrate the students' comprehension of the material and implementation of what has been learnt. The learning consists of independent inquiry. Sometimes there are debates in the forum as well as collaborative learning.

Illustration aids – the learning units were structured in the course website. The reading materials included questions and the learning materials came with assignments. The students' voices express astonishment with the materials added to the course such as movie clips, pictures, presentations, illustrations, quizzes, caricatures and authentic texts as well as creative assignments. The texts included in each unit illustrated the learnt subject. One of the students points out: *"Unit 4 about the observation pleased me the most. I did not believe watching a movie and filling three different observation sheets would be so interesting. It was great relating to the movie clip from three perspectives; each time I paid attention to something else in the observation, something different: for example, using body language, words of persuasion, literary language".* Another student stated: *"When I read the documentation of the observation of the lesson about the Holocaust in the 12th grade of the regular matriculation pathway I felt as if I was the observer and I was in the class, sitting and hearing the voices of the pupils and the teacher. The documentation of the observation was so actual that no imagination was necessary in order to absorb the atmosphere and the difficulties. I realized how important is a real, authentic report, linked to the occurrences, adding on the side all the details which could provide a full picture of the events. I understood then what is a high-level qualitative observation which could enrich the data. It surprised me to enter so deeply into a place and a situation without knowing*

where it happened and who the players were. I felt the power of the field note included in the learning unit". The illustration aids included in the online teaching units aimed to involve the students in the process of understanding and implementation of qualitative research. They *engaged the students and did not leave them at a distance. One of the students told: "In the unit of research questions formulation I did not think how difficult it would be to verbalize proper and adequate research questions for the pictures. At first it seemed innocent and simple. However, after delving deeper I felt that sometimes things became complicated. This is what happened to me later on in the unit. We were given a multiple choice questionnaire and I had to reply what was qualitative and what quantitative. The answers at the end of the unit clarified the subject".* The illustrations encompassed authentic texts from numerous studies and therefore they were convincing. They were also in the students' areas of interest and practice, namely relevant. The students had to structure the knowledge based on empirical papers in various areas which illustrated the principles of qualitative research features obtained through directed questions and online assignments.

Lecturers' profile – the lecturer in the online course is characterized as leading towards independent learning. She is a purposeful tutor and to use the students' words: "She led us to understand what we read and learn", "She saved us time for surfing the Internet and made the learning material accessible". She referred the students to various sources, giving questions which guided them and checked their comprehension. The students indicated that although they did not see or hear her she managed to establish good relation with them. One of the students sums it up: "The virtual lecturer was always supportive and answered our questions". She managed to remain present by being available on the online channel.

Students' profile – students are required to engage in individual learning, have a high self-discipline of meeting deadlines which do not appear in any timetable. They should allocate learning time for themselves. Coping with the contents of qualitative research and the process of consolidating a perception and attitude towards the qualitative research is personal, without engaging in questions and answers. They are asked to read materials without conducting a discourse, comprehend the ideas expressed in them, classify and explain their thoughts. They have no forum for voicing their doubts, misunderstandings, question marks, thoughts of denial and rejection because they have to fulfill the assignments. One the students clarified: "My *character dictates that I really need to hear the lecturer at first hand as well as the dialogue with him or her and I missed it in the online course. I believe that an in-depth reflection and a dialogue about every assignment might help in this matter, making the course more meaningful. Nevertheless, whenever I needed elucidation and guidance, I had the option to contact the lecturer and receive from her adequate clarifications or expansions. At the end of the course I was satisfied with the process and the numerous demands".* Another student told: *"At first I was terrified by the amount of materials and the difficulty level of the assignments. I felt that I did not*

understand and failed to keep up with the pace of the assignments submission. I studied whole nights... this was unexpected for an online course which I was sure would be light. Later on I learnt to enjoy the 'surprises' in each learning unit". Another student pointed out: "The first learning unit almost broke me… reading articles which describe quantitative studies of different topics and qualitative articles on other topics and understand by myself the differences between a quantitative research and a qualitative research. I spent so much time reading, thinking, answering the assignments and I didn't know if I managed to include all the differences. Later on, in the next unit, I got a surprise, an amazing presentation which summarized everything, helping me to respond to the following assignments without any problem. I felt that the time I had invested was beneficial".

Students have to be creative like in the assignment of compiling a qualitative concepts lexicon. As part of their assignments the students built a shared concepts lexicon for the qualitative research such as the 'Wiki-course'. Their words mentioned "great interest", sometimes "loneliness", "difficulty with load of the learning materials" and the "assignments'. The findings illustrated two special and unexpected statements about the students' place in the course. One student claimed: "In the online qualitative research course I felt that all the students were **equal** in the eyes of the lecturer. All of them had to bring examples from their world, had the same assignments and the same articles. The lecturer did not demonstrate special attitude towards specific students, all were equal. She was behind the screen. When choosing qualitative research questions I felt I could bring myself as I am, my culture and my areas of interest". The second statement was: "I am a timid young woman, I never ask questions in class. I felt **confident** to address questions to my online lecturer when I did not understand some concept or what should I do in the assignment. For example, I asked her, the lecturer, several times what does 'triangulation' mean and what is a 'focus group'. What is the difference between 'action research' and 'case study'? I could also request an example of an ethical problem in a qualitative research". In the online course too the students express the importance they attribute to the lecturer-student relationship, an emotional value-based relation and to the contribution of the online course lecturer in a formal interaction".

Assessment methods – assessment in the course was based on submitting the learning unit assignments according to a pre-determined timetable. The learning units included also self-assessment by electronic tests. Moreover, the students had to submit to the lecturer exercises written on paper following the online units.

Advantages – the learning is individual and can take place at any time and place. Students control the learning procedure and pace. There is flexibility and accessibility from every place, at any time. The learning units are designed to develop critical reflection and openness to criticism. They use multimedia and many available and accessible information sources. Students acquire competences of technological tools, updates and available new information. The learning leads and

teaches the students to learn independently, cope personally with theoretical materials and implement research skills in practice. Students' acquisition of qualitative research methods particularly in an innovative technology creates a balance regarding research approaches in general and their implementation in academic studies in particular.

IV. SUMMARY INSIGHTS AND IMPLICATIONS

The present study demonstrated the features of qualitative research teaching in two different teaching frameworks-conventional (face to face) learning and online learning – as part of the compulsory studies for a M.Ed. degree at an academic college of education.

According to the findings, the 'Qualitative Research' Course constituted a basis of open thinking for coping with change processes at the lecturer and students' level. The course inculcated tools and competences for managing changes change by adopting research approaches; delving in research processes and qualitative research issues; clarification and selection of a subject and problem for investigation; formulating qualitative research questions; understanding the issues of data collection as 'familiar' or 'foreign' researchers in the investigated field; personal research tools acquisition; discussing ethical issues; data analysis at different levels; building categorizations, data coding, triangulation and fine-tuning, presentation and reporting [21]-[23], [14].

The findings relating to each course highlight both the learning features of the different frameworks and the contents of the qualitative research course which were manifested by different and similar ways. The course objectives were to build a solid theoretical foundation for the qualitative research on the one hand and actual applicable experiencing on the other. The objectives were accomplished in the two frameworks based on the belief that students' attitudes towards changing their perception of the research approach would constitute part of the unique learning culture of these frameworks. References [23], [3] and [24] explain the difficulties involved in the adoption of changes. They argue that a process integrating the cognitive approach and the behaviorist approach (logic, emotion and competence) might lead to a change in students' attitudes.

The communication processes in the two courses stemmed from the learning features and the change features of each course. The findings show that different interactions transpired in the courses, emphasizing communication patterns at various levels: high level of student-lecturer interactions in the two courses; high level interactions among the students in the frontal course; and high level interaction between the students and the learning materials in both courses. These types of interaction were also found by [25] and [26] who defined them as interactions in triangle lecturer – learner – knowledge. According to these researchers the dialogical space which contains the triangle in a balanced way will promote optimal teaching-learning processes. Reference [24] underscores that there are various models of high quality interactive learning which facilitate a fascinating combination of communication technologies.

Findings of the online course indicate its prominent advantage, namely students have control over the learning procedure and learning pace. Students expressed feelings of equality and confidence and personally asked the lecturer questions in writing on the computer screen. "A culture of independent learning was established in the course for the purpose of constantly improving the use of technological tools", "I have learnt to study in a structured, systematic and creative way". These findings are in line with the studies of [24], [25] and [27] who describe the concept that all individuals using the Internet should be allowed to deal with their knowledge and build it according to their needs. The current stage in the field of online learning is characterized as a "postmodern stage whereby the emphasis shifts from learners' technology to the learner. Teaching methods in online environment focus on the learner and highlight the learning processes of individuals as part of a learner community [3]. Reference [10] emphasises the educated integration of technology for the empowerment of the personal experiencing which enriches the learning methods. References [3] and [28] elaborate and stipulate that extensive aspects of online environment and culture can be learnt only through the students' direct experiencing with the online environment. This experiencing leads to focused learning which expands the knowledge and the ways it is acquired.

To sum up, based on the findings and the insights about the advantages of each learning framework, this study recommends integrating online units in face to face courses and at the same time incorporating workshop sessions in the online course. The findings underscore the great importance of a learning environment which copes by adopting innovative learning competences characterised by a dynamic concept and a concept of dealing with complex situations. That is, choosing the suitable 'segment' of information and applying it when solving problems in situations which differ in time and place [29], [30].

A. Research Limitations

The contents of the courses were identical and the same lecturer taught in both of them. Nevertheless, the student types were different, their background and dynamics in each learner group were different resulting in different teaching and learning styles. These data made the comparisons rather difficult. The follow-up of the study lasted two years. Hence, it is not possible to infer from this study about the future functioning of the students and the lecturer in similar or different frameworks. On the other hand, although the research sample is very diversified and the group is not big (72 students and one lecturer) the ability to learn is quite consolidated since extensive data were collected by different tools and in different cross-sections. Another limitation is the implications stemming from exposing the two patterns of learning framework for different or similar teaching-learning patterns.

It is recommended expanding the study and exploring the attitudes of the lecturer in the two different learning frameworks. Moreover, it is recommended checking the students' attitudes and implementation of the learnt material sometime after the course.

B. The Research Contribution and Importance

The present study discusses the story of a qualitative research course in two teaching-learning frameworks. The findings illustrate that every learning framework has its own advantages which are suitable to a personal style. Opening courses which match the teaching and learning style upgrades the academic variety. Teaching methods in the two frameworks which generated a change in the students' attitudes towards the qualitative research as a research paradigm illustrate how learners can be guided to experience changes by acquiring knowledge and building it in a constructivist way. This can be achieved mainly by real experiences in a research field which is in the learners' area of interest and is relevant to their practice and professional promotion. This contribution is in line with the goal of education systems, i.e. to train learners to be correctly and truly integrated in the entire world. That is, changing the conventional teaching methods and shifting to online and branched out learning environments which facilitate development of interdisciplinary learning competences and dynamic learning [30].

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