Editorial

From the perspective of editors, we are expressing our appreciation to the authors and editorial board members of our Journal of Teacher Education for Sustainability (JTES) https://www.degruyter.com/view/j/dcse, affiliated to the UNESCO Chair at Daugavpils University since October 2015.

On behalf of the UNESCO Chair at Daugavpils University, Interplay of Traditions and Innovations in Education for Sustainable Development (ESD), we hereby wish to acknowledge the active participation and constructive contribution of authors in preparing and reviewing scholarly research articles for the development of JTES journal.

To further strengthen the JTES, we have restarted a more intensive focus on the Global Action Program (GAP) framework (2015–2020) and Sustainable Development Goals (SDG) with an addition of SDG 4, Quality Education for all in the SDGs. You have been highly committed participants in making such transformations happen since the beginning of this movement in 2015. It is the long-term perspective with the aim to develop the Global Resource Centre on the specialisation for seeking new approaches and quality improvement in research and programme development in teacher and higher education for ESD.

We hope that cooperation in building a global network is possible because our journal is shaped and run by the distinguished authors and esteemed editorial board members from around the world. The present issue contains eleven scholarly papers covering a large spectrum of key issues in the domain of education aimed at finding relation with sustainability and sustainable development.

The paper by Baiba Martinsone and Sabine Vilcina focuses on the initial evaluation of sustainability of the first universal Social Emotional Learning programme implemented in Latvia. The authors analyse teachers’ perceptions about the issues of programme effectiveness and sustainability within seven focus groups. The teachers’ views indicated the importance of external support from school administrators and supervisors (i.e., the programme authors), their own social and emotional competencies, and their willingness to be actively engaged in the qualitative maintenance of the programme.

The paper by Naser Rashidi and Hussein Meihami focuses on the cultural identity formation of student-teachers. The authors of this study investigate the role of negotiation in the cultural identity formation. They approach the issue using narratives produced by the three student-teachers. By analysing the narratives through ethnographic semantics, they observed the cultural identity formation of the student-teachers in different codes, such as using cultural varieties in teaching, identifying the gaps between cultural contexts, reconceptualization of cultural concepts, cultural transformation, new modes of using culture, internalization of cultural issues, and cultural awareness. They concluded that negotiation of cultural identity could bring changes to the cultural identity of the teachers.

The paper by Tomonori Ichinose places the emphasis on the need for learner-centred and interactive teaching strategies, such as critical thinking, participatory decision-making, value-based learning, and multi-method approaches, all of which, to some degree, contrast traditional lecture-based teaching practices. Based on answers from a questionnaire administered by head teachers in 469 ESD schools, the present research shows that teachers recognise that at least in relation to the local environment, community welfare, and depopulation of communities, the students are increasingly
aware of their role and the need to act ambitiously to create a sustainable society. In these teacher comments about ESD methods, the main emphasis was placed on the whole system.

The study by Ahmad Alkhawaldesh endorses school-based sustainable teacher training and development in Jordan to achieve ongoing teacher professional growth. As a qualitative study, it robustly relies on a set of self-reports developed by a cohort of 12 Doctoral students who reflected on SBTT in the second semester, 2017. The paper investigates teachers’ professional proficiency and training needs and suggests the forms and priorities of training for in-service teachers to become a powerful agent of sustainable teaching.

The paper by Yun Wen and Jing Wu presents research data gained in a large-scale survey questionnaire. Focus group discussions and interviews of 112 teachers have been conducted, focusing on teachers’ subject content and professional knowledge, Chinese teaching practice and pedagogy, as well as knowledge of technology and its application.

The paper by Hassan Eslamian, Seyed Ebrahim Mirshah Jafari, and Mohammad Reza Neyestani presents a quasi-experimental study that investigates the effect of teaching of aesthetic skills to faculty members on the development of their effective teaching performance through a two-group pretest-posttest design. The findings showed that teaching aesthetic skills to the faculty members of the experimental group paved the way for the development of their effective teaching performance and enhanced their potential to utilise all of the six components of effective teaching (designing teaching strategies, implementation of teaching strategies, classroom management, human relationships, evaluation, and desirable personality traits). The authors recommend faculty members to acquire the required knowledge and skills to better use aesthetic skills in the teaching process.

The paper by Grazina Ciuladiene and Brigita Kairiene focuses on teachers’ skills to solve conflicts with students correctly and effectively without damaging the relationship, losing the cooperation with students or disrupting the educational process. The results of this study indicate 28 behavioural reactions to a classroom conflict by the participants; 12 were those of teacher engagement, and 16 of student engagement. In line with the conglomerated conflict behaviour framework, students reported that both conflict parties (students and teachers) in the case of active student position engaged in more than one type of behaviour in response to a single incident. Understanding students’ experience would allow teachers to better respond and manage students’ reactions, as well as help teachers prevent behaviours such as aggression and promote other behaviours such as motivation.

The paper by Dunja Andic and Sanja Tatalovic Vorkapic provides the results of the awareness of consequences and the attribution of responsibility for environmental/sustainability problems among students of the four Faculties of Teacher Education in four countries, Bosnia and Herzegovina, Croatia, Slovenia, and Serbia. Research results indicate that students from Croatian and Slovenian Faculties of Teacher Education are characterised by a more pronounced awareness of environmental/sustainability problems than the students from Bosnia and Herzegovina and Serbia. The responsibility for environmental/sustainability problems is higher among the students of the Faculty of Teacher Education from Croatia and Serbia than among students from Bosnia and Herzegovina and Slovenia.
The paper by Jelena Badjanova, Anita Pipere and Dzintra Ilisko explores gender identity as a crucial aspect of the culture that shapes our daily life and recognises the research gap on this topic in the context of sustainable education. The paper describes the quantitative cross-sectional study on gender identity of students and teachers comparing the respondents by their age and sex. It was concluded that majority of respondents from all age and sex groups described themselves as androgynous. Male and university students featured the scattering of scores more toward masculinity, while the scores of female, pupils, and teachers were more inclined toward femininity. Dominance of androgynous individuals challenges the current approaches to the gender education in the context of sustainable development.

The paper by Aida Mammadova considers education as a driving force for urban sustainable development, and the author urges to use different approaches to increase the awareness level in younger generations. The author argues that teaching about sustainability requires an integrated approach due its complexity. In the study, the author 1) reflects on the fieldwork in small-scaled private and town-scaled business sectors and 2) observes the interconnection of urban sustainability practices through the welfare with environmental, social and economic sectors. The paper presents students’ evaluation of a linkage among social, environmental and business sectors related to welfare practices as well as their awareness level towards the issue of sustainable urban development.

The paper by Anita Stasulane addresses the issue of children and young people’s well-being at school. The phenomenon of well-being at school cannot be seen only in the context of local situation; it is deeply contextual. The article discusses one of the most relevant domains of well-being – school, and how it relates to happiness, life-satisfaction and psychological well-being of children and young people. The article outlines the results of fieldwork undertaken in project consortium countries (Croatia, Estonia, Georgia, Germany, Greece, Hungary, Latvia, Portugal, Slovakia, Spain, and the United Kingdom) with the goal to understand the subjective experiences of children and young people from different age groups, regions and socio-economic backgrounds. The results of the research confirmed that educational spaces could take a more significant role in promoting well-being of children and young people; in its turn, the education system should rebalance academic learning and emotional well-being.

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Teachers’ Perceptions of Sustainability of the Social Emotional Learning Program in Latvia: A Focus Group Study

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Abstract
The aim of this study was to provide an initial evaluation of the sustainability of the first Social Emotional Learning (hereafter SEL) program in Latvia, which to date is still the only SEL program in our country. Initiated during the 2012/13 academic year, this program has already been implemented in 41 Latvian schools. In order to address the teachers’ perceptions of program effectiveness and sustainability seven focus groups were organized. Thematic analysis of the focus group discussions pointed to various benefits of the program, including a general dissemination of SEL principles, and teachers’ reflections on the importance of their own active role in the process of social and emotional learning. The value of the support of the school administration for program sustainability was also noted. The views expressed by the teachers were aligned with previous studies, indicating the importance of external support, the teachers’ own understanding of SEL principles, and the willingness to be actively engaged in facilitating quality maintenance of the program.

Keywords: social emotional learning, sustainability, teachers’ perspective, focus groups

Introduction
Social emotional learning (SEL) is a process through which learners develop several important competencies such as understanding and management of their own emotions, feeling and exhibition of empathy toward others, setting and achieving positive goals, establishing and maintaining positive interpersonal relationships, and responsible decision making (CASEL, 2013). Social and emotional competences involve knowledge, attitudes and skills in all aforementioned areas. Children with well-developed social and emotional competencies, moreover, later in life experience benefits in various domains (Zins, Weissberg, Wang, & Walberg, 2004), including better physical and mental health, greater moral reasoning and achievement motivation (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

To enhance children’s social and emotional competencies, one of the approaches is the development of specific SEL programs, which provides systematic and structured
activities. There has been continuous development of new SEL programs, focusing on either the development of social and emotional competencies, in general, or on specific skills, often for children with specific aspects of difficulty, in particular.

During the past several decades, greater attention has been paid to the investigation of the effectiveness and sustainability of social and emotional learning programs (Durlak et al., 2011). Research has shown that both general and specific approaches are effective to develop the student’s potential, and to engender immediate and long-term changes in children’s behavior (Durlak et al., 2011; CASEL, 2012). Important aspects which have been identified as markers of successful SEL program implementation and maintenance include the following: sequential activities which build upon each other; lesson components which involve student active engagement; specific social skill development; and the targeting of specific skills (Durlak et al., 2011).

Although all of the SEL programs have a unified overall aim – to develop social and emotional competencies – nevertheless, there are variations in program design, process of implementation, methods of instruction and other technical aspects (Jones & Bouffard, 2012; Sklad et al., 2012). At present, there is an ongoing discussion regarding the most effective ways in which an SEL program can be implemented so that the best outcomes can be achieved (Elbertson, Brackett, & Weissberg, 2010; Elias, 2010; Elias et al., 2015). An implemented program can easily disappear in the long-term (Hargreaves & Shirley, 2009); therefore, it is important to understand how to maintain program sustainability, because program continuity is an important component for facilitating changes in student behavior (Elias, 2010). Research on program effectiveness has shown the benefits of integrated intervention programs, which consist of multiple independent strategies or programs (Domitrovich et al., 2010). There is a greater chance that a SEL program will be sustainable and achieve the best possible outcome if it is organized on a schoolwide basis – connected with other school activities and embedded in daily curriculum activities (Greenberg et al., 2003). Within the framework of CASEL (Collaborative for Academic, Social, and Emotional Learning) a Theory of Action (ToA) has been developed. This approach helps schools to implement a schoolwide and sustainable SEL (Meyers, Gil, Cross, Keister, Domitrovich, & Weissberg, 2015). The authors of the ToA emphasize six key components: 1) every stakeholder (teachers, staff, students, parents) has a shared vision about which SEL aspects need to be developed, and a shared plan for achieving these outcomes; 2) the stakeholders assess existing strategies and resources which are already in use, and examine what is needed additionally; 3) there is ongoing professional development; 4) evidence-based SEL is practiced in the school; 5) SEL is integrated into daily practices in school; and 6) there is a continual monitoring of progress in order to ensure improvement in SEL practices (Oberle, Domitrovich, Meyers, & Weissberg, 2016).

Furthermore, it is crucial to consider the individuals who are implementing and maintaining the program (including outside experts) as important components of the systemic context, contributing not only to the SEL program, but also to the school environment and school climate in general. For a successful maintenance of SEL program, it is necessary for the program to be in congruence with the school’s system of values, and there need to be well-defined goals to elucidate the skills which a school hopes to develop in its students and staff with the help of the program (CASEL, 2012; Elbertson, Bracket, & Weissberg, 2010; Elias et al., 2015). In the broader understanding of the dynamic ecosystem of a school, the SEL program causes changes in the school environ-
Teachers’ Perceptions of Sustainability of the Social Emotional Learning Program.

...and these changes, in turn, engender the necessity of alterations in the SEL program to facilitate its sustainability (Elias, 2010). These modifications are necessary to adapt the program for a specific school context; therefore, it is important to maintain the basic core principles of the SEL program (Elias et al., 2015).

The sustainability of a program is often influenced by various external aspects, for example, teacher turnover or continuation vs. discontinuation of financial support (Elias, 2010). An important aspect of successful program implementation and sustainability is the engagement and support of the school administration, and the support of one or more influential teachers who are opinion leaders in the school environment (Merrel & Guelder, 2010). Moreover, it is important that the support from SEL program experts will be available. It should be noted that whether or not the teachers implementing the program are able to receive supervision and consultations and whether they are able to discuss and clarify aspects of the program are among the forepart of the program. Furthermore, the positive feedback both from colleagues, parents, students and media about the benefits of the program serves to facilitate program sustainability (CASEL, 2012; Elias, 2010).

Teachers’ attitudes, their level of motivation, and their involvement and willingness to participate in additional training and supervision sessions may significantly influence the effective maintenance of a SEL program. Similarly, previous studies have shown that program effectiveness and sustainability are influenced by the extent to which the SEL principles are disseminated outside of the SEL classroom context. It is essential that the social and emotional competencies be practiced during break time, in the school cafeteria, school playground, and elsewhere. This requires a significant amount of motivation on the part of the teacher (CASEL, 2012; Jones & Bouffard, 2012).

The teacher’s ability of self-reflection and evaluation of their own role in the program outcome is an important aspect of program implementation and sustainability (Odabasi, Cimer & Palic, 2012). Teachers with more developed social and emotional skills have greater self-awareness and ability to understand how a student’s emotional reactions affect the teacher, and how the teacher’s emotional reactions affect the student (Richardson & Shupe, 2003). At the end of the initial implementation phase of the SEL program in Latvia, a total of 630 teachers who had been involved in conducting the SEL class lessons were asked to reflect (in written form) upon their own strengths and weaknesses regarding program implementation. The results of the qualitative assessment of the teachers’ perceptions (Martinosone & Damberga, 2016) revealed their difficulty in reflecting upon their own strengths and weaknesses. It was revealed that the teachers focused mostly upon the students’ performance and/or their own professional competencies. Some of the teachers in their remarks focused upon an evaluation of the program itself, emphasizing the advantages of the teacher’s handbook and supplementary materials. Less than a quarter of the teachers wrote about changes in interpersonal relationships among the students or changes in the class climate, and only 15% of the teachers addressed their own social and emotional competencies as contributing factors in regard to successful program implementation. The authors of the study concluded that in the future the SEL program implementation process should include training specifically focused upon the development of the social and emotional competencies of the teachers, including their ability to be aware of the effect of their behavior and emotions upon others, to adapt their behavior to the needs of the specific class context, and to be aware of how their teaching affects dynamic changes in the ecological system of the school as a whole.
The aim of the present study was to gain a greater in-depth understanding of the teachers’ perceptions of the Latvia SEL program potential for sustainability. The written responses from the teachers at the end of the first year of the program implementation provided some insight into those aspects of SEL program teaching which they considered important enough to present in written form. Consequently, the focus group discussion format was chosen for the present study in order to allow for a greater probing of the teachers’ opinions, and for the ability to refocus the teachers’ train of thought upon aspects of how they perceive their own investment in the process.

The focus group interview questions were based on the issues which have been approved as facilitative of program effectiveness and sustainability in previous research (e.g., CASEL, 2015; Elias, 2010). The initial question was focused upon the dissemination of the SEL principles in different environments of the school, whereas the following questions addressed various internal (e.g., teachers’ own competencies) and external (e.g., need of support) aspects of program sustainability.

To address the aim of the current study the following research questions were posed:

RQ1. In the opinion of the teachers, how is the SEL program being maintained in the school at different levels, and in the school as a whole?

RQ2. What kind of support do the teachers need for successful maintenance of the SEL program at their school?

RQ3. What do the teachers consider as facilitative and risk factors in regard to the sustainability of the SEL program in their school?

Method

Latvia SEL Program

The Latvia SEL program (Martinsone & Niedre, 2013) was developed as an original program to address the needs of students within the specific sociocultural context of Latvia. It was based on the principles and theoretical insights from already existing SEL programs in other countries (Martinsone, 2016). The Latvia SEL program is a preventive, universal school-wide program, which is based on well-developed 40 minute-long SEL class sessions implemented by the classroom teacher. During the SEL lessons, students learn skills of emotional self-regulation, positive social interaction models, problem solving, and goal-setting strategies. Each SEL lesson includes the following structure: setting lesson objectives which are meaningful for the students; student engagement; understanding of major concepts; and a reflection at the end of the hour. A description of the SEL program’s theoretical framework, structured lesson plans, glossary of primary concepts, and a CD with supplementary teaching materials (video clips, work sheets, PowerPoint presentations, illustrations, texts for reading and discussion), is included in the teacher’s handbook. From the first to tenth grade the SEL lessons are conducted within the classroom, whereas the eleventh and twelfth grade students engage in outside-of-classroom prosocial activity projects, within which they apply the basic SEL principles learned in the previous grades.

During the Latvian SEL program initial implementation in the school years 2013/2014, the schools’ administration agreed that all of their homeroom teachers would participate in a day-long training seminar on the content and implementation of the
SEL program. During the training seminar, the teachers received instruction on the SEL principles, the overall content of the program and the specifics of the class lessons. Each teacher received the handbook and the supplementary materials for conducting the class lessons. The teachers were familiarized with the potential benefits of the program, and that these would be increased if the SEL principles were also incorporated in other aspects of the academic curriculum. For example, teachers were encouraged to apply the SEL lesson practices in the teaching of other academic subjects (i.e. setting lesson objectives which are meaningful for the students; planning multi-faceted activities; and a moment of assessment and reflection at the end of the lesson). Also, parents were regularly informed about the SEL program implementation. An important aspect of the SEL program implementation was that the teachers were required to participate in a group supervision sessions in order to share their experience in conducting the SEL lessons, to gain additional knowledge, to receive support and to gain experience in reflecting upon their own strengths and aspects in need of further development. The school administration was also involved in the implementation plan, in that they were asked to commit to a continuation of the program for at least three years after the initial implementation phase. In addition, supervisors were trained in each region, in order to facilitate program sustainability and fidelity of program implementation.

Research Participants

The teachers participating in the focus groups were from seven schools involved in a continuous implementation of the SEL program since the initiation of the program. The schools were chosen so as to be representative of the various regions of Latvia: two schools from the capital city Riga and five schools from the various regions of Latvia. Teachers who continued active implementation of the SEL program were invited to participate in the focus groups, and 58 teachers agreed to participate. The mean age of the participating teachers was 46.43 (SD = 8.51), with years of teaching experience ranging from 3 to 42 years (M = 22.83, SD = 9.40). Their experience in implementation of the SEL program ranged from 2 to 4.5 years (M = 4.33, SD = .46). Within this focus group study all 58 teachers were women.

Procedure

Within each focus group (on the average eight to nine teachers) there were teachers both from the younger and older grade levels.

The length of each focus group discussion was from 45 to 80 minutes. To the extent that almost all of the teachers participating in the groups had been implementing the SEL program since the initial implementation stage, the groups were homogeneous, thereby facilitating the group dynamics (Krueger & Casey, 2015). At the beginning of the discussion all of the group participants shared basic information regarding their age, years of teaching experience, and years of implementing the SEL program.

The focus group discussion questions were developed upon the basis of conclusions from previous research on SEL program fidelity and sustainability (CASEL, 2012). The specific open-ended questions developed for the focus group discussions were as follows:
1. How are the students’ competences, developed during the SEL program, maintained on a school-wide level (in various school settings)?

2. As a teacher what kind of external support would you need to maintain the SEL program more successfully?

3. Which factors in particular have helped you as a teacher to sustain the SEL program from year to year?

4. Which factors in particular make it difficult for you as a teacher to sustain the SEL program from year to year?

During the interviews, more questions were asked; therefore, in this article the issues associated with different aspects of the program’s sustainability were analyzed. The focus group moderator assured that all of the questions were answered, if necessary with additional questions for clarification. Due to practical reasons the focus groups were led by only one moderator, who was responsible of taking detailed notes, making observations and preparing a transcript of whole discussion. At the end of each interview, the moderator provided a summary and feedback on the answers received from the respondents. Then respondents reflected, confirmed or added to the content of their answers. After each focus group discussion, the moderator prepared a detailed interview transcript.

Data Analysis: Thematic Analysis of Discussion Transcripts

In the analysis of the results of this qualitative research the principles of thematic analysis were applied (Joffe & Yardley, 2004). Initially each of the two authors of this study independently read and reviewed several times each focus group transcript in order to get a general view of the content of the responses. Through an inductive approach the units of meaning were grouped according to themes, and the themes were finally grouped as categories. After the identification of the themes by each author independently, these groupings were discussed, and in case of disagreement the discussion continued until consensus agreement was reached.

Results

The thematic analysis conducted for each of the questions presented as topics of focus group discussion resulted in the following series of identified themes and categories, which are presented in each table, and also include specific examples or illustrations of the expressed responses.

The following categories and themes were identified with respect to the responses to the first interview question: How are the students’ competences, developed during the SEL program, maintained on a school-wide level (in various school settings)? (see Table 1).

The responses were grouped in two main categories – organization at the administrative level (includes e.g. support from the school’s administrator, assessment of the program’s effectiveness, simultaneous implementation of other support program) and various aspects of the school environment (for example, organization of special events supporting acquired social and emotional skills of the students).
Table 1
Themes, Subthemes and Illustrative Examples of Opinions Expressed in Response to the First Discussion Question: How are the students’ competencies which are developed during the SEL program maintained on a school-wide level (in various school settings)?

<table>
<thead>
<tr>
<th>Themes at the administrative level</th>
<th>Subthemes</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incorporation in the homeroom class curriculum</td>
<td>Cooperation with the social pedagogue, psychologist, school nurse, everyone keeps up the expectations, “On the cover of the student daily planner are the school rules, and this helps to maintain the SEL competencies”, “At the beginning of each school year we review the SEL material in the pedagogical meeting”, “The director suggested and we agreed to conduct open SEL class sessions for colleagues to observe”, “Through positive comments to parents electronically, previously there were more negative comments”, “At the end of the school year a general survey for teachers, parents and students on the effectiveness of the SEL”.</td>
<td></td>
</tr>
<tr>
<td>Support from other school professionals</td>
<td>Methodological support</td>
<td>“The SEL themes have been incorporated in the homeroom class agenda”, “In the entire school SEL is a priority”, “There is cooperation with the social pedagogue, psychologist, school nurse, everyone keeps up the expectations”, “On the cover of the student daily planner are the school rules, and this helps to maintain the SEL competencies”, “At the beginning of each school year we review the SEL material in the pedagogical meeting”, “The director suggested and we agreed to conduct open SEL class sessions for colleagues to observe”, “Through positive comments to parents electronically, previously there were more negative comments”, “At the end of the school year a general survey for teachers, parents and students on the effectiveness of the SEL”</td>
</tr>
<tr>
<td>Regular positive feedback</td>
<td>Program effectiveness surveys</td>
<td>“The organization of special theme days – friendship day, friendly expression day”, “In physical education class we speak a lot about emotions”, “At the end of other class sessions – how do you feel, how do you rate yourself”, “We try to uphold the SEL principles in our own daily activities”</td>
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</tbody>
</table>

One teacher mentioned a series of events, supported by the school administration, facilitated positive social interaction skills, emotion regulation, goal-setting and problem-solving strategies.

“During the ‘Prosocial Activities Week the 12th grade students taught the first-grade students about traffic safety rules; each class prepared a special song to sing to the other classes; teachers wrote letters to their students; there were presentations about the emotions of well-known people – how they have felt in certain situations. There was a special Students’ Day where the teachers made some entertainment for the students. All of this helped to strengthen the ability to see situations from the other’s perspective.”

The responses to the second discussion question: As a teacher, what kind of external support would you need to maintain the SEL program more successfully? were grouped into three main categories (see Table 2).
Table 2
Themes, Subthemes and Illustrative Examples of Opinions Expressed in Response to the Second Discussion Question: As a teacher what kind of external support would you need to maintain the SEL program more successfully?

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplementing the program content</td>
<td>New topics</td>
<td>“The program should include examples from the internet and social networks”, “The 11th and 12th grade should also include class lessons, not only prosocial activities”, “SEL games for the younger grades”, “Additional work sheets”</td>
</tr>
<tr>
<td></td>
<td>Updating of the content</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Additional materials</td>
<td></td>
</tr>
<tr>
<td>Direct support to the teachers</td>
<td>Continual training</td>
<td>“There should be a continuation of teacher training after the initial SEL introductory course”, “Supervisions”, “Discussion of methodological issues”</td>
</tr>
<tr>
<td></td>
<td>Consultations from specialists</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Methodological support</td>
<td></td>
</tr>
<tr>
<td>Other solutions</td>
<td>Technical solutions</td>
<td>“To include materials in the e-environment”, “To have the video materials available on YouTube”, “To have material for working with parents”, “Visiting lecturers on the SEL topics”</td>
</tr>
<tr>
<td></td>
<td>To expand the audience</td>
<td></td>
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<tr>
<td></td>
<td>To include other specialists</td>
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</tbody>
</table>

In their responses to this question the teachers focused specifically on the SEL program materials, and on issues related directly to the implementation of the lesson plans. However, there were also opinions in regard to the sustainability of the SEL program.

“In our school, there should be a renewal of methodological discussions. In the past once a month we would have methodological discussions. The teachers would share their experience, and discuss how the class had responded. Then future teachers could plan for the continuation of SEL on a long-term basis. There might also be a class session for students together with their parents. Once I had such a class session – we watched together an animated film and discussed the merits of it. Certain values were brought out, such as curiosity and friendship, and the parents were able to support this at home.”

The responses to the third discussion question: Which factors in particular have helped you as a teacher to sustain the SEL program from year to year? were grouped into three main categories (see Table 3).
### Table 3

**Themes, Subthemes and Illustrative Examples of Opinions Expressed in Response to the Third Discussion Question: Which factors in particular have helped you as a teacher to sustain the SEL program from year to year?**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organizational/ administrative support</td>
<td>Administration support</td>
<td>“The support of the school administration”, “The SEL values have been incorporated in the school directives”, “The exchange of best practices between schools and also among ourselves”, “The school values the benefits from the program”, “Support from the support staff in the implementation of the program”</td>
</tr>
<tr>
<td></td>
<td>The school presents itself as an SEL school</td>
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<tr>
<td></td>
<td>Methodological support</td>
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<tr>
<td></td>
<td>Recognition of benefits</td>
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<td></td>
<td>School personnel inclusion</td>
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<tr>
<td>SEL program content</td>
<td>Teacher’s handbook</td>
<td>“That the teaching materials are completely ready to use, with supplementary materials”; “That there is flexibility in the lesson plans, I was able to conduct a fifth’s grade lesson for my seventh grade, and it was very successful”, “The principle of thematic blocks which are strengthened at each next grade level”, “The topics do not lose their relevance”</td>
</tr>
<tr>
<td></td>
<td>Lesson flexibility</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Succession of topics</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relevance of topics</td>
<td></td>
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<tr>
<td>Teacher’s understanding of SEL importance and activity</td>
<td>Teacher’s perspective</td>
<td>“As a teacher, I understand that it is important, and therefore I am glad to implement the program each year”, “Since I was able to conduct a lesson for children together with their parents, the parents now also support the program”</td>
</tr>
<tr>
<td></td>
<td>Parental involvement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outside of class opportunities</td>
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</tbody>
</table>

The teachers emphasized both the facilitative role of administrative support and teacher’s own positive attitude toward SEL, and the program’s content itself (successive lessons on relevant topics, well-developed teacher’s handbook, etc.)

In all of the focus groups, the opinion was expressed that it is easier to maintain the SEL principles in outside of the class situations in the lower grades because the teachers have greater direct contact with the students during break time, in the cafeteria, in the school yard and in other contexts.

“It is important to note that we are together also during break time, and in afterschool events where there is a more informal atmosphere, so we are able to observe how the SEL principles are used in daily situations. For some period of time after the SEL lesson we can help the students to practice a certain new skill, such as stress management strategies, etc.”

However, the teachers of the higher grades expressed their motivation to maintain the SEL principles in daily life situations, with collaboration between colleagues.

“Other teachers also help to resolve situations involving social and emotional aspects – for example, belittling among students. Someone is always watching during break time, and I believe that situations of intolerance are becoming less and less frequent.”
The responses to the fourth discussion question: Which factors in particular make it difficult for you as a teacher to sustain the SEL program from year to year? were grouped into two main categories (see Table 4).

**Table 4**

<table>
<thead>
<tr>
<th>Themes</th>
<th>Subthemes</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>External factors</td>
<td>Work load</td>
<td>“I receive financial compensation for only one hour of homeroom time per week, but I must accomplish everything”, “During the homeroom period we must discuss various issues, so there is little time left for SEL”, “Parents have various opinions and stereotypes, they do not provide enough support for our attempts at helping their child to develop”, “The SEL values are not maintained outside of the school context”, “The themes should be expanded to include the digital environment, for example, why you shouldn’t spend so much time there”</td>
</tr>
<tr>
<td></td>
<td>Lack of support from parents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outside of school context</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Program content</td>
<td></td>
</tr>
<tr>
<td>Factors related to the teachers</td>
<td>No obstacles</td>
<td>“I haven’t encountered any obstacles”, “Upon occasion it is necessary to leave out some material, just from looking at it”</td>
</tr>
<tr>
<td></td>
<td>Teacher’s attitude</td>
<td></td>
</tr>
</tbody>
</table>

In all of the focus groups there was an unanimously endorsed opinion that a significant obstacle is the heavy work load of the teachers, and that as a result of educational reforms there is now even less time allotted for homeroom periods.

“Previously a teacher received financial compensation for four hours of homeroom time per week – then it was enough time to plan special events, to organize routine activity, and time for the thematic SEL lessons. Now only one hour of homeroom time per week (for some two hours) is reimbursed – during this one hour it is necessary to organize special school events, to prepare student performances... therefore there is rarely time for a complete SEL thematic lesson. The alternative is that preparations for the concert would have to take place after school, but the children do not want to remain after school, and the school bus leaves at a certain time.”

In several of the focus groups the teachers admitted that since the initial implementation of the SEL program, they do not always have time to complete all eight lessons according to the plan. This points to the issue of how to assure that the SEL ideas become established in the school’s culture outside of the SEL class lesson, and brings to the forefront the role of the school administration in integrating the SEL as a crucial part of the school’s identity.
Discussion

The teachers’ answers to the four focus group interview questions were thematically analyzed to identify their opinions regarding various aspects of the Latvia SEL program dissemination and specific factors which facilitate or debilitate the program’s sustainability. The thematic analysis then provides answers to the three main research questions. Other questions addressed during the focus group interviews were analyzed separately with a focus on relationships (Martinsone & Vilcina, 2017).

In answer to the first research question as to how the SEL program was integrated within other aspects of the school environment, the respondents were unanimous in agreeing that an important contributing factor is the organizational support provided by the school administration. This includes administrative actions such as positioning the school as a SEL school, developing a unified system for the program implementation (i.e. including the SEL lessons as a part of the homeroom teacher’s responsibility, involving other members of the school support staff, and organizing evaluation of the program’s effectiveness). In two of the seven schools where the focus group discussions were organized, the teachers admitted that since the initiation of the program implementation almost five years ago, during the past several years the SEL lessons are no longer included in the homeroom teacher’s obligations, and it is each teacher’s own choice and initiative to conduct the SEL lessons, or not.

The integration of the SEL program in the school system may provoke systemic resistance, because of changes in the daily routines and necessity to alter accustomed activities. This may be a challenge, especially in situations of a tight daily schedule (Elias, 2010; Elias et al., 2015). The school administration’s initiative in creating a positive school climate and maintaining parallel programs, which supports positive behavior, has shown to be a promoting factor in previous studies on SEL effective and successful maintenance (Merrell & Guelder, 2010). During the focus group discussions of this study the teachers also commented upon the positive effects of the positive behavior program, which had helped to develop a clear norms and values in the school.

The views expressed in the focus groups were consistent in that the SEL ideas are best maintained when there is dissemination within other aspects of the school environment. The teachers mentioned that during other subject lessons they often make use of the SEL lesson structure (initially setting lesson objectives which are meaningful for the students and a moment of reflection at the end of the lesson), and that they more often discuss emotional and social issues in other contexts as well. On a daily basis, the SEL competencies are maintained through modelling and positive support of positive behavior, as well as through daily engagement in problem solving, for example, during break time. The teachers placed importance on the meaning of various outside-of-classroom school activities, for example, thematic days and campaigns (Prosocial Activities Week; Politeness Day; From Class-to-Class, etc.). The Latvia SEL program is based upon the principle that the teachers are teaching social and emotional skills within the confines of the program, but then simultaneously supporting and providing opportunities for these skills to be used outside of the classroom, so that they become a part of the daily routine.

In response to the question about the necessary external support for effective maintenance of the SEL program, the focus group respondents indicated various suggestions for expansion and improvement of the program. For example, to include the relevant
program content such as the electronic social media, to develop additional supplementary materials, and to develop some in-class lessons for the 11th and 12th grade students are some of the suggestions. Another suggestion was to broaden the SEL program audience, for example, by including the parents. The teachers stated that they needed additional direct support, such as additional training on SEL principles, supervision sessions, and in-service sessions organized by the school administration on SEL implementation of lesson plans. These suggestions from the teachers are essential, because due to the financial constraints of the national and local school budgets, the teachers have not been able to receive the above mentioned SEL support services. Other supportive services have been initiated, for example, the training of supervisors for each region of Latvia, however, again due to financial limitations regular supervision sessions have been enacted only during the first years of program implementation. A continuous means of support is that each year the University of Latvia organizes a conference on topics of SEL and positive behavior management, providing additional information, as well as providing an opportunity for teachers from all regions of Latvia to meet and to share their experience. Nevertheless, apparently there is a need for a more systematic and structured system of providing direct support based on which SEL teachers can benefit the most.

The teachers continued to address the issue of need for administrative support in response to the third research question concerning the resources and risks which hinder or facilitate SEL sustainability. The teachers emphasized that maintenance of the SEL program is positively engendered by the school director’s interest and initiative, for example, in public presentation of the school as a SEL school, and organizing program assessment, which provides positive feedback about program effectiveness. The teacher involvement in the initial program planning might be very important for involving teachers further along in the long-term evolution of the program, when it becomes necessary to make adaptations to adjust to the changing school environment. An important facilitative aspect is methodological support for the teachers, including regular sharing of experience, exchange of teaching materials and methods, as well as the possibility to observe each other’s lessons. They also mentioned the benefits of working as a team with other members of the school staff, including the social pedagogue, school psychologist and speech therapist. Previous research has also shown that for the maintenance of the SEL program it is useful to have a multi-layered support system, whereby other school professionals can work with individuals or small groups to strengthen the social and emotional competencies which have been addressed during the SEL lessons, especially in situations of developing behavioral problems (Mart et al., 2015).

Within the focus group discussions, the teachers acknowledged the importance of the Latvia SEL program as a significant resource for the maintenance of social and emotional competencies within the student body. In particular, the teachers commented on the value of the sequential aspect of the SEL program, the detailed lesson plans including topics of interest to the students, and the easily usable supplementary materials. Teachers differed to the extent that they evaluated their own engagement in the SEL process, with some teachers expressing a great deal of initiative, for example, in proposing to invite parents to some of the SEL lessons. Such a practice could be very useful for dissemination of the importance of SEL, and for expanding the school administration’s and larger community’s interest in supporting the program. By expanding an understanding of the SEL principles, there is greater opportunity for these principles to become embedded in the community (Catalano et al., 2004; Elias et al., 2015). It is positive that
the teachers are aware of their own investment in the development of social and emotional competencies in their students. This aligns with the conclusions of other researchers who have found that the teacher is able to promote the students’ development through positive interactions and expectations, the modelling of socioemotional competencies, and the engagement of students in positive interaction (e.g., Birch & Ladd, 1998; Murray & Greenberg, 2000; Pianta, Hamre, & Stuhlman, 2003; Williford & Wolcott, 2015). The opinions expressed by the teachers indicate that they value the importance of being open to change and self-development. Therefore, if a teacher is doubtful about the necessity of SEL, or doubtful of his or her ability to implement the program, then this may seriously impede the implementation of the SEL program, and can foster discontent among the teachers (Collie, Shapka, Perry, & Martin, 2015; Kress & Elias, 2006). The focus group participants also mentioned a lack of support from parents and the community, and teachers’ workload as significant risk factors in regard to SEL sustainability.

Limitations

This study has several limitations. Due to financial constraints, the schools were included in the study on a voluntary basis so the sample was not randomized. Therefore, it is not possible to conclude that the results of the current study represent an opinion of all schools, which have implemented the Latvia SEL program. Moreover, the authors of the current study were aware of the limitation that the first author of this research was also the first author and implementer of the Latvia SEL program. Efforts were made to maintain neutrality in researcher’s role and to be aware of possible tendency to researcher’s bias. Due to financial constraints, each focus group was led by only one moderator, who then was responsible also for observations and note-taking. Hence it was not possible for the moderators to compare the transcripts at the end of each focus group discussion. Therefore, a great theme congruence across the different focus groups was found after the analysis of discussion transcripts.

Conclusions

The focus groups were organized inviting teachers who had been active in maintaining the SEL program in their schools since the initial program implementation. The focus group interview questions provided opportunity for the teachers to express their views on the Latvia SEL program effective maintenance and various aspects, which they identified as resources or risk factors for SEL program sustainability. The focus group discussion analysis allowed for an opportunity of greater in-depth understanding of the perspective of the teachers involved in the program implementation.

First, the teachers mentioned that the SEL principles are maintained within the school as the result of the following: 1) administrative support, for example, SEL being included in the obligatory school curriculum, the simultaneous maintenance of the “Support of Positive Behavior” program, methodological support for the teachers, and program evaluation at the school-wide level; 2) the opportunity for students to practice their SEL competencies also within the context of other classes, outside of the classroom and at various school events.

Second, for the sustainability of the SEL program it is necessary to renew and expand the SEL program, including lesson plans and supplementary materials, to provide new
technical approaches, and to expand the SEL audience to include parents. The teachers were unified in their call for the necessity of direct support – supervisions, additional training seminars on SEL principles, and in-service discussions on methodological issues.

Third, the focus group participants mentioned the following as the major facilitating factors for SEL sustainability: 1) the organization of the infrastructure (i.e. support from the school administration, SEL program integrated in the school curriculum and statement of purpose, regular methodological meetings, program evaluation at a school-wide level); 2) teacher understanding of SEL significance and willingness to be actively engaged; 3) the content and organization of the Latvia SEL program. The major risk factors include teacher overload and lack of enough time, as well as lack of sufficient external support, especially from students’ families and the local community.

Aspects, which need improvement in the future, include the necessity of greater integration of the SEL principles in the school system as a whole, need for greater support from the school administration, and the necessity of additional teacher training seminars. Also, to be considered are future opportunities for teachers to become partners in the further development of the Latvia SEL program so that they would experience a greater sense of belonging and motivation for further engagement.

References


Teachers’ Perceptions of Sustainability of the Social Emotional Learning Program.


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Addressing Cultural Identity through Negotiation: Analysis of Student-teacher-authored Narratives

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Abstract
Teachers’ cultural identity is among the forefront issues within the realm of teacher education studies. The research about teachers’ identity has been done using teacher-authored narratives. That said, the purpose of this study was to investigate the role of negotiation in the student-teachers’ cultural identity formation. To that end, three student-teachers (two males and one female student-teachers), majoring in English language teaching participated in this study. During four months, the student-teachers participated in a negotiation program on cultural identity. They were sent some academic papers to study, then, they participated in discussions about cultural variations and the ways to address them in classrooms. The student-teachers were asked to write their narratives. Then the narratives were analyzed based on the semantic expressions. The qualitative analysis of the student-teachers’ narratives showed that their cultural identity changed during the negotiation period. By analyzing the student teacher-authored narratives, it appeared that they addressed cultural variations in different ways including using cultural varieties in teaching, identifying the gaps between cultural contexts, reconceptualization of cultural concepts, cultural transformation, new modes of using culture, internalization of cultural issues, and cultural awareness, each of which is discussed in the current study. It can be concluded from the obtained information that cultural identity is a dynamic one and open to change. The research bears some implications for teacher education policy makers to introduce sustainable teacher education program in general, and sustainable second language teacher education program in particular.

Keywords: sustainable teacher education, teacher-authored narrative, negotiation, student-teachers

Introduction
Language teacher identity is a vexing issue which cannot be considered as an innate attribute acquired once and for ever. However, the concept of language teacher identity is a co-constructed and socially driven issue which can be influenced by a number of factors. Teacher identity in general, and language teacher identity in particular, are in close relation with what teachers construct in their profession about the identity. According to Goh et al. (2005) teachers’ sense about their profession can alter their...
motivation to play their role as a teacher in an arena of performances in which they negotiate many things with the surrounding factors. It is also possible that their identity changes the way they approach curricular and institutional principles. This leads to myriad studies (e.g., Chong, 2011; Chong, Low, & Goh, 2011; Meijer, de Graaf, & Meirink, 2011) on the issue of teacher identity which in its place is due to the shift in the perspective toward the teachers' role.

Identity can be in direct relationship with “being” and “doing” (McNaughton & Billot, 2016). Being means that how a person, or in our case a teacher, views the world based on the attitudes, assumptions, beliefs, and values that person possesses. Doing is related the influence of the mentioned factors in the way that a person lives (Taylor, 1989). Korhonen and Törmä (2016) believe that the teacher being and doing which createhis/her dynamic identity has an utmost importance in the professional growth of the teacher. Jawitz (2009) declares that through expressing the being and doing teachers can join into different communities of practice. That said, one may refer to the academic identity of teachers as the conceptualization of doing and being of teachers’ stances based on the values and ideology in a community of practice (De Fina 2009; McNaughton & Billot, 2016).

Closely related to the being and doing of teacher education is what Kumaravadivelu (2012) states about teacher identity. According to Kumaravadivelu (2012) the teaching behavior of a teacher is in direct relationship to what he/she possesses as identity about the world. Given that, the desired teaching can be achieved if we can understand the perceptions of teachers about the world. Teachers are in direct relation to various social, cultural, and political constructs in their society which leads them to establish a set of identity outputs. The identity of a teacher can affect the way he/she teaches. Teachers’ identity is only one aspect of the other parts of teaching Self, including teacher beliefs and teacher values. These factors can be investigated for the purpose of sustainable teacher education. It is, hence, related to the concept of sustainable education in general, and sustainable teacher education in particular (Raus, 2016). The field of sustainable teacher education is considered as a new but important issue which scholars need to pay more attention (Stanszus et al., 2017).

Identity has been defined in many different angles due to the subjective nature it has. The field anthropology has witnessed the scholars of different fields such as philosophy, theology, and sociology provide different definitions for identity. Elliott (2009) states that identity “has proved to be one of the most vexing and vexed topics in the social sciences and humanities.” (p. viii). Consequently, the term identity can be defined differently if one sticks to the very categorization of modernism and postmodernism. The two schools struggle on whether identity is unified, multiple, singular, and bounded or not. In the next section, we will approach identity of the teachers from a theoretical perspective.

A Dialogic Response Toward Teacher Identity

In the course of literature analysis, it appears that identity is a complex and many-faceted theoretical concept (Alsup, 2006; Gee, 2001). In direct relation to the concepts of being and doing, Holland et al. (1998, p. 5) point out that “identities, the imaginations of self in worlds of action, ... lived in and through activity and so must be conceptualized as they develop in social practice.” That is the emergence of “becoming”. Teachers’
Addressing Cultural Identity through Negotiation..

identity has a process from being to doing in which the final result will be becoming. Given that, it is believed that each and every teacher’s identity theorized in a reciprocal relationship with others’ identity. Bakhtin (1990) asserts that the understanding of the relationship between one’s “self” and “others” will lead to the understanding of teacher identity. Having the conceptualization of Bakhtin’s mind, a dialogic approach is necessary to identify the relationship between one’s “self” and “others” (Hallman, 2015). Using a dialogic approach in this way helps to construct a two-way response toward the intentions of others and the responses of self. It is worth mentioning that one of the principles of dialogism is that each and every language which is produced is the response to the language of others (Hallman, 2015). According to Bakhtin (1990) the language can also be a text. This means that the texts which are produced by the teachers can also be regarded as the manifest of teachers’ identity.

Based on what have been said about identity, self, and others, it can be concluded that negotiation on different issues in teacher professional development can have effect on a teacher’s identity. Consequently, rising the awareness of teachers about various matters in the teacher education program can be framed with what Bakhtin believed as the relationship between self and others. It is also a reminder of what Vygotsky (1979) states that through others we become ourselves. Moreover, as Kumaravadivelu (2012) states self can be negotiated constantly. This can be “the result of individuals’ continual critical engagement with others who share their personal and professional space.” (Kumaravadivelu, 2012; p. 59). Hence, negotiation can be a catalyst of identity. The identity of a teacher is negotiable due to the fact that, as Jenkins (1996) and Vygotsky (1986) declare, it is a socially constructed and socially shared notion. In this regard Jenkins (1996, p. 3) states that

> if only because identities are about meaning, and meaning is not an essential property of words and things. Meanings are always the outcome of agreement or disagreement, always a matter of convention and innovation, always to some extent shared, always to some extent negotiable.

Through the analysis of the quotation, this is well-illustrated that the identity formation and to some extent changing can be achieved through the negotiation. It is an undeniable fact that social realities such as ethnic, religion, and linguistic differences might have an effect on the identity of the teachers. Sen (2006) calls that multiple monoculturalism; in which each society with different and distinct culture tries to preserve its own identity. This may lead to the ignorance of differences in the society by the teachers. It is clear from the above lines that teachers’ identity is transferable to the classroom. It is also important to know that identity of the teachers is a notion which is socially constructed. Consequently, many other different factors which are to some great extent socially constructed are involved (Jenkins, 1996). Hence, it is correct to say the negotiation between Self and those factors may change the identity of the teachers. Thus, the purpose of this study was to investigate the effects of raising teachers’ awareness about cultural variations through negotiation on their identity change. That said, through different terms of conditions, we conducted various discussions on the mentioned topics and investigated the cultural identity of the teachers through the narration they produced. To that end, the following research question is addressed:

1. How do teachers’ identity change when their awareness will be raised about social and cultural variations in the society?
Literature Review

The historical perspectives toward the notion of identity date back to the 20th century when the researchers and theorists in different fields of study started to pay attention to this notion (Martel & Wang, 2015). The notion of identity has been scrutinized by Holland and Lachicotte (2007); leading them to two mainstreams of theorizing: a psychological idea by Erick Erikson and a sociological one by George Mead. Given that, Holland and Lachicotte (2007, p. 107) stated that

An Eriksonian ‘identity’ is overarching. It weaves together an individual’s answers to questions about who he or she is as a member of the cultural and social group(s) that make up his or her society. A Meadian identity, on the other hand, is a sense of oneself as a participant in the social roles and positions defined by a specific, historically constituted set of social activities.

The notion of identity first appeared in language pedagogy with regard to the language learners. Norton (2000) conducted a study on the immigrant women learning English in Canada. In this study, Norton investigated how identity was considered with regard to the context of teaching and learning. It was approximately at the end of 1990s when researchers in the field of teacher education started to consider teacher identity as the subjects of their studies (Martel & Wang, 2015). Some pioneer studies such as the one by Duff and Uchida (1997) and Antonek, McCormick, and Donato (1997) are the prime examples. Scrutinizing the literature, it can be stated that most of the empirical studies on language teacher identity are focusing on native and non-native speaking teacher identity (Menard-Warwick, 2008). Later on, researchers (e.g., Fichtner & Chapman, 2011; Menard-Warwick, 2011) conducted studies addressing language teachers’ cultural identity.

By reviewing the studies conducted within the realm of language teacher education, one can reach the major themes. Miller (2009; p. 178) believed that the notion of identity should be explicitly taught to the student-teachers to raise their critical reflection that “takes account of identity and related issues, of individuals in specific contexts, and of the role of discourse in shaping experience.” Different investigations were done to see the significant role of others in the teachers’ identity formation (Martel & Wang, 2015). It is believed that those whose roles are significant in the teachers’ identity formation are “mentor teachers, classmates, and teacher educators, while in the workforce, significant others include colleagues, administrators, and students.” (Martel & Wang, 2015; p. 290). The influence of the above mentioned “others” on language teachers’ identity has been referred to in some studies such as the one Liu and Xu (2011) and Park (2012). For instance, Park (2012) investigated the status of non-native student-teachers in the United States where some of the student-teachers lost their confidence due to the questions by the language learners about their ability in teaching English to the natives.

Moreover, the prior experiences and the personal biography that teachers possess may form their identity (Duff & Uchida 1997; Izadinia 2013). In the study by Duff and Uchida (1997), it was revealed that some of the teachers did not use the textbooks in their classroom while they taught grammar due to the experiences they had in their school time. Furthermore, in the study by Yi (2009) it was revealed that prior experience was a determining factor in language teacher’s identity. Ennsner-Kananen and Wang’s
(2013) study, moreover, showed that the participants expressed regret over the interactions with other cultures leading to weaken their first language cultural identity.

The researchers (Morgan & Clarke, 2011) believed that one more issue which is important in language teacher identity formation is the context. There are two contexts which the student-teachers do their activities; the teacher education program and the schools where they teach. Feiman-Nemser and Buchmann (1985) called this as the “the two world pitfall”. In some of the studies such as the one by Luebbers (2010), the student-teachers were complaining about the reality of classrooms. To put it in another way, student-teachers’ professional development is done within the context of teacher education; in which some of the realities are ignored with regard to the student-teaching contexts. This problem is not specific to the teacher education program and student-teaching contexts, but it can also be seen during the first years of instructions by the teachers (Zeichner & Tabachnik, 1981). This may lead to the change in their identity.

Although cultural issues are integrated with language teaching and teacher identity, there are not many investigations in this regard. Researchers (e.g., Ennser-Kananen & Wang 2013; Fichtner & Chapman 2011; Menard-Warwick, 2011) asserted that intercultural issues helped not only to the formation of teacher identity regarding different cultures but also it helped to approach teaching culture. According to Martel and Wang (2015, p. 293) “tensions and struggles are common themes in the construction of language teachers’ bi- or multi-cultural identities.” In a study conducted by Fichtner and Chapman (2011) it was revealed that there was disequilibrium in the teachers’ identity while they formed their first and second identity with regard to the language they learnt to teach later. The student-teachers in Fichtner and Chapman’s study had declared that their primary identity was in association to their national identity, whereas the second identity, which was difficult for them to come up with, was regarded as the target language culture. Moreover, in the study conducted by Ennser-Kananen and Wang (2013), it was revealed that the more the teachers’ intercultural experiences were, the more their tendency toward teaching culture.

More often than not, the studies conducted to investigate the cultural issues and teachers’ identity showed that teachers often relied on their own cross-cultural and cultural experiences to teach culture in their classes (Duff & Uchida, 1997). That said, Morgan (2004) called the phenomenon as “identity as pedagogy” in which “the teacher’s identities are performed in classroom conversations around culture and, in turn, transformed in the culture teaching practice.” (Martel & Wang, 2015; p. 293).

Methodology

Teacher-authored Narratives

In this study we were investigating the role of negotiation of cultural variations on student-teachers’ cultural identity formation. To that end, we used teacher-authored narratives as the source of data. From 1990s, narratology has been introduced as an approach to understand and document the professional development of the teachers (Carter, 1993; Doyle, 1997). According to Johnson (2007) “narrative inquiry, as a form of professional development, represents systematic self-exploration conducted by teachers through their own stories and language” (p. 175). Through using narratives one can understand the complexities a teacher may face, and trace the professional development
trend of a teacher. As Johnson and Golombek (2002) point out narrative inquiry can help teachers to self-understand themselves, so it can lead them to change; change in identity for instance.

In the current study, we went through the narrative epistemology (Bruner, 1996) and the argument that narratives are the manifest of the constructive process based on which human beings interoperate their activities and experiences (Sarbin, 1986). According to Johnson (2007, p. 178) “This stance recognizes that narratives, by their very nature, are not meant to describe phenomena objectively, but rather to expose how people’s understandings of phenomena are infused with interpretation.” It can be concluded that narratives are socially mediated and cannot be reduced except if they lose their essence (Clandinin & Connelly, 2000; Lyons & LaBoskey, 2002). It is also worth mentioning that narratives are chronological regarding different events at focus. Through the reconstruction of the stories teachers show their stance with the issues. According to Johnson (2007), due to the transformative power of narratives as a manifest of systematic change they “become a mainstay in teacher education Programs” (p. 179).

Teacher Narratives Collection and Analysis Method

In our study, we scrutinized the narratives of three student-teachers regarding their cultural identity before and after negotiations. Given that, we used ethnographic semantics (Spradley, 1979) to analyze the narratives by focusing on the meanings the teachers provided to their verbal expressions. In this study, in order for more accuracy and more analysis we have used MAXQDA software which helped us to delve into the narratives deeply.

During the four months, the lead researcher negotiated with the three student-teachers about their cultural identity. Before the negotiation the lead researcher asked the student-teachers about their stance with regard to the cultural issues in the classrooms. This included many factors such as the importance of teaching cultural issues, how they reacted toward different cultures, and how they approach students’ culture which were something other than the main culture of the class. The student-teachers wrote their narratives and delivered them to the researchers.

In the second phase of the study, the lead researcher started to negotiate on student-teachers’ cultural identity by using different methods. First of all, the lead researcher sent some related academic papers whose subjects were about the above mentioned issues. The student-teachers were asked to study them. Then the lead researcher started to negotiate on different notions and terms with the student-teachers. In this way, the student-teachers’ cultural identity were negotiated.

One more instructional tool was the short clips on cultural issues in the L2 classrooms which were sent to the student-teachers and they were asked to watch them and, later, discuss them with the lead researcher. Approximately, each and every week the lead researcher negotiated the cultural issues regarding the cultural identities of the student-teachers.

At the end of the four months, the researchers asked the student-teachers to write another narratives regarding cultural issues and the way they might consider the differences in cultural issues in their classrooms. Then after, the narratives produced by the student-teachers during the program were categorized in different excerpts and were analyzed using MAXQDA software. The software helped us to obtain the main themes
of the narratives written by the student-teachers and the relationships among the themes. To analyze the obtained information from the interviews, the researchers used Strauss and Corbin’s (1998) systemic approach. Grounded theory studies can be codified and described through using the systemic approach. There are three coding levels in systemic approach including open coding, axial coding, and selective coding. The researcher started to analyze the interviews by open coding. In this level of coding the major or core, categories were specified. The next level is axial coding in which the categories will be broken into subcategories and sub-themes. Finally, in the selective coding the researcher developed propositions and hypotheses based on the model; showing the related categories. MAXQDA helped to do the analysis more systematically.

Results

To obtain the information about the role of negotiation on the cultural identity of the student-teachers we, as stated earlier, used the narratives produced by the three student-teachers. Firstly, we obtained the main themes which the student-teachers mentioned and the qualitative extent to which they have discussed them. Figure 1 shows the information.

<table>
<thead>
<tr>
<th>Code System</th>
<th>Teacher 1</th>
<th>Teacher 2</th>
<th>Teacher 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using cultural varieties in teaching</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Detecting the gap between cultural contexts</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Conceptualization of cultural issue</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Cultural transformation</td>
<td>●</td>
<td>●</td>
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</tr>
<tr>
<td>Addressing new mode of cultural use</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Internalizing new cultural issues</td>
<td>●</td>
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<td>●</td>
</tr>
<tr>
<td>Cultural awareness</td>
<td>●</td>
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</tr>
</tbody>
</table>

Figure 1. Main themes student-teachers addressed about cultural variations in their narratives

As can be seen in Figure 1, there are seven main themes that we identified in the narratives written by the student-teachers regarding the change in their cultural identities after the negotiations. Qualitatively, the most referred theme was addressing new mode of cultural use by teacher #2. Then conceptualization of cultural issue and cultural awareness by Teacher #2 and detecting the gap between cultural contexts, cultural transformation, and addressing a new mode of cultural use by Teacher #1 were the most referred themes in the narrations. Teacher #3 also referred to the mentioned themes. In the following lines of inquires we mention some excerpts by the student-teachers with regard to using cultural varieties in teaching. The sections referring to the negotiations and cultural identities of the student-teachers have been become bold.

Excerpt #1: Using cultural varieties in teaching

Teacher #1: ... after a while and when I read some papers on the opportunities of cultural varieties in teaching I came to the conclusion that some of the cultural differences I observed in my classes that my students can help me in expanding the cultural subjects in the class ...

Teacher #2: Reading about cultural varieties was important for me in two ways. First, I changed my strict view with regard to the best culture for the classroom. Pre-
viously, I had the idea that not all cultures could be taught in the classrooms. Now that I studies more on the role of culture and cultural differences in the classrooms I change this view. Moreover, it can help us to teach different skills in the classroom based on cultural differences …

Teacher #3: I think one of the advantages of cultural differences is to change the view of the students about the idea that their culture is the best. Through thinking about the differences, both teachers and learners can raise their understanding about the environment around themselves.

The second theme which we extracted from the narratives of the teachers was detecting the gap between the cultural contexts. It is worth defining contexts here. Each and every person has got his/her own context which determines some limitations for them. That said, the more the context of a teacher will be similar to that of his/her students, more opportunities for learning can be achieved. The gap between the cultural context of a teacher and his/her students may lead to complex issues in the classroom. In the following excerpt we address how the student-teachers refer to this issue after they did the negotiation.

Excerpt #2: Detecting the gaps between cultural contexts

Teacher #1. In a discussion I had with some of the colleagues about the cultural varieties I come to understanding that each teacher has his/her own context of performance which needs to be as similar as it is possible …

Teacher #2. … I do not say that without knowing about the cultural environment one cannot teach well; however, if we detect the gaps existing between the cultural values which are important for the teacher and the ones by the students, teaching will be flourished.

Teacher #3. … the paper I read changed my view with regard to detecting and bridging the cultural gaps… I think when I finish my student teaching and become a teacher in the first session of each class I will go through the cultural differences …

Through the course of analysis, the student-teachers stated that while they negotiated the cultural issues they conceptualized cultural issues in new ways. The narrative written by the student-teachers showed that both the papers they read and discussions they had were influential in creating such cultural reconceptualization.

Excerpt #3: Reconceptualization of cultural issues

Teacher #1. When we discussed cultural issues new aspects about the essence of culture appeared. This leads to think about how I can use and react toward cultural issues in the classroom.

Teacher #2. … and by reading all those papers, the concept of why culture and cultural values should be implemented in the classroom has changed for me. I think I will have a wider cultural knowledge which helps me to think about culture not like the previous time.

Teacher #3. … at the end of the discussions and reading materials, I draw conclusion that the new world has new culture so should it be for the classrooms …

Cultural transformation was another theme which the student-teacher paid attention in the narratives they wrote. Through analyzing the narratives, we understood that by this theme, cultural transformation, the student-teachers meant that they could not only
teach culture but also prepare an instructional environment that the students changed them based on the cultural values and beliefs they had. This could be done in a dialogic interaction between the teachers and the students.

Excerpt #4: Cultural transformation
Teacher #1. I do agree with the fact that classroom is like an arena for cultural transformation. Here is the place where teachers and students can be along each other to reach cultural agreement on the subjects which are shaky.

Teacher #2. Through the potentials we have in our classrooms, I mean the students who are the main cultural potentials, we can learn new cultural issues and thank about them to transform them. I think the same phenomenon can happen for the students...

Teacher #3. … I remember in one of the papers I studied the teacher’s discussion lead to the cultural discussions in the classrooms in which they discuss every bits of the issue. I will tend to increase such discussions in my classroom.

The fifth them which the student-teachers addressed in their narratives was addressing new modes of cultural use. The theme means that how it is possible to use new mode in teaching cultural issue.

Excerpt #5: Addressing new modes of cultural use
Teacher #1. [in the discussions] it is now much easier to address cultural aspects in our teaching, since we have more facilities which can use to do cross-cultural comparisons ... I will use the internet in order to push my students to be familiar with cultural differences...

Teacher #2. The information I obtained during the discussions convinced me to use new methods and facilities to teach culture in my classroom. The thing is, according to the conclusions of some of our discussions, we can now use various mode of teaching culture which make it both interesting and easy to teach.

Teacher #3. … I can say I will use new facilities to address teaching culture …. This is the recent discussion in the field of language teaching … no one should be left behind from teaching cultural values and beliefs … students can also use new modes to raise others about their culture … I accept such proposals for my classroom by students of various culture to present their culture to others …

Internalizing new cultural concepts is another theme which the student-teachers addressed in their narratives. Overall, their cultural identity about the variations changed, showing that the negotiations led them to pay more attention to cultural variations. The narratives also showed that the student-teachers would like to address internalizing new cultural concepts through new methods.

Excerpt #6: Internalizing new cultural concepts
Teacher #1. … my studying about teaching culture change my view that new cultural concepts should be internalized. The internalization, according to Vygotsky, is done by others. Consequently, in the new future I will go through internalizing cultural concept using the appropriate methods.

Teacher #2. Before teaching culture, I think teachers should work upon the internalizations of concepts. In our discussions we come to the conclusion that if we will be able to internalized the concepts, cultural variations can be called upon easier...

Teacher #3. … and it is the internalization of culture which I think is more important than paying attention to other aspects of teaching culture …
The last theme which the student-teachers referred to after negotiation about cultural variations was cultural awareness. The student-teachers, overall, stated that the negotiations led them to be culturally aware.

Excerpt #7: Cultural awareness

Teacher #1. *Through studying different papers, my awareness about cultural variations increased. Now, I know how to treat cultural variations in my classroom and I come to the conclusion that some of my reactions were not that much appropriate.*

Teacher #2. *Cultural and, sometimes, cross-cultural awareness can be achieved through negotiation types such as the one we had during these months. Raising the cultural awareness of the students and ourselves is very important and in the later time I will do some awareness raising tasks …*

Teacher #3. *… I will do awareness raising activates in the classroom in order to prepare the condition for the students to raise their awareness about the cultural facts …*

**Discussion**

In the current study we have investigated the cultural identity of student-teachers through teacher-authored narratives. Through the course of analysis on the teacher-authored narratives we found out that after the negotiation the cultural identity of the student-teachers changed; in that they changed the way they had reacted toward cultural variations. The main themes which the student-teachers referred were using cultural verities in teaching, identifying the gaps between cultural contexts, reconceptualization of cultural concepts, cultural transformation, new modes of using culture in teaching, internalization of cultural issues, and cultural awareness. Unlike the studies done by Fichtner and Chapman (2011), the findings of this study showed no tension or struggle in the cultural identity formation of the student-teachers. Some explanations can be made on the obtained results.

First of all, the results indicated that the student-teachers’ cultural identity changed and they considered the cultural variations as the advantages for instructing English language in their classrooms. It is showing that the student-teachers passed the state of being and went through the state of becoming (Izadinia, 2013). This also shows that the identity of student-teachers is a dynamic one, meaning that by participating in negotiation program their cultural identity with regard to the cultural variations changed (Beijaard et al., 2004; Maclean & White, 2007; Beauchamp & Thomas, 2009).

Moreover, the main themes we mentioned above showed that student-teachers situated in a process of professional identity formation (Putnam & Borko, 1997). In this process of professional identity formation student-teachers use the identity they obtained through the process in the instructional program. It is the thing Morgan (2004) called identity as pedagogy. Based on the narratives of the student-teachers in this study, it was clear that they wanted to change their procedures in approaching cultural variations in the classrooms. This can be rooted in the negotiations the student-teachers participated since their cultural identity awareness enhanced in myriad ways.

On top of this, the classroom practices are influenced by the cultural identity of the teachers (Martel & Wang, 2015). This is well-shown in the student-teacher-authored narratives of this study since in their explanations their cultural identity change caused to decide to use the cultural variations in the classrooms for instructing materials. More-
over, they thought of new modes of representing cultural variations in their classrooms which could be due to the change in their cultural identity.

The context in which student-teachers are working is also very important in shaping their professional identity in general and cultural identity in particular (Morgan and Clarke, 2011). It should be stated that the student-teachers, in this study and as general, had two contexts of participation: their teacher education program and the school teaching context. Analyzing the narratives by the student-teachers in this study and their cultural identity changed indicated that not only the negotiation they participated helped them to change their idea about cultural variations but also, probably, the schooling context they school teach might push them to work upon their future carrier.

One more point about the main themes obtained through the analysis of teacher-authored narratives is the transformation and reconceptualization of cultural concepts and issues. By referring to the two mentioned themes the student-teachers wanted to discuss cultural issues to find new cultural identity in this regard. We believe that this is due to the nature of negotiation. Based on negotiation principles the participants will learn to negotiate things through their critical thinking. During the four months, we think that since this ability increased in the student-teachers they wanted to implement this ability in the form of transformation and reconceptualization of cultural concepts and issues in their classrooms.

Conclusions

According to Gaudelli and Ousley (2009, p. 934) “identity work is vital in whatever way it manifests and that it is up to reflective teacher educators to enact this focus in appropriate ways that are contextually bound.” This direct quotation well-illustrates the importance of Identity in teacher education program. In this study, we investigated the cultural identity change of the student-teachers during a negotiation program. The results of qualitative analysis of student-teacher-authored narratives showed that the student-teachers’ cultural identity changed during the negotiation program, thus the results support the hypothesis that teacher cultural identity is dynamic and open to change.

The qualitative analysis of the student-teacher-authored narratives showed that the student-teachers’ cultural identity changed with regard to the main themes such as using cultural verities in teaching, identifying the gaps between cultural contexts, reconceptualization of cultural concepts, cultural transformation, new modes of using culture, internalization of cultural issues, and cultural awareness. The mentioned themes were all related to cultural issues showing that student-teachers paid more attention to such issues. To put it in a nutshell, the themes showed more relations to instructional aspects of teaching cultural issues. Hence, it is showing the importance of changing in cultural identity with regard to cultural instructions. Moreover, teacher education policy makers should know that the role of negotiation in cultural identity formation of the teachers open new horizons to future sustainable teacher education programs (Miedema & Bertram-Troost, 2015). That said, teaching culture by means of its different approaches need to be more emphasized in the teacher education programs (Egne, 2014).

Finally, it is worth mentioning that finding new approaches to work on the identity of student-teachers is important for teacher education programs. Miller (2009), suggested some directions in this regard: “understanding the nature of identity; knowing the context
in which student-teachers work; engaging student-teachers in critical reflection; and beginning with learners’ needs” (Martel & Wang, 2015, p. 297). Portfolio writing is another way to develop the identity of teachers (Antonek et al., 1997).

References


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An Analysis of Transformation of Teaching and Learning of Japanese Schools that Significantly Addressed Education for Sustainable Development

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Abstract

Education for Sustainable Development (ESD) requires learner-centred and interactive teaching strategies such as critical thinking, participatory decision-making, value-based learning, and multi-method approaches, all of which to some degree contrast traditional lecture-based teaching practices. As there is very little evidence providing international comparison across different educational backgrounds, the research digs deeper into the effects of a pluralistic ESD approach to teaching in the context of Japanese primary and secondary education. Based on answers from a questionnaire administered by head teachers in 469 ESD schools, the present research shows that teachers recognise that at least in relation to the local environment, community welfare, and depopulation of communities, the students are increasingly aware of their role and the need to act ambitiously to create a sustainable society. In these teacher comments about ESD methods, the main emphases were on the whole system, for example, the use of integrated studies (referred to 37 times), cross-curriculum development (13), and the ESD calendar (12). The fact that ESD is learner-centred (26), learning in the society (23) focused on collaboration with local community, and based on active learning (20) also frequently appeared. The research also reveals that by using local resource materials and conducting experiential activities, students’ awareness of their local district deepens, and students then start to tackle with difficulties of local society such as declining population, protection of natural environment, and preservation of traditional culture by themselves. However, it cannot be said that teachers clearly understand their role as coaches and change agents, and there were no reported cases of teachers and students collaboratively designing school activities. Thus, there is still space for more profound teaching and learning growth in ESD in Japan.

Keywords: ESD methodology, pluralism, behaviour changes, learner-centred study, integrated study, locality
Introduction

The proposal for a Global Action Programme (GAP) on Education for Sustainable Development (2014), a follow-up to the Decade of Education for Sustainable Development (DESD), maintained that Education for Sustainable Development (ESD) should connect key sustainable development issues with teaching and learning, and that it requires innovative participatory teaching and learning methods that empower and motivate learners to take action for sustainable development. This proposal also pointed out that ESD promotes skills such as critical thinking, understanding complex systems, imagining future scenarios, and making decisions in a participatory and collaborative way.

Outlining the basic features of Education for Sustainable Development as a teaching tradition, Stables and William (2002) and Öhman (2005) identified ESD’s three essential aspects of holism: connecting the environmental, social, and economic dimensions of Sustainable Development (SD) issues; integrating their past, present, and future implications; and focusing on their local, regional, and global nature. In its core, such an approach aims to nurture wholeness in all aspects of traditionally segmented and compartmentalized educational discourses like those of individual development, relationships between the individual and the world, disciplines of knowledge, educational aims and so on (Pipere, Veisson, and Salóte 2015).

After holism, the second essential feature of ESD deals with the processes of teaching and learning. ESD focusses on the development of skills and action competence for sustainability; this pedagogy has been labelled pluralism.

Pluralistic ESD requires learner-centred and interactive teaching strategies, for example, critical thinking, participatory decision-making, value-based learning, and multi-method approaches, all of which to some degree contrast traditional lecture-based teaching practices (e.g., Öhman, 2004; Sandell, Öhman, and Östman, 2005; Corney, 2006; Corney and Reid, 2007; Winter and Firth, 2007, Firth and Winter, 2007; Rudsberg and Öhman, 2010).

Mogensen and Schnack (2010) and Bentham (2013) further emphasise that a key role of ESD in an action competence approach is to develop students’ ability, motivation, and desire to play an active role in finding democratic solutions to SD problems and issues. In this light, the purpose of teaching ESD is to empower and motivate students subjectively to take action for sustainable development.

Despite this global commitment and these discussions around ESD-oriented teaching approaches, however, there is very little empirical evidence on how these transformative educational approaches are really applied in the classroom. How effective at empowering and motivating students to take action for sustainable development are the educational approaches of ESD in fact?

This article researches the surveyed schools’ efforts concerning the transformation effected by ESD methodology from the viewpoint of head teachers. In addition, as there is very little evidence providing international comparison across different educational backgrounds, the present research digs deeper into the effects of a pluralistic ESD approach to teaching in the context of Japanese primary and secondary education.
1. Literature Review Concerning ESD Methodology

Earlier research on ESD methodology focused on the effects of Environmental Education (EE) and the difference between EE and ESD (e.g., Öhman, 2004; Summers, Corney, and Childs, 2004; Spiropoulou et al. 2007; Walshe, 2008; Pepper and Wildy 2008). Other previous studies focused mainly on geography or science trainee teachers’ conceptions (e.g., Summers and Childs, 2007; Summers, Childs, and Corney, 2005; Summers, Corney, and Childs, 2004; Winter and Firth, 2007, Firth and Winter, 2007).

Öhman (2004) found disciplinary differences amongst Swedish upper secondary teachers’ ways of conducting EE. Social science teachers taught environmental issues to a higher degree than science teachers, while only 30 % of language teachers taught environmental issues at all. In addition, many teachers did not teach according to an ESD tradition.

Summers, Corney, and Childs (2004) researched student teachers’ conceptions of sustainable development in the United Kingdom. Their research showed that many student teachers recognised the centrality of environmental (87 %), economic (69 %), and social (49 %) factors in sustainable development.

Summers and Childs (2007) found that starting secondary science teachers recognised the centrality of environmental (72 %), economic (53 %), and social (31 %) factors – but just 15 % highlighted all three; when compared with a pre-specified framework, the aspects of sustainable development largely missing had to do with citizenship, preservation of diversity, and uncertainty and precaution in action.

Pepper and Wildy (2008) reported that Western Australian government secondary school teachers focused only on the environmental aspect of sustainability; education for sustainability remained fragmented and vulnerable to changing school conditions. In this study, leadership of education for sustainability occurred only unpredictably and with little vision for the future, with little evidence of alliance-building or collaboration among colleagues.

Borg et al. (2012) referred to the different ways that teachers with different backgrounds recognised sustainable development. The greatest uncertainty for teachers is related to the economic dimension of ESD. Science and social science teachers are critical of incorporating economic growth into the concept of sustainable development while language, vocational, and esthetical-practical teachers are not incorporating it at all. Borg, Gericke, Höglund, and Bergman (2014) showed that Swedish teachers were uncertain with respect to their understanding of all three dimensions.

In general, these studies focused on teachers’ overall understanding of ESD – environmental, economic, and social – as well as individual teachers’ conceptions of ESD, science, geography etc. These studies have mostly focused on secondary school teacher perspectives and noted the differences in how secondary school teachers from different disciplines and subjects understand sustainable development. As a result, these studies have shown that only a few teachers have a holistic understanding, and that the ecological perspective is the most commonly recognised one.

In contrast, research focussing on students’ recognition of ESD is very rare, and shows that ESD influences students’ environmental knowledge but does not create a transformation of attitude and behaviour.

Walshe (2008) looked at the impact and understanding of sustainable development among 12- to 13-year-old geography students in the UK, finding that there was a wide range of levels of understanding of the concept of sustainability. Pauw and Petegem
An Analysis of Transformation of Teaching and Learning of Japanese Schools...

(2011), based on research from 1287 students 10 to 12 years old from 59 schools (38 eco-schools and 21 control schools), showed that eco-schools influenced their students’ environmental knowledge rather than had the environmental affect. The same authors (2013) showed that the effect of environmental values on environmental behaviour is different across different cultural contexts, based on a massive study with a total of 1,833 children 10 to 13 years old from Flanders (Belgium), Guatemala, and Vietnam.

Berglund, Gericke, and Chang (2014) indicate significant differences in the economic dimension of sustainable consciousness between students from Swedish schools that learn using an ESD approach and students from regular schools, but not in the environmental and social dimensions of sustainable consciousness.

Pauw, Gericke, Olsson, and Berglund (2015) collected a large amount of data from 2,413 students from 51 schools across Sweden to study the effectiveness of ESD. Their results indicate that ESD can actually impact student outcomes in terms of sustainable consciousness.

When it comes to teaching methodologies used for environmental education, different teaching traditions have been discussed: fact-based, normative, and pluralistic traditions. The fact-based traditions are based on the belief that if students accept the correct scientific facts, they will automatically take the right actions regarding environmental issues. In the normative tradition, education is recognised as one tool to create an environmentally-friendly society (Sandell, Öhman, and Östman 2005). Pluralistic traditions require learner-centred and interactive teaching strategies, for example, critical thinking, participatory decision-making, value-based learning, and multi-method approaches to transform society, instead of traditional teaching.

Mogensen and Schnack (2010) emphasised that a key role of ESD in an action competence approach is to develop students’ ability, motivation, and desire to play an active role in finding democratic solutions to transform society.

Bentham (2013) suggested an ESD approach for developing action competence, involving focus on critical and creative thinking, systemic thinking, and future thinking as ESD skills.

The following research is based on the discussion of the methodology of ESD; the essential feature of ESD deals with the processes of teaching and learning. ESD focusses on the development of skills and action competence for sustainability; this pedagogy has been labelled ESD’s pluralism. The schools that the study is looking at use an action-based, pluralistic approach to teaching ESD.

Thus, with pluralism in mind, this article researches the contributing schools’ efforts concerning their implementation of ESD from the viewpoint of school teachers.

2. ESD in a Japanese Educational Context

During the Decade of Education for Sustainable Development (2005–2014), which was strongly supported by the Japanese government, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) launched “The Basic Educational Promotional Plan of 2008”. This promotional plan positioned the UNESCO Associated Schools as centres for promoting ESD, and gave support to increase the number of the UNESCO Associated Schools in the global school network of UNESCO-leading ESD. This allowed the UNESCO Associated Schools in Japan to take part in the development of the educational content and methods of ESD. After this initiative, the numbers of the UNESCO
Associated Schools in Japan increased from 24 in January of 2008 to 1,043 in May of 2017. These ESD schools in Japan are primarily public and compulsory schools (76%); primary schools make up 52% of ESD schools.

ESD is extensively present as part of the description of all subjects in the curricula under the Revised National Curriculum Guidelines of 2008. ESD content is most noticeable in geography, civics, natural science, home economics, and physics.

However, as UNESCO (2014) indicated, ESD in Japan is mainly practiced during integrated study time rather than in core subjects. The integrated study time was established when the Curriculum Guidelines, which are the national standards of curricula in Japanese schools, were revised in 1998. These study periods have provided space for teaching and learning approaches that encourage task-based inquiry learning, problem-solving, and participatory learning, which are important components of the pluralistic approaches of ESD.

Table 1
Example of an ESD Calendar (MEXT 2016)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Grade 6 ESD calendar</th>
<th>Yanagawa Primary School</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>April</td>
<td>May</td>
</tr>
<tr>
<td>Japanese</td>
<td>Classroom debate</td>
<td>Things that have been posed down</td>
</tr>
<tr>
<td>Math</td>
<td>Investigating data and averages</td>
<td></td>
</tr>
<tr>
<td>Science</td>
<td>How your body is made and moves</td>
<td>Living things and their environment</td>
</tr>
<tr>
<td>Social studies</td>
<td>The people who made ‘Edo(Tokyo)’ culture</td>
<td>People living under long-term state of war</td>
</tr>
<tr>
<td>Integrated</td>
<td>Launching out into the future</td>
<td>Investigating local history, talking about your city</td>
</tr>
<tr>
<td>English</td>
<td>Can you introduce your home town?</td>
<td></td>
</tr>
<tr>
<td>Special activities</td>
<td>Making sushi rolls</td>
<td>Hosting Yanagawa Local Festival</td>
</tr>
<tr>
<td>Moral education</td>
<td>Cheers for longevity</td>
<td>The good old days Learn about past</td>
</tr>
<tr>
<td>Music</td>
<td>Art</td>
<td>Express myself of 12 years’ old</td>
</tr>
<tr>
<td>Sport</td>
<td>Pathogens and the body’s resistance</td>
<td>Anti-drug abuse, tobacco, alcohol, medicine</td>
</tr>
<tr>
<td>Home economics</td>
<td>Learn about everyday food and the basics of cooking</td>
<td>Your Growing up</td>
</tr>
<tr>
<td>Environmental education</td>
<td>International understanding, Culture and cooperation</td>
<td>Human rights/life education</td>
</tr>
</tbody>
</table>

The ESD calendar, which was developed by Toshio TESHIMA, principal of a primary school in Tokyo, shows how all subjects, integrated study time, extra-curricular
activities, and so on are linked by content in each grade over the course of the year; color-coded units are connected with a line to clearly show their associations (see Table 1).

The aim of the present research is to dig deeper into the effects of a holistic ESD approach to content and a pluralistic ESD approach to teaching in the context of Japanese formal education. Although ESD has been part of the curriculum in Japan for several years, very little research has been conducted to ascertain its effectiveness at empowering and motivating students to take action for sustainable development; thus, research on the Japanese interpretation of ESD is needed; its integration into schools has certainly been different than in Europe (e.g., in Sweden and the UK, cited above), which is mainly focused on secondary education and individual teachers of different subjects.

3. Research Question and Methods

As mentioned above, previous studies have mostly focused on secondary school teacher perspectives and noted the differences in how secondary school teachers from different disciplines and subjects understand sustainable development. In Japan, ESD curriculum has been constructed by linking with other subjects and areas (such as moral education and extracurricular activities), and it is integrated through the whole school curriculum.

This study intends to look at ESD in Japan (a rarely studied topic) from the viewpoint of primary and secondary school teachers (also a rarely studied topic). Thus, the main research question is the creation of a pluralistic ESD approach to teaching in the context of Japanese formal education. To answer this question, the issue will be considered from the viewpoint of schoolteachers in Japan.

This study employs document analysis of the questionnaire survey, which is a form of qualitative research. In the document analysis, documents are interpreted and reviewed multiple times and remain unchanged by the research process. In addition, KH Coder (open-source software for quantitative content analysis and text data mining developed by Higuchi Kouichi) was used for metric text analysis of this text data. Using the software, it was possible to measure the frequency of words and then derive basic concepts from the data. In addition, a co-occurrence network was configured. This is used to reconstruct underlying perspectives by extracting frequently used lexical items and their combinations.

The Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT), together with the Asia-Pacific Cultural Centre for UNESCO (ACCU), conducts an annual questionnaire in all Japanese UNESCO Associated Project Network (ASPnet) schools. These questionnaires ask about multiple aspects of the UNESCO Associated Project, including the effectiveness and challenges of ESD. The general overview is released on the MEXT website (MEXT, 2016).

The present research, using the responses to MEXT survey question no. 19 for the year 2016, analyses the change created by the UNESCO Associated School project and the effectiveness of teaching and learning under ESD in the UNESCO Associated Schools. Question no. 19 is as follows: “Explain the effectiveness of the transformation of teaching and learning, after your school began participating as the UNESCO Associated School project and became a school which addressed ESD”.

In 2016, a total of 469 schools, including 228 primary schools, 92 lower secondary schools, 4 primary lower secondary schools, 34 secondary schools, and 84 upper secondary schools responded to the questionnaire survey.
4. Research Analysis and Findings

4.1. Transformation of Teaching

Question no. 19 asked about the effectiveness of the transformation of teaching and learning after participating in the UNESCO Associated School project and becoming a school that addresses ESD. The questionnaires were administered to the head teachers, who are the ones responsible for ESD practices; comments were collected from 253 schools. Figure 1 shows a co-occurrence network reconstruction of the underlying concepts, created by extracting frequent (appearing more than 16 times) vocabulary items. The following comments are typical ones derived from synthesis of all teachers’ comments.

Open-ended comments were collected from the teachers. In the following data, ‘P’ stands for primary school teachers, ‘LS’ stands for lower secondary school teachers, and ‘US’ means upper secondary school teachers.

![Co-occurrence network for ESD methodology](image)

**Figure 1. Co-occurrence network for ESD methodology**

4.1.1. ESD Calendar and Cross-curriculum

Many teachers referred to the ESD calendar, which makes an integrated study a regular subject, and various dates of school events on the schedule for the year. The ESD calendar also assists in the clarification and materialisation of the learning content.

Here are some of the teachers’ comments regarding the ESD calendar:
“Making the ESD calendar led teachers to think systematically about the relationship between integrated study time, life science, etc.” (P)

“We made the ESD calendar and began to think about the connections between integrated study time and learning and other academic subjects.” (P)

“Our schoolteachers advanced the research of study materials from the viewpoint of ESD, so clarification and materialisation of the learning content was advanced, since the content of instruction was carefully selected.” (P)

“We added various dates of school events, integrated study activities, life science, and classroom activities into the ESD calendar so that we can work systematically with vision.” (P)

Some teachers referred to the cross-curriculum, which is the same approach as the ESD calendar.

“Cross-curriculum was created. We conducted lessons which involved students’ direct experiences.” (P)

“Mainly focusing on integrated study time activities, we discussed how to combine all curricula in a cross-sectional and integrated manner.” (P)

“We plan lessons utilising academic knowledge and skills cultivated by each ordinary subject into integrated studies.” (P)

4.1.2. Learner-centred Learning

Achieving a shift to learner-centred, subjective learning is usually mentioned as a key factor in the effectiveness of ESD. Active learning plays an important role in this context. The Japanese Ministry of Education has recently promoted ‘active learning’ as part of educational reform.

“Transformation from teaching by injecting knowledge to subjective learning by the students was advanced, using active learning, facilitators, workshops etc.” (P)

“Previously, tasks and activities were given from the teacher’s point of view. Now, school education has shifted; for example, students find out issues subjectively and collaboratively, and they work to find solutions to the problems cooperatively.” (P)

“With a focus on active learning, we are conscious of the process of discussion.” (LS)

4.1.3. Collaborative Lessons

Previous studies mostly focused on secondary school teachers’ conceptual understanding of ESD; a majority of those teachers recognised the centrality of environmental perspectives. However, a problem with recognising that environmental issues are central will be cleared up if various individual teachers collaborate to manage sustainable lessons. Teachers stressed that collaborative lessons created by teachers of different subjects moved forward because of the enhancement of ESD.

“Before, only single professional teachers were responsible for their teaching. Now, experimental and advanced teaching (of ESD) has been developed, such as collaborating with various institutions and using human resources.” (US)

“The number of teachers who manage lessons using active learning methods, collaborative classes between science and English, English teachers teaching subjects other than English: these types of pedagogy have been promoted as “scholarship support projects” by the Board of Education. Now teachers are discussing the development of collaborative lessons.” (US)
“We are able to arrange lessons not just to transfer knowledge to the students but also to adopt a participatory learning approach that emphasises exploration and practice with experience.” (US)

4.1.4. Locality

Something unique to teaching and learning in the Japanese school system is the concept of ‘locality’ or ‘district’, which frequently appeared in the responses. Familiarising students with local issues allows them to tackle the problems of local districts and to sustain those districts’ advantages: the beauty of nature, local products, history and culture, etc.; this is a central learning style in ESD. As a result, students gain love for their local area and local pride is promoted.

“Through activities used to familiarise students with the river, investigate the river, and protect the river of our district, ESD teaches how to work on various activities to support students’ love and pride for their local district.” (P)

“During integrated studies, a teaching method was developed; students were able to think how to sustain their excellent point[s] of their district in the future, and act and disseminate information on their own.” (P)

“The combination of teaching material from local educational resources and student-centred learning increased.” (P)

The following comment was typical in the way that it expressed the transformation of teaching in ESD, commenting on active learning and collaboration among different subjects, schools, and local communities.

“Language activities and active learning are actively adopted in classes. Students’ ability to think, expressive skills, and problem-solving skills have been increased in each subject. In addition, the sense of collaboration among different subjects, schools, and local communities takes place in the school, and the utilisation of local educational resources is promoted”. (P)

4.1.5. Critical Thinking and Democratic Decision-Making

As noted, pluralistic ESD requires learner-centred and interactive teaching strategies such as critical thinking, participatory decision-making, value-based learning, and multi-method approaches, instead of traditional teaching.

In these teacher comments about ESD methods, the main emphases were on the whole system, for example, the use of integrated studies (mentioned 37 times), cross-curriculum development (13), and the ESD calendar (12). The fact that ESD is learner-centred (26) learning in the society (23) focussed on collaboration with local community and based on active learning (20) also frequently appeared. In contrast, critical thinking and democratic decision-making, both found in the study by Mogensen and Schnack (2010), were never referred to in the Japanese context of ESD.

4.2. Transformation of Learning

The above-mentioned results reflect the change in the teaching methodology adopted or undergone by teachers teaching ESD. There were also a few comments about the ‘transformation of students’ learning’.

To understand this latter transformation, the present research analyses question no. 16 from the 2016 questionnaire results: “Comment on the effectiveness of the trans-
formation of students after participating in the UNESCO Associated School project and becoming a school that addresses ESD*. All in all, 265 comments on this question were collected.

4.2.1. Behaviour Changes

In these comments, taken as a whole, teachers indicated that students began to be aware of sustainable issues and view them as their own problems. Teachers also emphasised that the awareness led to behaviour changes.

“Students began to be aware of energy and environmental problems as their own problems. That is because students started to learn about the connection between their daily life and energy, the natural environment.” (P)

“Students increase their motivation to think and practice what they can do by themselves.” (P)

“Students’ ability to solve problems, ability to communicate, ability to take action to create a sustainable society have been increasing.” (P)

“The number of children who consider and work for the improvement of their local district has increased.” (P)

4.2.2. Local ESD Study

Similar to what we saw with question no. 19, ‘local’ and ‘district’ frequently appeared.

“By developing activities which were linked with local communities and related organisations, we were able to have a variety of genuine experiences.” (P)

“The number of students who have learned to act ambitiously to protect the local environment has increased, along with the mind-set of loving their local regions.” (P)

“Through lessons related to the environment, depopulation of communities, disabilities (handicaps, braille, sign language experience), students are increasingly aware of their roles in a sustainable society.” (LS)

These comments help reveal the typical student learning style in ESD in Japanese compulsory education. By using local resource materials and conducting experiential activities, students’ awareness of their local district deepens, and students then start to tackle with difficulties of the local society such as declining population, protection of natural environment, and preservation of traditional culture by themselves. These actions generally positively affect student motivation toward learning, and lead to the cultivation of students’ love and pride towards their local community (see Fig. 2).

Bentham (2013) suggested that the ESD teaching and learning approach should include development of action competence; involve decision making and community-based decision making (for instance, debates and action plans); engage in community and social development activities, active learning methods (for instance, environmental impact assessments); explore ways of solving local contextually relevant problems. The context of teaching and learning in Japanese ESD schools is in the line of this concept.

“By using local resource materials and conducting experiential activities, students’ awareness of their local district has deepened. Students also pick up on local issues and problems depending on their own awareness, and tackle these issues subjectively.” (P)

“Students’ communication skills improved because of communication with local people. Students’ civic pride (pride in the local community) increased because they learned about their local district. Motivation to learn increased throughout the use of these activities.” (US)
The holistic understanding of ESD has three essential aspects, each itself tripartite: connecting the environmental, social, and economic dimensions of Sustainable Development (SD) issues; integrating their past, present, and future implications; and focusing on their local, regional, and global nature. Based on the analysis of the comments regarding student transformation, environment and nature came up most often (appearing 87 times), followed by society and culture (64 times); economy appeared only once. However, the most emphasised concept was ‘local (community)’, which appeared 183 times.

This means that in the context of education in Japan, local community, including issues such as disruption of local society and economy because of declining population, is the topic whose relevance is most keenly felt. This reflects the fact that most of the Japanese ESD schools are primary, and so many of the study topics and materials that they select are from their school district and local area, which is the most meaningful geographical frame for young children.

4.3. International Comparison

Laurie, Tarumi, McKeown, and Hopkins (2016) carried out studies in 18 countries to identify contribution of ESD to high-quality education. One main question posed by their research was, “How can ESD promote innovation in the teaching–learning conceptual framework?”

The results of research conducted by Laurie et al. demonstrated that ESD contributed to improved teaching, yielded a strong argument for maintaining and even augmenting its role in education systems, and emphasised that ESD prompted innovative teaching approaches and methodologies such as project-based learning, experiential education, cooperative and peer learning, as well as teaching and feedback. As mentioned above, similar transformations are very clear in the present research.

The same authors also noted that the focus in many ESD schools is changing from teaching to learning, as teachers come to understand their role more as that of coaches and change agents and are no longer constrained to traditional roles (the study was conducted in Australia, Belgium, and Latvia). Furthermore, cases of teachers and students designing school activities collaboratively were also reported (the study was conducted in Finland).

The present research also revealed that school education had shifted, with more student activity related to finding out about issues subjectively and collaboratively, and
working collaboratively to find solutions to problems. Learner-centred classrooms have also been realised effectively in the ESD content in Japan.

However, from the present research, it cannot be said that teachers clearly understand their role as coaches and change agents, and there were no reported cases of teachers and students collaboratively designing school activities. Therefore, there is still space for more profound teaching and learning growth in ESD in Japan.

Conclusion

A key role of ESD in an action competence context is to develop students’ ability, motivation, and desire to play an active role in finding democratic ways of transforming society for sustainability. Although there are many arguments about the effectiveness of ESD, the comments about the Japanese public education system by the teachers surveyed here indicate that at least in relation to the local environment, community welfare, and depopulation of communities, the students are increasingly aware of their role and the need to act ambitiously to create a sustainable society. It appears that the methods of ESD are effective at empowering and motivating students to take action for sustainable development in the context of Japanese primary and secondary education.

In the present research, the most frequently appearing concept in relation to both questions is ‘local (community)’. A typical student learning style was familiarising themselves with local issues to tackle the problems of local districts, and thinking about how to sustain local advantages by engaging local skills. As a result, students are expected to gain love for and pride in their local district.

Concerning the pluralistic nature of ESD, in Japan, the ESD curriculum is integrated throughout the whole school and linked with the integrated study time and other subjects and areas. The whole school system (e.g., integrated studies, cross-curricular activities, and the ESD calendar) is the typical approach for Japanese teachers. Integrated study activities, ordinary subjects, and classroom activities are all connected on the ESD calendar, so that schoolwork systematically combines with a vision toward sustainability.

On the other hand, critical thinking and democratic decision-making, which were important in previous studies (Mogensen and Schnack 2010; Bentham 2013), were never referred to in the Japanese ESD context. In addition, teachers did not seem to understand their role as coaches and change agents, and there were no cases of teachers and students collaboratively designing school activities. There is thus still space for more profoundly learner-centred classrooms in Japanese education.

In an international comparative study, Laurie et al. (2016) stated that ESD was best implemented when issues were addressed in multidisciplinary ways and across curricula. When collaborating on interdisciplinary projects, multidisciplinary approaches enable teachers to learn about curriculum content in areas outside of their specialty. The present research supported this idea, as teachers emphasised that collaborative lessons with teachers from different subjects were effective for the enhancement of ESD. As one teacher noted, “Before, only a single professional teacher was responsible for their [own] teaching. Now, advanced teaching of ESD has been developed using collaboration with various organisations and human resources”.

Previous studies on individual teachers’ experience of ESD mostly focused on secondary school teachers; these studies showed that only a few teachers had a holistic understanding of ESD. However, these issues can be mitigated if teachers are collaborating
on interdisciplinary projects. Therefore, further research should focus on these types of approaches and on determining the effectiveness of the whole-school approach to ESD.

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School-based Teacher Training in Jordan: 
Towards On-school Sustainable 
Professional Development

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Abstract
Despite the challenges to develop school-based sustainable teacher training and development and the diverse demands to execute this type of teacher professionalism to achieve sustainable teacher development, this new trend seems indispensable both for Jordanian teacher education and many other similar world educational systems. The present qualitative study robustly relied on a set of self-reports developed by 12 doctoral students who took a teacher education course at the University of Jordan in the second semester, 2017. They self-reported on their perspectives on school-based teacher training in terms of its significance, requirements, challenges and possible solutions to develop this route to teacher training in a country which like several other educational systems worldwide was dominated by an academic theory-based route to teacher preparation and qualification. Their self-reports were analysed and their patterns concerning the reasons behind adherence to school-based teacher training and the facilities to promote it and the challenges for school based teacher training were collected and meticulously probed. The findings of the study noticeably advocate school-based teacher training as a major route to teacher training. The participants of the study obviously considered this training route a method to transfer training experience to the teachers’ classroom instruction. Some recommendations were proposed calling for adopting this new training approach and conducting further research in this emerging paradigm.

Keywords: teacher education, school-based teacher training, sustainable professional development

Introduction
Teacher education for sustainable development is an educational paradigm that considers life-long professional development and learning of teachers as the main hub of teaching practice. Sustainability and sustainable development have recently become widely discussed in the educational arena, in general, and in teacher education and development, in particular. For example, Salite (2015) called for the reorientation of teacher education towards sustainable development. At the heart of the debate on sustainable professional development of teachers, there is the shift from traditional one to
more school-based teacher professional development, which the present study attempts to address. Recently, sustainable education and teacher education integration into the wider system of higher education and teacher education milieu have attracted the attention of policy makers, educationists and researchers who are willing to make these people care about issues and concepts that relate to climate change and global warming among other related global issues and concerns. Teacher education is being viewed to take the lead and consider such issues. Teachers are urged to equip themselves with new skills and high standard professional knowledge to assume new roles and responsibilities in sustainable education in their societies (Kabaday, 2016). Teacher education in the context of sustainable education should abandon conventional teaching models and shift to a transformative model of education to account for the twenty-first century humanity demands for living sustainably in a globalised world (Bell, 2016). With this new trend in teacher education, teachers are essentially required to exhibit teacher renewal and professionalism.

According to Williamson and McDiarmid (2008), the continuum of teacher learning as well as teacher education turns out to be indispensable in a lifelong learning process which implies the demand for extended teacher professionalism. This implies that teacher education and learning, which the present study is premised on, should continue through the whole teacher development and should feature all teacher experiences during career long learning.

The present study, basically, envisions a new model of teacher education and training which puts special emphasis on the school as the key site for sustainable professional development of Jordanian teachers rather than the conventional all-for-all trainees model, which according to some research, is excessively theoretical and hypothetical in nature while the recent trend gets to line up with sustainable education of teachers.

**Background of the Study**

As the context of this study, the educational system in Jordan, resembling several world educational systems, aims to achieve modernisation, productivity, good citizenship and social and sustained economic growth of the country. It also desires to equip Jordanian people with life-long skills and experiences by creating an educated population and well-skilled workforce. The ultimate goal of achieving teacher education goals will turn to be a reality when there is a sustainable educational system that can achieve these objectives. The vision of the educational structure in Jordan is to respond to and stimulate sustained economic growth through an educated workforce and population.

In Jordan teacher education used to be the responsibility of two-year teacher institutes. It was not until the end of the 1980s when teacher education in Jordan started to take its initial shape with the first educational reform conference held in 1987. Consequently, the 1990s witnessed the attachment of teacher education programmes as supported by a Jordanian-European project to achieve the main objective of boosting teacher education in the country. Therefore, most governmental universities in Jordan established teacher education programmes to train prospective teachers (Abu Naba’h and Abu Jaber, 2017). Around 2004, teacher education programmes at Jordanian universities were reduced to a smaller number of programmes.

The Jordanian Ministry of Education recognises that developing the quality of teacher education is the major priority for the Jordanian national development where
the main tool to achieve this goal encompasses the development of the quality of teacher education adopting various reform policies and strategies, on the top of which there is the improvement of teacher training. Therefore, the Ministry’s response took the shape of a national project ‘The Education Reform for Knowledge Economy’ (ERfKE) which was divided into the two main phases: ERfKE I that took place in the period of 2003–2009, and ERfKE II that took place in the period of 2010–2015. The main goal was to enact an educational reform to improve professional development of teachers apart from other educational goals.

Since then, calls are on rise to get the Ministry of Education to support teacher education and training recognising the role played by teacher education programmes at Jordanian universities. Recently, there have been calls for school-based teacher education for various merits perceived by the Ministry of Education to prepare prospective teachers. This is supported by dissatisfaction with the traditional platonic form of teacher education where academies were awarding degrees and qualifications to teachers who, according to several educationists and practitioners, were not sufficiently educated and trained to account for the teaching responsibilities and the changing forms of the teaching profession. Meanwhile, there were calls for establishing partnerships between teacher education programmes and projects and initiatives of the Ministry of Education to educate and train teachers, but, until now, these remained mere calls to be applied.

Teacher education in Jordan, as the case of many world counties, is in a continuing flux due to domestic and global professional development, teacher education, training changes and trends seeking sustainable teacher education and development. Due to the increasing and widespread criticism of centralised in-service teacher training where large numbers of new (prospective) teachers are brought together and taught theory, the on-site (decentralised) sustainable teacher training has come to the surface and seems to receive a popular reputation and support over the centralised route for several reasons. In consonance with these directions, UNESCO Recommendations for Reorienting Teacher Education to Address Sustainability (2013–2014) exemplified the demand for the reorientation of curricula and teacher education.

The conventional in-service training is based on holding training courses and workshops for large numbers of newly appointed school teachers. They are assumed, after finishing their in-service training, to transfer mostly theory they received from their trainers to classroom instruction. This has recently turned to be a less favoured option due to various shortcomings of this form of teacher training among which there is the discrepancy between the training input received from these programs and the school instruction and teacher demands. Therefore, there is an urgent demand for school-based teacher training, rather than the conventional form of in-service teacher training, which tends to get the attention of policy makers in the educational sector and gains the attention of teachers and supervisors, as well as school principals. In 2005, the School-based Teacher Training Conference was held in Jordan, which attracted the attention of the Royal Committee for Education, teachers, supervisors, as well as the personnel and experts of the Ministry of Education. The conference was also supported by international agencies such as the USAID. Now, it has become popular that the school-based teacher training is the most possible route to teacher training though there are calls for a partnership between universities and the Ministry of Education for the preparation of potential prospective teachers, in-service teacher training and the sustainable development of teachers. Some international trends, such as in England, call for initial
teacher training being the province and be hosted by the schools with focus on this trend over the university-led route. School-based teacher training, according to international literature, enables the trainee to influence the school environment, especially in the domain of behavioural management skills. Training at school deepens links with schools and may offer the trainee an opportunity to find a post at school after finishing the training programme. It is believed that the school-based teacher training provides a solid foundation for success in the future. Erawan (2015) did not support the used form of in-service teacher training and due to factors that have to do with the school management and direct supervision of teacher training and continuity of life-long skills, the scholar, alternatively, tended to favour the school-based teacher training route.

**Research on the In-service Teacher Training and the Continuing (Sustainable) Professional Development**

Various research studies have highlighted the career-long professional development and learning so as to improve teacher quality (Day, 2002; Niemi, 2015). The shortcomings of the initial teacher preparation were identified demonstrating the inadequacy of this preparation to meet the needs of teachers to develop their professional learning via their teaching careers. Until 2005, research drew attention to factors impacting teachers’ work and the on-going commitment, stamina and effectiveness of teachers throughout the teachers’ professional life cycles (Day & Gu, 2007; Sammons, Mujtaba, Earl, & Gu, 2007).

Worldwide, there is an increasing perception of the careful development of teachers professionally during the course of their professions to be effective teachers. This requires provision of support and retaining of teachers to create an effective learning environment so as to improve learning and support the work environment for teachers to develop and to keep on developing the teachers’ expertise (Evers, Van der Heijden, & Kreijns, 2016). This would mean the improvement of the whole school environment. This cannot be achieved without collaborative teachers who should demonstrate coherence with school policies, curricula, focused content and inquiry learning approaches (Badri, Alnuaimi, Mohaidat, Yang, & Al Rashedi, 2016).

As stated above, the need for robust and systematic teacher preparation and development has gained increasing momentum. As far as the on-site- professional development is concerned, this has been found to include multiple routes to teacher development such as mentoring, peer coaching, observing teachers, modelling and providing feedback to other teachers. Practice is enhanced in an on-going process when the continuing professional development of teachers offers richer professional development experiences than is the case with short term teacher development (Kelly, 2006).

The present mainstream seems to support professional development when it goes with the school culture and when it exhibits attributes of peer-learning, cooperative and sustainable development (Darling Hammond & Richardson, 2009). There is evidence that supports collaborative continuing professional development that aims to meet the professional development needs, while similar evidence supports that teachers need to have ownership over their professional development.

According to Mohammadi and Moradi (2017), continuous professional development is valuable for teachers in implementing sustainable education. Therefore, the exploration of the perceptions of teachers could be an important attempt since their
beliefs influence their classroom practices, thus affecting their students’ learning. The findings of their study demonstrate that beliefs about continuing professional development are subject to change. This result was also consolidated by a set of semi-structured interviews. The results also demonstrated that the participants considered professional development programmes to be useful. The study provided some pedagogical implications directed toward sustainable professional development.

Gholami and Qurbanzada (2016) found out that in-service teachers had a negative perspective towards the impractical courses which tended to be not practical in the real classroom environment and they regarded them as less powerful. The participants of the study found courses related to teaching like teaching methodology, of special sustainable nature and beneficial in the actual teaching context. Further, the participants asserted that it was necessary for the universities to integrate practical courses such as the practicalum as well as classroom observations in the university curriculum to promote more genuine learning.

Kabadayi (2016) investigated pre-school teachers’ needs concerning in-service training courses to put forward an effective model built up on their needs assessment to attain sustainable Turkish education. Referring to Salite (2008), she called for on-site training courses that can be like an agent for educational change by the teachers who are willing to expose themselves to the challenges and innovations of teaching.

Cordingley and Bell (2007) suggested that teachers can be supported in their sustainable professional development when there is the help from an expert. Strong evidence has found that teachers establish a starting point in their professional needs where training is tailored along with such needs. This meant that teachers with specialist expertise assumed autonomy as they progressed in their training.

A study by the OECD (2009) indicated that school leadership can play an important role in the development of other school teachers. School leaders with a strong instructional leadership may benefit from further professional development to remedy teachers’ weaknesses, promote good student-teacher relations, create teacher collaboration, and encourage teachers to achieve innovative teaching strategies. According to Drago-Severson (2007), this can be achieved by offering leadership roles to teachers; ensuring teaming, collaborative inquiry as well as reflective practice and mentoring.

Buitink (2009) studied how student teachers learn how to practice teaching during the school-based teacher education programme. The study explored the changes that student teachers experienced in their practical theories and reflected on the student teachers modification of their theories. All eight student teachers were monitored during their teaching practice. The study revealed that all participants expanded their broad, well-structured practical theories, which focused on their pupils’ learning strategies. However, their learning strategies exhibited substantial individual variation. Based on the study findings, the learning in a work-based context was highlighted.

Arani (2001) conducted a study that used the case study method to describe the characteristics of Japanese school-based in-service teacher training programmes, which were designed to help teachers improve their competence and the quality of their teaching activities. The data came from observations of and interviews with teachers in classrooms within 10 public elementary schools. School-based in-service teacher training is based on planning and conducting collaborative research activities. Teachers learn from each other, from their relationships with students and from enhanced professional dialogue. Japanese teachers view professional development and enhancement of their teaching
skills as a lifelong pursuit. They know that experience, self-study, critiques of their teaching by their colleagues and self-reflection are important parts of this process. Instead of one-time workshops on the latest educational topics, they are engaged in a long-term process of self-reflection and development. The study proposed a model of improving teacher competence that consisted of four teacher improvement efforts: teachers on their own; teacher-student relationships; teacher collaboration and finally teacher-parent cooperation.

Hurd (2008) investigated the effect of teacher training on secondary student outcomes. The additional benefit schools receive from involvement in teacher training offers the school an opportunity to uplift standards, but this might influence the school students’ achievement by getting students being taught by inexperienced prospective teachers and the resulting diversion of mentors’ efforts from the classroom instruction. The findings of this study revealed that the number of trainees did not have any significant effect on school results. Depressing effect was left in case of low number of trainees while, on the other hand, larger numbers did not have a negative effect.

Badri, Alnuaimi, Mohaidat, Yang, Al Rashedi (2016) reported on findings from the 2013 study for Abu Dhabi that collected teachers’ views on teaching and learning with a special focus on teachers’ professional development. The aim was to understand teachers’ perceptions regarding professional development needs and influences as well as the barriers encountered by Abu Dhabi secondary teachers. The study threw light on the variations of their views in relation to other independent variables such as teachers’ age, gender and type of the school. The most prevalent variation was observed concerned public or private schools. Male teachers consistently assigned higher perceived influence scores than female teachers. Public schools, on the other hand, assigned higher influence scores for the activities which they participated in. Female teachers assigned higher barrier scores to five of the seven barriers to the participation in professional development tasks. The research recommended that the professional development programmes should ensure the effectiveness of the professional development chances for educators in Abu Dhabi educational zone.

Niemi (2008) envisioned teacher professional development as if it were a continuum which extended from pre-service education and continued through the newly qualified teachers’ induction stage, and covered a career-long development. According to the scholar, Finnish teachers’ work contexts provide high level of professional autonomy in their work. The role of pre-service teacher education is to prepare them for this responsibility. Previously, in-service training occurred over training days and via short training courses. The new training trend looks at teachers as developers in the school community. Teachers should design school-based projects and their development is part of the whole school development. The article reflected on new forms in which this new trend was implemented where, for example, the school supported the multi-professional cooperation in the school community. The other is to design a school community which uses a design-based approach in cooperation with many partners, and the third form implies the promotion of connection between pre-service and in-service research-based teacher education and, finally, the promotion of induction for new teachers.

Alkhawaldeh (2001) conducted a qualitative investigation on language teacher education models in Jordan. He reflected on three models that used to shape teacher education from the perspective of various stake holders including university professors, mentors, student teachers and school supervisors. The first model was the university-
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based model that asserted the role of academy in teacher preparation and academics believe that the student teachers should possess knowledge of different academic theories to practice teaching. The second model was the partnership model between academy and institutions that employ teachers as workforce in schools. This trend was believed to get all stakeholders to reach a consensus among them to agree on the standards and the theories which teachers need to practice teaching. A final model or route was the school-based one. It has recently started to attract the attention of many stakeholders that believe in the on-site or work-based teacher education where teachers are directly supervised by more capable peers who are more knowledgeable about teaching and who can transfer their experiences to those who need knowledge and experience about teaching. The present study matches with this direction as it is receiving continuing attention and can potentially achieve the sustainable professional development of prospective teachers.

Statement of the Problem

Through teaching graduate courses in curriculum and instruction, the researcher has noticed the general allegiance among graduate students who are mostly practicing teachers at Jordanian and some regional schools and universities to a kind of teacher training that is based on the school. Most of them tend to favour the on-site route to the training and preparation of teachers. The Jordanian teacher education and training was traditionally dominated by theory-based teacher education and training where either pre-service or in-service professional development was mostly built up on the premise that a new teacher was provided with knowledge about teaching and some practical application and was then supposed to translate the acquired knowledge and experience into classroom teaching practices, which, according to many stakeholders, did not fully turn into reality. Calls and projects to make teacher education more decentralised and based on the school, has recently captured the attention of policy makers, school principals and educationalists. This new trend was coupled by international calls to set the school as the centre for the teacher sustainable professional development as the school could afford training to its teachers to be less costly and more workable on condition that it could spot teacher experiences and prepare or allocate mentors of more experience and knowledge about teachers who could transfer this experience and knowledge to less experienced teachers at their schools. The present study investigates this new phenomenon in the area of teacher education in Jordan, taking into account the factors that push teacher education towards the school-based teacher education, which is expected to foster life-long sustainable professional development.

Purpose and Questions of the Study

The present study investigates the shift in perspective from theory-based teacher training to school-based sustainable teacher training as experienced by a cohort of doctoral students taking a course on teacher education at the University of Jordan. What follows is a set of research questions which the present study attempts to address.

1. What are the reasons behind favouring sustainable school-based teacher education?
2. What qualifies the school to be the centre for school-based teacher training?
3. What are the challenges that may encounter sustainable school-based teacher training?
4. How does the school overcome the challenges to develop sustainable school-based teacher training?

Participants of the Study

12 PhD students taking teacher education course at the University of Jordan as part of their doctoral study requirements provided their opinions on the on-school teacher training. All of these doctoral students were preparing for a doctoral degree in (General) curriculum and instruction. A few of them were occupying key positions in their countries. Two of them were Yamani students, one Emirati, while the rest were Jordanian students. Most of them (11 students) were practicing teaching at various levels in their countries and seemed familiar with school-based teacher training. At present, school-based teacher training is receiving attention of educationists, teachers and policy makers.

Significance of the Study

The present study addresses the views of a cohort of (12) highly qualified school teachers. It will be more useful and valuable to several concerned people among which are those who do care about shifting teacher education to achieve school-based teacher training to attain sustainable professional development. This new trend will be more attainable if policy makers are enthusiastic and willing to reform teacher education. Schools, whether private or public, will find the outcomes of this study uniquely related to their policies as sustainable professional development. Several education directors at various educational directorates may find the results of the study highly useful as well. Finally, the researchers who search into areas of teacher education, in general and sustainable professional development of teachers’ instructional performance, in particular, may benefit from the findings of this study and can also build up on these results to explore more about the possibilities of making school-based sustainable professional development a reality.

Limitations of the Study

This current study was limited to the research tool which was the self-report instrument used for the purpose of this study. It was also confined to a sample of 12 participants of doctoral students taking a course on teacher education at the University of Jordan, who reported on the new perspective of school-based teacher training. The time line of the study was also a restriction where the study was conducted during the second semester, 2017.
Research Tools

The research tool used in the study consisted of a self-report where the participants voiced their views on the significance of school-based teacher training, the reasons behind adopting the school-based teacher training, the requirements to execute this type of training, the challenges encountered and suggestions to overcome these challenges. Five specialists in the field of teacher education from various sub-disciplines who held PhD degrees established the validity of the research tool. The self-reports were written at the end of the second semester, 2017. They were collected and analysed by looking for patterns in the responses of the participants of the study.

Validity

The form of self-report items was forwarded to eight university specialists in teacher education and curricula from various universities in Jordan. After reviewing the items of the self-report, all reviewers agreed on the suitability of the instrument and suggested a few points to modify it. The final version was produced taking into account the comments and remarks of the reviewers.

Reliability

After establishing the inter-rater reliability of the self-report instrument by getting two analysts to analyse the data obtained from the reports and calculating agreement between the two analysts, the researcher looked for patterns among the responses to the research questions. The responses were tabulated to serve the purpose of this study.

Data Analysis

Data collected via the qualitative tool in the study were qualitatively analysed. First, responses to the items of the self-report were coded and intensified to allow for patterns to emerge from the mass of data. Secondly, responses were grouped according to the questions in the self-report. Thirdly, related responses were used to answer the research questions. Finally, essential quotes were selected to support and cross match with related responses.

Findings

The results of the present study set out the reasons for selecting school-based teacher training, the requirements and facilities available in the school that are likely to facilitate school-based teacher training, the challenges encountered by the execution of the school-based teacher training and, finally, address the issue development of school-based teacher training.

Table 1 presents the merits of school-based teacher training highlighting among these the flexibility of this kind of training, the consideration of individual teacher’s needs, the qualitative improvement of the school instruction and the development of positive attitudes among teachers toward the teaching profession. School-based teacher
training cannot be implemented without guaranteeing, for example, a school environment supporting this new route of teacher training.

Table 1

<table>
<thead>
<tr>
<th>No</th>
<th>Reasons for adopting school-based teacher training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Needs of school teachers are considered following this kind of school training</td>
</tr>
<tr>
<td>2</td>
<td>On-site training can qualitatively improve teacher’s teaching performance</td>
</tr>
<tr>
<td>3</td>
<td>Training outside the school does not consider individual needs of teacher and the school</td>
</tr>
<tr>
<td>4</td>
<td>On-site training can unify teacher’s school related discourse and intersect with the school policy and system</td>
</tr>
<tr>
<td>5</td>
<td>Unification above can enable the school to integrate the curriculum that can finally improve the learning performance of the school students</td>
</tr>
<tr>
<td>6</td>
<td>Leaders should have training inside the school to enable teachers to have coherent language and strategies</td>
</tr>
<tr>
<td>7</td>
<td>On-site training can offer opportunities for all school teachers</td>
</tr>
<tr>
<td>8</td>
<td>This new training guarantees easiness of measuring effect of training by measuring learning achievement among school students</td>
</tr>
<tr>
<td>9</td>
<td>The school can guarantee the fulfillment of the needs for professional development of teachers</td>
</tr>
<tr>
<td>10</td>
<td>The school can make up for any shortages in the teacher’s qualifications resulted from initial teacher training and preparation</td>
</tr>
<tr>
<td>11</td>
<td>The school can guarantee offering the teachers training tailored around their speciality, the stage they teach and the level of their students</td>
</tr>
<tr>
<td>12</td>
<td>On-site training opens the chance for collaborative discussion and debate with the trainer where this can be followed up with the teacher immediately and possibly simultaneously during training</td>
</tr>
<tr>
<td>13</td>
<td>This training enables the teacher to overcome real problems encountered in real-life teaching</td>
</tr>
<tr>
<td>14</td>
<td>Positive attitude toward teaching is developed</td>
</tr>
<tr>
<td>15</td>
<td>Teacher’s attitude toward the school at which they train is developed</td>
</tr>
<tr>
<td>16</td>
<td>The trainee teacher has commitment toward the school where he or she trains</td>
</tr>
<tr>
<td>17</td>
<td>The trainee teacher becomes more flexible and can have self-renewal due to school-based teacher training received</td>
</tr>
<tr>
<td>18</td>
<td>This approach enables teachers to develop their teaching skills</td>
</tr>
<tr>
<td>19</td>
<td>On-site training can qualitatively improve teacher’s teaching performance</td>
</tr>
</tbody>
</table>

Table 2 highlights that the school principal should possess knowledge and skills to practice the role of introducing and implementing teacher training at school. It also requires that the school administration should be able to assess the skills and knowledge of school teachers to decide how to improve their teaching methods and skills.
Table 2
Requirements for the Development of the School-based Teacher Training

<table>
<thead>
<tr>
<th>No</th>
<th>Requirements for implementing school-based teacher training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The school principal should possess the essential knowledge and skills that enable him to play such a role.</td>
</tr>
<tr>
<td>2</td>
<td>The school administration should be aware of how to assess teachers’ teaching performance and identify the weaknesses and strengths in order to develop the skills of strong teachers and improve those of less-experienced teachers</td>
</tr>
<tr>
<td>3</td>
<td>Offering incentives for teachers</td>
</tr>
<tr>
<td>4</td>
<td>A well-resourced training environment should be guaranteed</td>
</tr>
<tr>
<td>5</td>
<td>Availability of educational technology equipment in the school</td>
</tr>
<tr>
<td>6</td>
<td>The school administration can help teachers sort out any problems encountered in the process of training</td>
</tr>
<tr>
<td>7</td>
<td>The school should keep abreast of the recent instructional and training trends</td>
</tr>
<tr>
<td>8</td>
<td>The school principal should possess the essential knowledge and skills which enable him or her to play such a role.</td>
</tr>
<tr>
<td>9</td>
<td>The school administration should be aware of how to assess teachers’ teaching performance and identify the weaknesses and strengths in order to develop the skills of strong teachers and improve those of less-experienced teachers</td>
</tr>
</tbody>
</table>

Table 3
Facilities that Qualify the School to Host School-based Sustainable Teacher Training

<table>
<thead>
<tr>
<th>No</th>
<th>Facilities that facilitate implementation of school-based teacher training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Teachers’ experiences and school administration’s experiences</td>
</tr>
<tr>
<td>2</td>
<td>The school is the site where action research can be conducted directly and where application of recommendations is possible</td>
</tr>
<tr>
<td>3</td>
<td>The school is the site where training quality can be directly judged and compared among several teachers’ experiences</td>
</tr>
<tr>
<td>4</td>
<td>The school is the place where school facilities can be benefitted from</td>
</tr>
<tr>
<td>5</td>
<td>The school can explore and determine teacher’s shortages and their lack to training and skills</td>
</tr>
</tbody>
</table>

As the school is the site where teacher training should take place and action research is conducted, school facilities are, therefore, benefitted from. The school is therefore more able to explore and determine the training teachers should have.

School-based sustainable teacher training is likely to face several challenges that may make its implementation difficult as outlined in Table 4.

According to Table 4, several challenges face the implementation of school-based teacher training such as lack of qualifications of some school principals and teachers, teacher overload of teaching and administrative responsibilities, lack of sufficient knowledge among some school teachers about recent theories and methods of teaching, insufficient co-operation among some school teachers to transfer their experiences and knowledge to less-experienced teachers, lack of knowledge about the vision of the school-based teacher training and the lack of sufficient incentives for experienced teachers to act as mentors of less-experienced teachers.
Table 4

Challenges Encountered in the Adoption of the School-based Sustainable Teacher Training

<table>
<thead>
<tr>
<th>No</th>
<th>Challenges to school-based sustainable professional development of teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lack of sufficient teacher experiences due to promotion or transfer from school to school</td>
</tr>
<tr>
<td>2</td>
<td>Overload of teaching responsibilities among teachers that forces them to cover the instructional material</td>
</tr>
<tr>
<td>3</td>
<td>Classroom size and over-crowdedness that take most of the time of teachers</td>
</tr>
<tr>
<td>4</td>
<td>Disinterest among several teachers to attend training courses or considering them routine work without any benefit therefore training focuses on the theoretical side and ignores practical training</td>
</tr>
<tr>
<td>5</td>
<td>Teachers’ beliefs about their significant selection of the teaching profession may be a challenge in their quest for further professional development</td>
</tr>
<tr>
<td>6</td>
<td>Lack of support from the local community to have on-site teacher training</td>
</tr>
<tr>
<td>7</td>
<td>Not all schools have a vision about the outcomes of school-based teacher training</td>
</tr>
<tr>
<td>8</td>
<td>Satisfaction among some schools with the minimum level of teacher’s skills to practice teaching</td>
</tr>
<tr>
<td>9</td>
<td>Lack of experienced teachers and supervisors to improve other teachers’ levels</td>
</tr>
<tr>
<td>10</td>
<td>Teachers overloaded with the work of the school and scarcity of time to mentor other colleagues</td>
</tr>
<tr>
<td>11</td>
<td>Lack of educational leaders in schools to lead school-based sustainable teacher training</td>
</tr>
<tr>
<td>12</td>
<td>Some school administrations are not qualified and knowledgeable of the new educational developments in the field of teacher training</td>
</tr>
<tr>
<td>13</td>
<td>Lack of co-operation among some colleagues to transfer their experience to less-experienced teachers via school-based sustainable teacher professional development</td>
</tr>
<tr>
<td>14</td>
<td>Insufficiency of the basic initial teacher training during pre-service teacher education where some teachers do not take any educational courses during studies at the university</td>
</tr>
<tr>
<td>15</td>
<td>Lack of sufficient teacher experience due to promotion from one position to another or transfer from school to school</td>
</tr>
</tbody>
</table>

Finally a set of suggestions are proposed by the participants of the present study to improve school-based teacher training.

Table 5

Proposals to Develop School-based Sustainable Professional Development of Teachers

<table>
<thead>
<tr>
<th>No</th>
<th>Suggestions to develop school-based sustainable teacher training</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Assessing teachers’ actual needs to reach a professional model that fits their actual development</td>
</tr>
<tr>
<td>2</td>
<td>Linking teacher’s promotion with the training received that is likely to develop the training culture among teachers</td>
</tr>
<tr>
<td>3</td>
<td>The school and the local community should support teachers to receive on-site teacher training to become creative in their teaching</td>
</tr>
<tr>
<td>4</td>
<td>The trainer should be acceptable by the trainees and also should be flexible as well as cooperative and applicable</td>
</tr>
<tr>
<td>5</td>
<td>The school teachers should keep up with the most recent developments in their speciality and methods of teaching</td>
</tr>
</tbody>
</table>
School-based teacher training should be based on the actual needs of school teachers, receive support from different stakeholders, develop trainer–trainee relationship as well as school teachers should update their teaching methods and strategies.

**Further Qualitative Evidence from the Self-reports Supportive of the Sustainable School-based Teacher Professional Development**

Highlighting school-based teacher training and in defence of this new trend in teacher education and training, one participant said:

*When the school adopts school based training, it can offer equal opportunities for all teachers in training. When the training is inside the school, the school administration is able to follow up the effect of the training on the school students’ final achievement and it can detect any problems because it knows teachers’ conditions and, conversely, it cannot detect these potential problems and solve them.*

The other participant reflected on what the school administration should know in order to be able to assess the needs of the teachers:

*The school administration should be knowledgeable of how to assess teachers’ teaching performance and identify the weaknesses and strengths in order to develop the skills of the strong teachers and improve those of less-experienced teachers.*

The third participant described the contribution by experienced teachers to enact a profound change in the prospective teacher’s experience:

*This training is significant as there are experienced teachers in the field of teaching who can transfer their experiences and knowledge about teaching to those who are newly appointed at the school. The new teacher cannot wait for so long until the central authority of the Ministry of Education holds training for new teachers where a well-resourced colleague at the school can do the job and provide skills and experiences derived from the context where the new teacher can apply.*

A commitment to the school and being a model to their teachers is what one participant envisioned as the nature of the sustainable development of the school.

*This school-based teacher training nurtures in the trainee some commitment to the school in which he or she receives training and becomes a model where he or she receives the attention of the school administration and school staff.*

*Through the adoption of this training trend that is based on the school, the school will be more able to assess the training needs of its teachers, which when collected can help uplifting the instructional performance of school teachers.*

Some challenges that were perceived to impede the development of the school-based teacher training were best described by one participant:

*Among the most recurrent challenges is that this kind of school-based teacher training is costly, and also the absence of supervisory practices where until*
now there is no governmental supervision and the lack of commitment by some teachers to the training regulations and lack of incentivizing teachers for their efforts and the idleness of some teachers to develop and engage themselves in sustainable development.

Finally, qualities of a good trainer were described by one of the participants:

*The trainer should be competent in the training undertaken by him, should possess the skills that qualify him to influence the trainee, and the trainer should leave an effect on the trainee even after the training programme. The trainer should be flexible and create a dialogic type of training with the trainees, as well as should enable trainees to apply their skills and should be interpersonally acceptable by them.*

**Discussion**

In line with international literature and local and global trends, the present study adopts a sustainable professional development quest based on the school for many profits and strengths mentioned by the participants of this study. This inquiry has raised several school-based teacher training issues: for example, the study unfolded the issue that some trainees do not receive sufficient pre-service teacher training during their studies at the university. The study, in the eyes of the participants, has praised school-based teacher training for several reasons mentioned above, i.e., the teacher who receives training at school can be more loyal to its vision and message, therefore, can grow naturally. The teachers at the school can collaboratively transfer their experiences and exchange them among each other. The unification of the school vision, strategy and discourse can also be achieved if the school adopts such a type of school-based teacher training. The school trainers can also help develop the school leaders to improve their teaching strategies and can also prepare school teachers to act as mentors of their less-experienced peers. The trainee teacher becomes more flexible and can exhibit self-renewal due to the school-based teacher training because of the received feedback on teacher performance which is provided on the spot and under the direct supervision of the mentors prepared at school. Highlighting the new trend of teacher education, Williamson and McDiarmid (2008) promoted the continuum of teacher learning as well as teacher education as fundamental in a lifelong learning process that implies the demand for extended teacher growth and professionalism. Likewise, Erawan (2015) called for adopting school-based teacher training. For example, Santone, Saunders and Seguin (2014) also reflected on new sustainable teacher education and development.

Further, this school-based teacher training, from the perspective of the participants of this study, can enable the teacher to be more flexible in the work and have a sort of commitment and adherence to the school policy and regulations. Moreover, the teacher who receives school-based teacher training can assume self-development as the needs of individual teachers can be identified, investigated and profiled. This new trend highlighted by the study is also in agreement with what other researchers have advocated (Day & Gu, 2007; Sammons, Mujtaba, Earl, & Gu, 2007) who called for collaborative debate to be ensued among school teachers where a constructive dialogue could be developed so that teachers were engaged in this dialogue all the time which could not be ensured by traditional teacher training. Equal opportunities are guaranteed for all the teachers
School-based Teacher Training in Jordan.

in the school and the communication between administration and school teachers becomes easy and possible.

The reason why the school is the best to conduct school-based teacher training is that, first of all, the school can have various teacher experiences, especially large schools that employ many teachers. The school where training is undertaken can provide an ideal environment where the effect of the training can be easily followed up and measured in the actual classrooms. The school can also explore the teachers’ shortages for training and qualification and so can work on the development of the teachers’ teaching skills. Alkhawaldeh and Qualter (2004) suggested that school-based teacher training could possibly be considered one of the main routes to teacher training and professionalism. They reaffirmed that due to the direct co-operation and communication with experienced peers at school, new or prospective teachers could have a first-hand experience in teaching.

However, this kind of training, from the point of view of the participants, may be obstructed by factors such as the lack of experienced teachers at school where collegial development is limited or even not possible. Teachers are overloaded with work responsibilities and may not have time to get training. Some of the school administrators and teachers are not knowledgeable and lack leadership skills. Some teachers may have negative attitude toward their selection of the teaching profession and this may impede their involvement in the training process. Furthermore, the mentoring relationship may also be challenged as some school teachers may not be willing enough to transfer their experiences to less-experienced teachers. Some or most of these challenges can be sorted out if the Ministry of Education and universities have more faith in this route of teacher training.

The school-based teacher training, in the context of the current investigation, is challenged by the lack of sufficient initial teacher education by some teachers which other teachers might have therefore, this creates a situation where multi-level teacher training should be provided. Niemi (2008) highlighted continuing professional development of teachers.

Finally, the trainer who is expected to execute training should be acceptable by the trainees, knowledgeable, understandable, and should have dialogic and flexible character. This illustrates the contribution of the mentor who, in the context of this study, should be a specialist teacher at school and provide less-experienced teachers with professional knowledge and experience. Cordingley et al. (2007) suggested that teachers can be supported in their continuing professional development when help was provided by an expert.

Conclusions and Recommendations

The current study has probed the reasons behind selecting school-based teacher education and development. It has solicited the opinions of the participants via a self-report developed by them about a set of various aspects related to a school-based sustainable teacher development route. The participants highly defended this new route and saw it beneficial, essential and contributory to teacher sustainable professional development despite various challenges encountered in its execution. Participants saw this new trend considerable of individual teacher’s teaching needs and suitable to transfer experiences among school teachers at the one school and a cross similar schools with the same resources and teacher qualifications.
On the basis of the results of the study, the author recommends wide school-based teacher development, offering opportunities to train mentors and school principals to apply this new approach and foster collaborative sustainable professional development of teachers in order to allow teachers to transfer experiences and professional knowledge to other teachers who may desperately need such a special assistance to better attain effective professional development that is expected to better contribute to the country’s development in the spheres of education, in general, and teacher education, in particular.

Emerging model reinforced and consolidated by the study results

The potential model that is substantiated by the results of the present study is the school-based sustainable professional development model which should be crystallised and developed in further research. Further, the study suggests that on-site school training can create a paradigm shift in teacher education where school can lead this training through preparing mentors who are trustworthy to train less experienced teachers in their respective schools. With the school resources and accumulated knowledge and experience, potential teachers can be trained and their sustainable professional development will be sustained under more capable peers. Capable peers can, for example, select and explore the beliefs and convictions of less experienced teachers and can pick out the professional knowledge these teachers may need and can, at the same time, monitor their development route. Further, this can be achieved when the school allocates and administers training courses and workshops to implement this sustainable development. One final recommendation is to minimise all-for-all in-service teacher training and to enact reorientation of teacher education to be more of sustainable school-based teacher training. Academies can also have their share once they change from a traditional theoretical route of teacher education and training to this new model of teacher education and training. In line with global teacher education and training trends, the Ministry of Education in Jordan has started to put special faith in this constantly evolving route of teacher professionalism for the above mentioned merits though this is still a demanding route.

References


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A Study on Singapore Chinese Language Teachers’ Professional Proficiency and Training Needs for Sustainable Development

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Singapore Centre for Chinese Language, National Institute of Education, Nanyang Technological University

Abstract
Continuous professional development can help teachers become responsible mentors for sustainable education. Taking into account subject characteristics and concentrating on investigation of professional proficiency and training needs of the Chinese language teachers in Singapore, this study seeks to shed light on providing more targeted in-service training and workplace learning support for teachers to attain the goals for sustainable development. An explanatory mixed methods approach was adopted in this study. A total of 1054 Chinese language teachers completed the questionnaire on subject content and professional knowledge, Chinese teaching practice and pedagogy, and knowledge of technology and its application. Focus group discussions and interviews of 112 teachers were conducted to further explore the results from the survey data. The findings of the study provide insights into shaping the forms and priorities of in-service training for teachers to be a powerful agent of sustainable teaching.

Keywords: teachers’ professional proficiency, training needs, Singapore Chinese language teachers, second language teaching, sustainable development

Introduction
Continuous professional development can help teachers not only understand sustainable development concepts and issues but also experience life-long learning, thus becoming responsible mentors for sustainable education. It requires teachers to be learners, researchers, and collaborators, to reflect on their teaching practices and improve professional proficiency (Mohammadi & Moradi, 2017). Understanding teachers’ professional proficiency and their training needs, government and university level policies and directives can provide more targeted in-service courses or workplace learning support for teachers to attain their goals for sustainable development (Kabadayi, 2016). The present paper reports on an exploratory investigation into the teachers’ professional proficiency and training needs of Singapore Chinese Language (CL) teachers with various backgrounds. The findings of the study suggest the forms and priorities of training for in-service teachers to help them become a powerful agent of sustainable teaching.
Background

In teacher development, professional frameworks/standards represent a set of expectations and demands related to the knowledge, skills and attitudes the teachers are supposed to display in their activities with students. According to Shulman’s (1987) views on teachers’ professional proficiency, teaching, on top of the common factors of content knowledge and pedagogical skills, involves many factors that are often ignored. The scholar proposed categories of knowledge base, including content knowledge, general pedagogical knowledge, curriculum knowledge, pedagogical content knowledge, knowledge of learners, knowledge of educational contexts, and knowledge of educational ends. The suggested category of pedagogical content knowledge revealed the nature of teachers’ knowledge as a blend of different knowledge; teachers use repertoires and engaged in a process which Shulman called “pedagogical reasoning and acting”.

Day and Conklin (1992) identified four types of knowledge base of language teachers. These four components include content knowledge of the subject matter, pedagogic knowledge, pedagogic content knowledge and support knowledge. Content knowledge of the subject matter refers to elements within language such as syntax, semantics, phonology and pragmatics as well as literature and culture. Pedagogic knowledge focuses on knowledge of generic teaching strategies, beliefs and practices regardless of the subject matter, such as classroom management etc. Pedagogic content knowledge is about knowledge of how to deliver content knowledge in diverse ways so that students may understand. Support knowledge refers to knowledge of various disciplines that contribute to our approach to the teaching and learning of mother tongue language (psycholinguistics, linguistics, first language acquisition, sociolinguistics, research methods).

In CL speaking regions, such as Mainland China, Hong Kong and Taiwan, different governing bodies or professional institutions have come out with professional proficiency guidelines and standards for teachers, even specifically for teachers teaching Chinese as a foreign language (Ministry of Education, China, 2012a, 2012b; Ministry of Education, Implementation Direction for Subsidy Programs Assessing the Professional Development of Teachers, 2010; Shao & Shao, 2013). The commonalities and differences of these guidelines and standards can shed light on professional proficiency framework for Singapore CL teachers.

Table 1

<table>
<thead>
<tr>
<th>Role of the CL</th>
<th>Country/area</th>
<th>Commonly mentioned Knowledge</th>
<th>Skills</th>
<th>Attitude</th>
<th>Key suggested proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Native Taiwan</td>
<td>Lesson planning and instruction</td>
<td>Professional development and research</td>
<td>Professionalism and attitude</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Classroom management and coaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainland China</td>
<td>Knowledge of the subject</td>
<td>Professional skills</td>
<td>Professionalism and ethics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Instruction (skills)</td>
<td></td>
<td></td>
<td>Student development</td>
<td></td>
</tr>
</tbody>
</table>

Sequel to Table 1 see on the next page.
Table 1 shows commonly mentioned proficiency in these regions, including 1) subject content, 2) lesson planning and classroom management, 3) CL pedagogies and 4) professionalism and ethics/attitudes. Various terms have been used to refer to pedagogies, for example, lesson planning and instruction (Taiwan), professional skills (Mainland China), instruction skills (Hong Kong) and foundation of Chinese teaching and Chinese teaching pedagogies (Hanban, Mainland China). Since Chinese is taught as a second language in Singapore, professional knowledge and competency regarding second language teaching are emphasised. Meanwhile, teachers’ information literacy is highlighted to cater to students’ learning needs in the digital era, as well as to align with the fourth Master plan for Information and Communication Technology (ICT) in Education in Singapore in order to provide sustained professional learning and build efforts for ICT in learning. The Singapore CL teachers’ professional proficiency framework, hence, consists of three aspects: (1) subject content and professional knowledge, (2) Chinese teaching practice and pedagogy and (3) knowledge of technology and its application. It has been acknowledged that the affective domain is essential for predicting teaching quality. Limited by the scope of the study, however, we did not take account of the affective domain in this study, but only concentrated on investigating CL teachers’ knowledge and skills.

Methodology

The study adopted an explanatory mixed methods approach to respond to the research objectives and ensure both breadth and depth of findings. An explanatory mixed methods approach consists of collecting both quantitative and qualitative data, and qualitative data are addressed to help explain or elaborate on the quantitative results (Creswell, 2005). In this approach, we first developed and administered a large scale survey to capture teachers’ professional proficiency and training needs in reference to the three aspects of Singapore CL teachers’ professional proficiency framework. Then the quantitative survey data were supplemented by qualitative exploration via focus group discussion (FGD) and interviews. The qualitative data were used to explore in greater depth and helped reveal teachers’ perspectives concerning their strengths and difficulties of Chinese teaching in Singapore as well as in-service training needs.
Procedure and Participants

The target population of the study was Singapore in-service K-12 Chinese language teachers. An anonymous online survey was distributed to teachers via their MOE email accounts in 2013. A total of 1054 responses were collected, and 1044 responses were kept after data screening. The numerical responses to the questionnaire were analysed quantitatively using the SPSS statistical software. Descriptive tests were conducted to identify trends in responses. One-way ANOVAs and Kruskal-Wallis tests (for the factors which were the measures with non-normally distributed data) were used to test if statistical differences of professional proficiency could be found among teachers with different backgrounds. NVivo software was used to analyse the qualitative data from the open-ended survey questions and FGD and interview transcripts.

After the main survey questionnaire, 37 administrative teachers and 75 general teachers were invited to FGD and interviews. The FGD and interviews, lasting approximately one hour, were semi-structured and conducted face-to-face by our team members. All the processes were audio-recorded and fully transcribed. Though the participants came from a convenient sample, the sample consisted of teachers with different length of service, age and teaching levels. More details about their characteristics can be seen in Table 2.

Verbal protocol analysis was adopted to analyse the qualitative data from the open-ended survey questions and verbatim transcripts. In this approach, responses to the open survey questions and transcripts were segmented into idea units representing a complete thought or distinct idea (Trickett & Trafton, 2007). The demographic characteristics of the teachers involved in the study are summarised in Table 2.

Table 2
Descriptive Characteristics of the Participating Teachers

<table>
<thead>
<tr>
<th>Teacher Characteristics</th>
<th>N (%) in the questionnaire</th>
<th>N (%) in FGD and interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>School types</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Government</td>
<td>809 (77.5 %)</td>
<td>10 (55.6 %)</td>
</tr>
<tr>
<td>Government-aided</td>
<td>176 (16.9 %)</td>
<td>7 (38.9 %)</td>
</tr>
<tr>
<td>Independent</td>
<td>59 (5.7 %)</td>
<td>1 (5.6 %)</td>
</tr>
<tr>
<td>School levels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary</td>
<td>626 (60 %)</td>
<td>34 (65.4 %)</td>
</tr>
<tr>
<td>Secondary</td>
<td>340 (32.6 %)</td>
<td>14 (26.9 %)</td>
</tr>
<tr>
<td>Junior college</td>
<td>78 (7.5 %)</td>
<td>4 (7.7 %)</td>
</tr>
<tr>
<td>Teaching experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0–2 years</td>
<td>126 (12.1 %)</td>
<td>19 (17 %)</td>
</tr>
<tr>
<td>2–5 years</td>
<td>200 (19.2 %)</td>
<td>17 (15.2 %)</td>
</tr>
<tr>
<td>6–10 years</td>
<td>287 (27.5 %)</td>
<td>26 (23.2 %)</td>
</tr>
<tr>
<td>11–30 years</td>
<td>356 (34.1 %)</td>
<td>42 (37.5 %)</td>
</tr>
<tr>
<td>More than 30 years</td>
<td>75 (7.2 %)</td>
<td>8 (7.1 %)</td>
</tr>
<tr>
<td>Teachers’ age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21–30</td>
<td>237 (22.7 %)</td>
<td>29 (25.9 %)</td>
</tr>
<tr>
<td>31–40</td>
<td>365 (35 %)</td>
<td>35 (31.3 %)</td>
</tr>
<tr>
<td>41–50</td>
<td>271 (26 %)</td>
<td>26 (23.2 %)</td>
</tr>
<tr>
<td>Above 50</td>
<td>171 (16.4 %)</td>
<td>22 (19.6 %)</td>
</tr>
</tbody>
</table>
Instrumentation

The questionnaire used in this study was structured on the basis of Singapore CL teachers’ professional proficiency framework with the three main aspects. In addition to the part of the survey designed to obtain information regarding teachers’ characteristics, the initial version of the questionnaire comprised three sections with 67 items and 3 open-ended questions. The 67 statements covered the three key areas of knowledge and skills emphasised in the framework, namely, subject content and professional knowledge, Chinese teaching practice and pedagogy, as well as knowledge of technology and its application. All items were presented with a 7-point Likert-type scale, ranging from one “strongly disagree” to seven “strongly agree”. The open-ended questions invited participants to write down the topics in which they felt they needed further training.

In the questionnaire, some of the initial items were adapted from Schmidt, Baran, Mishra, Koehler and Shin (2010) and Chai, Koh and Tsai (2011), and all the items were subject to expert review with two professors and two master teachers who were familiar with teacher education research and CL teaching. To investigate teachers’ perception towards subject content and professional knowledge, we first generated items reflecting CL teachers’ knowledge based on our review of the literature. Subsequently, six scales and a pool of 31 items were constructed. These six scales were pedagogical content knowledge (KPC), Chinese language knowledge (KCL), curricular knowledge (KCR), Chinese culture knowledge (KC), assessment knowledge (KA) and research knowledge (KR). In the same vein, five scales with 22 items and three scales with 14 items were constructed to separately test teachers’ perception towards Chinese teaching practice and pedagogy and knowledge of technology and its application. The details of the five scales regarding Chinese teaching practice and pedagogy were classroom management (PCM), content-based pedagogical design (PCPD), pedagogical design (PPD), learning assessment (PLA) and pedagogical research (PPR). In the section regarding teachers’ knowledge of technology and its application, we defined three scales: ICT resources for improving Chinese teaching and learning (ICTR), Integrating ICT in Chinese teaching and learning (ICTI) and ICT for supporting collaborative learning and self-directed learning (ICTCS).

Validity and Reliability

Exploratory factor analysis (EFA) was used to clarify the structure of the teachers’ perception of their professional proficiency based on the obtained survey data. Suitability of the data for the factor analysis was first confirmed through Kaiser-Meyer-Olkin (KMO) test (KMO value of .97, .97 and .96 for each section) and Bartlett’s Test of Sphericity (p<.001). Items with a factor loading of less than 0.5 were subject to deletion from the item pool. Additionally, Cronbach’s alpha values were estimated to confirm the reliability of the overall instrument and each item. After the EFA with the principal component analysis and Varimax rotation with Kaiser normalization, 5 items were eliminated due to low factor loadings. The retained items in each section of the survey are provided in Appendices 1–3.

On the whole, the survey used in this study revealed acceptably high alpha reliability coefficients (Thompson & Daniel, 1996) for all items. The scales, hence, were considered to be sufficiently reliable for assessing the CL teachers’ professional proficiency. In addition to data source triangulation, two members of our team checked the transcripts and coded the qualitative data for the validation of the study.
Results

Teachers’ background in this study was investigated by considering school types, school levels, teachers’ age and teaching experience. To investigate whether local CL teachers with different backgrounds vary in their professional proficiency, one-way ANOVAs were performed with these four independent variables, respectively.

The one-way ANOVA results showed that there was no significant difference in each scale among the teachers from different school types (Appendix 4). Such results indicate that CL teachers’ professional proficiency at different school types is fair. In the following sections, we will focus on presenting the relation of school levels, teachers’ age and teaching experience to Chinese teachers’ professional proficiency. Nevertheless, based on the FGD data, it is worth noting that traditions, administrative arrangement or mission of a school affected how teachers perceived their work and how they interacted professionally among themselves.

<table>
<thead>
<tr>
<th>Factors</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>η²</th>
</tr>
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<tbody>
<tr>
<td>KPC</td>
<td>4</td>
<td>9.70</td>
<td>12.71</td>
<td>.000**</td>
<td>.047</td>
</tr>
<tr>
<td>KCL</td>
<td>4</td>
<td>3.36</td>
<td>4.20</td>
<td>.002**</td>
<td>.016</td>
</tr>
<tr>
<td>KCR</td>
<td>4</td>
<td>26.54</td>
<td>31.25</td>
<td>.000**</td>
<td>.107</td>
</tr>
<tr>
<td>KC</td>
<td>4</td>
<td>7.41</td>
<td>8.48</td>
<td>.000**</td>
<td>.032</td>
</tr>
<tr>
<td>KA</td>
<td>4</td>
<td>8.68</td>
<td>10.19</td>
<td>.000**</td>
<td>.038</td>
</tr>
<tr>
<td>KR</td>
<td>4</td>
<td>19.45</td>
<td>14.25</td>
<td>.000**</td>
<td>.052</td>
</tr>
</tbody>
</table>

Looking at the results of one-way ANOVAs with the independent variables: “school levels” and “teachers’ age” (shown in Appendix 5 and Appendix 6), certain statistically significant differences among teachers’ professional proficiency could be found. Yet, since the effect size values of them were too low, we had to indicate that though teachers from different school levels and in different age groups varied in their professional proficiency, the effects of school levels and teachers’ age on their knowledge and skills were not strong. Therefore, in this report, only the one-way ANOVAs for teaching experience, by which significant differences among teachers were found with large effect size, were elucidated (Table 3). Besides, means and standard deviations for all values were discussed to explore and identify the specific strengths or weaknesses of teachers at different school levels, age, or years of teaching.

In response to the open-ended questions in the survey, teachers were asked to indicate all the topics in which they felt that further training was needed. We quantified these sections of qualitative data and combined them with qualitative FGD and interview data to provide insights into training needs for CL teachers.

Teachers’ Background and “Subject Content and Professional Knowledge”

The descriptive statistics for subject content and professional knowledge varied due to school levels (Table 4). Except for primary school teachers’ perception towards research knowledge (M=4.96, SD=1.20), the mean score for each factor was above 5.00, indicating that teachers perceived themselves to have an above medium level of
knowledge. In general, primary school teachers had a lower self-rated score than secondary school teachers and junior college teachers, particularly in areas such as pedagogical content knowledge (KPC), Chinese language knowledge (KCL) and Chinese culture knowledge (KC). There was not much difference between secondary school and junior college teachers.

Table 4
Descriptive Statistics of Subject Content and Professional Knowledge by School Level

<table>
<thead>
<tr>
<th>Factors</th>
<th>Primary (n=626)</th>
<th>Mean</th>
<th>SD</th>
<th>Secondary (n=340)</th>
<th>Mean</th>
<th>SD</th>
<th>Junior college (n=78)</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPC</td>
<td></td>
<td>5.38</td>
<td>.88</td>
<td></td>
<td>5.59</td>
<td>.90</td>
<td></td>
<td>5.64</td>
<td>.85</td>
</tr>
<tr>
<td>KCL</td>
<td></td>
<td>5.78</td>
<td>.89</td>
<td></td>
<td>6.00</td>
<td>.92</td>
<td></td>
<td>5.80</td>
<td>.85</td>
</tr>
<tr>
<td>KCR</td>
<td></td>
<td>5.48</td>
<td>.97</td>
<td></td>
<td>5.51</td>
<td>.99</td>
<td></td>
<td>5.62</td>
<td>.90</td>
</tr>
<tr>
<td>KC</td>
<td></td>
<td>5.47</td>
<td>.95</td>
<td></td>
<td>5.83</td>
<td>.90</td>
<td></td>
<td>5.75</td>
<td>.99</td>
</tr>
<tr>
<td>KA</td>
<td></td>
<td>5.43</td>
<td>.92</td>
<td></td>
<td>5.50</td>
<td>.96</td>
<td></td>
<td>5.44</td>
<td>.96</td>
</tr>
<tr>
<td>KR</td>
<td></td>
<td>4.96</td>
<td>1.20</td>
<td></td>
<td>5.06</td>
<td>1.21</td>
<td></td>
<td>5.01</td>
<td>1.13</td>
</tr>
</tbody>
</table>

As shown in Table 5, teachers’ subject content and professional knowledge increased as their age increased, but not for the teachers aged above 50. In that age group, most of teachers’ self-rated item scores were lower than the scores from teachers aged between 41 and 50. There is no surprise the means for teachers’ self-rated scores consistently increased as their years of teaching increased (Table 6), but the mean of research knowledge (KR) was an exception.

Table 5
Descriptive Statistics of Subject Content and Professional Knowledge by Age

<table>
<thead>
<tr>
<th>Factors</th>
<th>21–30 (n=237)</th>
<th>Mean</th>
<th>SD</th>
<th>31–40 (n=365)</th>
<th>Mean</th>
<th>SD</th>
<th>41–50 (n=271)</th>
<th>Mean</th>
<th>SD</th>
<th>Above 50 (n=171)</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPC</td>
<td></td>
<td>5.28</td>
<td>.94</td>
<td></td>
<td>5.44</td>
<td>.86</td>
<td></td>
<td>5.60</td>
<td>.86</td>
<td></td>
<td>5.60</td>
<td>.89</td>
</tr>
<tr>
<td>KCL</td>
<td></td>
<td>5.70</td>
<td>.96</td>
<td></td>
<td>5.83</td>
<td>.92</td>
<td></td>
<td>5.95</td>
<td>.80</td>
<td></td>
<td>5.88</td>
<td>.89</td>
</tr>
<tr>
<td>KCR</td>
<td></td>
<td>5.10</td>
<td>1.01</td>
<td></td>
<td>5.51</td>
<td>.91</td>
<td></td>
<td>5.68</td>
<td>.93</td>
<td></td>
<td>5.75</td>
<td>.93</td>
</tr>
<tr>
<td>KC</td>
<td></td>
<td>5.42</td>
<td>.97</td>
<td></td>
<td>5.50</td>
<td>.97</td>
<td></td>
<td>5.75</td>
<td>.88</td>
<td></td>
<td>5.86</td>
<td>.98</td>
</tr>
<tr>
<td>KA</td>
<td></td>
<td>5.25</td>
<td>.99</td>
<td></td>
<td>5.44</td>
<td>.87</td>
<td></td>
<td>5.61</td>
<td>.93</td>
<td></td>
<td>5.50</td>
<td>.98</td>
</tr>
<tr>
<td>KR</td>
<td></td>
<td>4.68</td>
<td>1.22</td>
<td></td>
<td>5.05</td>
<td>1.08</td>
<td></td>
<td>5.22</td>
<td>1.19</td>
<td></td>
<td>4.96</td>
<td>1.32</td>
</tr>
</tbody>
</table>

Table 6
Descriptive Statistics of Subject Content and Professional Knowledge by Teaching Experience

<table>
<thead>
<tr>
<th>Factors</th>
<th>0–2 (n=126)</th>
<th>Mean</th>
<th>SD</th>
<th>3–5 (n=200)</th>
<th>Mean</th>
<th>SD</th>
<th>6–10 (n=287)</th>
<th>Mean</th>
<th>SD</th>
<th>11–30 (n=356)</th>
<th>Mean</th>
<th>SD</th>
<th>Above 30 (n=75)</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>KPC</td>
<td></td>
<td>5.00</td>
<td>.93</td>
<td></td>
<td>5.47</td>
<td>.85</td>
<td></td>
<td>5.47</td>
<td>.91</td>
<td></td>
<td>5.57</td>
<td>.89</td>
<td></td>
<td>5.77</td>
<td>.81</td>
</tr>
<tr>
<td>KCL</td>
<td></td>
<td>5.61</td>
<td>1.01</td>
<td></td>
<td>5.79</td>
<td>.86</td>
<td></td>
<td>5.80</td>
<td>.91</td>
<td></td>
<td>5.94</td>
<td>.87</td>
<td></td>
<td>6.02</td>
<td>.84</td>
</tr>
<tr>
<td>KCR</td>
<td></td>
<td>4.77</td>
<td>1.01</td>
<td></td>
<td>5.34</td>
<td>.87</td>
<td></td>
<td>5.52</td>
<td>.92</td>
<td></td>
<td>5.73</td>
<td>.93</td>
<td></td>
<td>5.95</td>
<td>.85</td>
</tr>
<tr>
<td>KC</td>
<td></td>
<td>5.29</td>
<td>.98</td>
<td></td>
<td>5.50</td>
<td>.95</td>
<td></td>
<td>5.57</td>
<td>.95</td>
<td></td>
<td>5.73</td>
<td>.91</td>
<td></td>
<td>6.00</td>
<td>.84</td>
</tr>
<tr>
<td>KA</td>
<td></td>
<td>5.00</td>
<td>.97</td>
<td></td>
<td>5.41</td>
<td>.89</td>
<td></td>
<td>5.48</td>
<td>.92</td>
<td></td>
<td>5.57</td>
<td>.95</td>
<td></td>
<td>5.66</td>
<td>.82</td>
</tr>
<tr>
<td>KR</td>
<td></td>
<td>4.35</td>
<td>1.27</td>
<td></td>
<td>4.86</td>
<td>1.07</td>
<td></td>
<td>5.06</td>
<td>1.10</td>
<td></td>
<td>5.22</td>
<td>1.21</td>
<td></td>
<td>5.12</td>
<td>1.26</td>
</tr>
</tbody>
</table>
Regarding KR, teachers with more than 30 years of teaching experience showed lower score than teachers with the experience of 11–30 years. As also shown in Table 3, the means for KR were comparatively lower than the means of other factors regardless of school levels or teaching experience. These results suggest that there is room to improve in this area, in particular. Teachers’ responses in the FGD and interview also supported this finding. However, it is worth noting that while teachers seemed to be less confident in KR, training regarding this topic was the least demanded according to the quantified data from the open-ended question (Figure 1).

![Figure 1. Training needs regarding subject content and professional knowledge](image)

Additionally, the one-way ANOVA results indicated that there were statistical differences by teaching experience in all factors (Table 3). Significant effect of teaching experience was found on teachers’ curricular knowledge (KCR), $F(4, 1039) = 31.25$, $p<.01$, with large effect size ($\eta^2=.107$). Post hoc comparisons using the LSD test further revealed that the mean score for teachers’ KCR consistently increased as their years of teaching increased. Significant differences could be found among teachers in all the subgroups, except for teachers with teaching experience between 11–30 years and above 30. Meanwhile, the FGD and interview data revealed that not only the beginning teachers but also the teachers with a rich teaching experience highlighted the importance and necessity of training in KCR, particularly when they were required to implement a new national curriculum. This finding is consistent with their response to the open-ended question in the survey. 15.33 % of teachers explicitly expressed that they needed further training in curricular knowledge. As shown in Fig. 1, this topic was in high demand as well. Therefore, the finding suggests the necessity of constant curriculum knowledge training regardless of teaching specialty.

Teachers’ Background and “Chinese Teaching Practice and Pedagogy”

Looking at teachers’ self-rated scores for Chinese teaching practice and pedagogy, primary school teachers tended to be less confident than secondary and junior college teachers. The same as the results about teachers’ subject content and professional knowledge, no much difference could be found between secondary and junior college teachers (Table 7).
Table 7
Descriptive Statistics of Chinese Teaching Practice and Pedagogy by School Level

<table>
<thead>
<tr>
<th>Factors</th>
<th>Primary (n=626)</th>
<th>Secondary (n=340)</th>
<th>Junior college (n=78)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>PCM</td>
<td>5.77</td>
<td>.92</td>
<td>5.82</td>
</tr>
<tr>
<td>PCPD</td>
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<td>.93</td>
<td>5.70</td>
</tr>
<tr>
<td>PPD</td>
<td>5.53</td>
<td>.91</td>
<td>5.61</td>
</tr>
<tr>
<td>PLA</td>
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<td>.90</td>
<td>5.86</td>
</tr>
<tr>
<td>PPR</td>
<td>5.30</td>
<td>1.11</td>
<td>5.51</td>
</tr>
</tbody>
</table>

As shown in Table 8, the mean of teachers’ self-rated scores increased as their age increased, but not for the teachers aged above 50. Similarly, the means increased as teachers’ teaching years increased (Table 9). Teachers’ first ten years of teaching were found to be the prime time for enhancing their proficiency of teaching practice and pedagogy.

Table 8
Descriptive Statistics of Chinese Teaching Practice and Pedagogy by Age

<table>
<thead>
<tr>
<th>Factors</th>
<th>21–30 (n=237)</th>
<th>31–40 (n=365)</th>
<th>41–50 (n=271)</th>
<th>Above 50 (n=171)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>PCM</td>
<td>5.43</td>
<td>.93</td>
<td>5.79</td>
<td>.88</td>
</tr>
<tr>
<td>PCPD</td>
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<td>1.00</td>
<td>5.62</td>
<td>.88</td>
</tr>
<tr>
<td>PPD</td>
<td>5.25</td>
<td>1.00</td>
<td>5.56</td>
<td>.84</td>
</tr>
<tr>
<td>PLA</td>
<td>5.47</td>
<td>.96</td>
<td>5.69</td>
<td>.86</td>
</tr>
<tr>
<td>PPR</td>
<td>5.14</td>
<td>1.07</td>
<td>5.40</td>
<td>1.01</td>
</tr>
</tbody>
</table>

Table 9
Descriptive Statistics of Chinese Teaching Practice and Pedagogy by Teaching Experience

<table>
<thead>
<tr>
<th>Factors</th>
<th>0–2 (n=126)</th>
<th>3–5 (n=200)</th>
<th>6–10 (n=287)</th>
<th>11–30 (n=356)</th>
<th>Above 30 (n=78)</th>
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</thead>
<tbody>
<tr>
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<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>PCM</td>
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<td>.95</td>
<td>5.61</td>
<td>.80</td>
<td>5.83</td>
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<td>1.01</td>
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<td>5.65</td>
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<td>1.00</td>
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</tr>
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<tr>
<td>PPR</td>
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<td>1.14</td>
<td>5.29</td>
<td>1.01</td>
<td>5.47</td>
</tr>
</tbody>
</table>

Besides, the results shown in Tables 4–9 indicated that the means for self-rated research knowledge (RK) were lower than those for competency of pedagogical research (PPR). Such results suggest that teachers’ basic knowledge about doing educational research was not solid enough, though they might have experiences in doing action research or lesson study. The FGD and interview data can help explain the reasons behind it. Episode 1 was extracted from the interview data about a young CL teacher of a secondary school, who had 4 years of teaching experience. According to her, although she had experiences of doing research, without her own initiative motivation she did not feel that she could benefit a lot from it. A primary school teacher with 7 years of
teaching experience also expressed her concerns about doing research regarding the lack of adequate time and Chinese literature (Episode 2).

**Episode 1:** Everyone is busy. When we are doing a research report, everything needs to be repeated over and over again, including preparing the materials, discussing and selecting the research topic, the intervention etc. Therefore, despite of getting the benefits from our research work, the holistic things that we need to do have already made us frustrated. Lastly, it looks like doing the task for the sake of doing and the meaning of doing it has been lost.

**Episode 2:** Literature about action research or lesson study is mainly in English. We need to digest it, but we are used to digest materials in Chinese. Besides, we have to present the findings in English. In fact, this would be a problem for us, because we did not want to make the things so complicated. ...

It will not be a problem for us to know the process of action research or lesson study; it still seems little unrealistic to us, because we have no time to do research.

Episode 3 is extracted from a primary school lead teacher’s interview data, in which the teacher (at the age of 41–50 with 23 years of teaching experience) highlighted the importance of collaboration among teachers while doing research.

**Episode 3:** Actually, I have done action research with a lot of schools. From my observation, most of the CL teachers are always under heavy workloads, so I will suggest adopting a cooperative model. Teachers can group by themselves to do action research. Maybe, I can handle this and you can do the other stuff. We will get our learning during this process. After practice over and over again, everyone will know how to do it, and then you will be able to do it by yourself. We are trying this approach in our school now.

The one-way ANOVAs indicated that there were statistical differences by teaching experience in Chinese teaching practice and pedagogy (Table 10). For those factors by which the assumptions of sphericity and homogeneity of variances were violated, Kruskal-Wallis tests were conducted and the results also revealed that there were statistical differences between groups in regard to classroom management (PCM), \( \chi^2(4, 1031) = 101.49, p<.01 \); and learning assessment (PLA), \( \chi^2(4, 1044) = 58.35, p<.01 \).

The results showed there were significant effects of teaching experience on teachers’ self-reported proficiency. Significant effect of teaching experience was found on teachers’ content-based pedagogical design (PCPD), \( F(4, 1039)= 19.00, p<.01 \), with effect size \( \eta^2=.068 \); and pedagogical design (PPD), \( F(4, 1039)= 18.28, p<.01 \), with effect size \( \eta^2=.066 \).

**Table 10**

<table>
<thead>
<tr>
<th>Factors</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>Sig.</th>
<th>( \eta^2 )</th>
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<td>15.23</td>
<td>19.00</td>
<td>.000**</td>
<td>.068</td>
</tr>
<tr>
<td>PPD</td>
<td>4</td>
<td>14.12</td>
<td>18.29</td>
<td>.000**</td>
<td>.066</td>
</tr>
<tr>
<td>PPR</td>
<td>4</td>
<td>8.84</td>
<td>7.85</td>
<td>.000**</td>
<td>.029</td>
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Note. \( df = \) degrees of freedom, \( *p<.05, \quad **p<.01 \)
The factors by which the assumptions of sphericity and homogeneity of variances were violated were not included.

The LSD test results further revealed that the means in regard to teachers’ PCPD and PPD were significantly different among teachers in all the subgroups, but not for teachers with teaching experience between 11–30 years and above 30. It indicated that constant in-serve training about (content-based) pedagogical design for teachers with less than 10 years of teaching experience was still necessary. As shown in Fig. 2, data from the open-ended question supported the need of training in these areas as well. This finding is consistent with what we found in FGD and interviews. Considering CL students have different starting points in Singapore, our teachers highlighted the importance and the need of training about differentiated instruction in CL teaching.

![Figure 2. Training needs regarding Chinese teaching practice and pedagogy](image)

Besides, according to the FGD and interview data, novice teachers seemed to have a lack of confidence in classroom management (PCM), in general, and learning assessment (PLA), in particular. However, there was no teacher who mentioned that he or she needed training about classroom management and not many teachers mentioned learning assessment in response to the open-ended survey question (Figure 2). Some reasons behind this inconsistency can be explained by the FGD and interview data. Novice CL teachers said that they would like to get guidance from expert teachers or to observe expert teachers’ teaching, and in this way to improve their competency of assessment and classroom management. In other words, compared with traditional training they would like to improve their knowledge and skills in these areas in the workplace.

Meanwhile, the qualitative data noted that although CL teachers seemed familiar with the term “formative assessment”, they still had no clear idea about how to align assessment with the goal of promoting learning. When talking about assessment, their major concern was still how to design examination items. It suggested that training for the design of new assessment items was still needed to support teachers in implementing a new curriculum and assessment for sustainable education.

**Teachers’ Background and “Knowledge of Technology and Its Application”**

Regarding teachers’ knowledge of technology and its application, secondary school teachers’ advantages were not quite obvious compared with primary school teachers (Table 11). The lowest scores were found by junior college teachers (Table 11). The interview data helped explain the reason why. Junior college teachers less frequently
used technology than primary or secondary school teachers, mainly due to the short term of learning (only 2 years) and the pressure of national standard examinations.

Table 11
Descriptive Statistics of Knowledge of Technology and Its Application by School Level

<table>
<thead>
<tr>
<th>Factors</th>
<th>Primary (n=626)</th>
<th></th>
<th>Secondary (n=340)</th>
<th></th>
<th></th>
<th>Junior college (n=78)</th>
<th></th>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
</tr>
<tr>
<td>ICTR</td>
<td>5.53</td>
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<td>5.63</td>
<td>.89</td>
<td>5.38</td>
<td>.96</td>
<td></td>
</tr>
<tr>
<td>ICTI</td>
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<td>1.01</td>
<td>5.37</td>
<td>1.00</td>
<td>5.21</td>
<td>.98</td>
<td></td>
</tr>
<tr>
<td>ICTCS</td>
<td>5.18</td>
<td>1.08</td>
<td>5.33</td>
<td>1.06</td>
<td>5.12</td>
<td>1.00</td>
<td></td>
</tr>
</tbody>
</table>

Table 12 shows the descriptive statistics of teachers’ knowledge of technology and its application by age. It is worth highlighting that we usually think young teachers are more tech-savvy. Some teachers also mentioned this point in their interview. However, the questionnaire results revealed that teachers aged between 41 and 50, most confident with their subject content and professional knowledge and Chinese teaching practice and pedagogy, were more positive about using ICT resources for assisting/improving the Chinese language learning than teachers at other age groups.

Table 12
Descriptive Statistics of Knowledge of Technology and Its Application by Age

<table>
<thead>
<tr>
<th>Factors</th>
<th>21–30 (n=237)</th>
<th>31–40 (n=365)</th>
<th>41–50 (n=271)</th>
<th>Above 50 (n=171)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>ICTR</td>
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<td>.99</td>
<td>5.55</td>
<td>.88</td>
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<tr>
<td>ICTI</td>
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<td>1.03</td>
<td>5.34</td>
<td>.87</td>
</tr>
<tr>
<td>ICTCS</td>
<td>5.23</td>
<td>1.06</td>
<td>5.32</td>
<td>.92</td>
</tr>
</tbody>
</table>

When CL teachers responded to questions about the challenges in implementing ICT lessons, the most common answers were still a lack of time or logistics issue. Meanwhile, our data indicated that the effectiveness of the use of ICT in strengthening CL teaching had been well and widely acknowledged by teachers. Figure 3 shows that 14.36 % of respondents identified “ICT resources for improving Chinese teaching and learning” as being current training needs.
Although the one-way ANOVAs revealed statistically significant differences in regard to ICT knowledge and applications among teachers with different years in service (Table 13), the effect of service years on teachers’ ICT knowledge and application was not powerful.

Table 13
One-way ANOVA Result by Teaching Experience Variable

<table>
<thead>
<tr>
<th>Factors</th>
<th>df</th>
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<th>F</th>
<th>Sig.</th>
<th>(\eta^2)</th>
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<tbody>
<tr>
<td>ICTR</td>
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<td>2.88</td>
<td>3.18</td>
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<td>.012</td>
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<tr>
<td>ICTI</td>
<td>4</td>
<td>5.19</td>
<td>5.21</td>
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<td>.020</td>
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<td>6.63</td>
<td>5.90</td>
<td>.000**</td>
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</table>

Table 14
Descriptive Statistics of Knowledge of Technology and Its Application by Teaching Experience

<table>
<thead>
<tr>
<th>Factors</th>
<th>0–2 (n=126)</th>
<th>3–5 (n=200)</th>
<th>6–10 (n=287)</th>
<th>11–30 (n=356)</th>
<th>Above 30 (n=78)</th>
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<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
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<td>ICTR</td>
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<td>.89</td>
<td>5.38</td>
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<tr>
<td>ICTCS</td>
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<td>1.10</td>
<td>5.38</td>
<td>.92</td>
<td>5.35</td>
</tr>
</tbody>
</table>

As shown in Table 14, the means for ICT facilitating collaborative and self-directed learning were particularly low. In line with this finding, some teachers explicitly mentioned that they had no idea of how to make the use of ICT to facilitate collaborative learning and self-directed learning, and further training in this topic for CL teaching should be provided. Meanwhile, the FGD and interview data showed us that a number of teachers had an open mind towards training approaches. They would like to experience online training course by themselves, and in that way to have a deeper understanding of using technologies for enabling self-directed learning and collaborative learning.

Discussion

The aim of the present paper has been to learn more about teachers’ professional proficiency and training needs, and on that basis to suggest the forms and priorities of training for in-service teachers to become a powerful agent of sustainable teaching. Four suggestions proposed based on the results are discussed below.

Teachers Reported above Medium Confidence in Proficiency and the Proficiency Difference due to School Levels but not due to School Types: Preparing More Training for Primary School Teachers

The mean score of teachers’ perception towards each factor was approximately or above 5.00, indicating that most teachers felt confident, in general, in their professional proficiency. The results also indicated the fair distribution of CL teachers in Singapore. That means CL teachers from different school types have no significant difference in
knowledge and competency. Yet, the results further revealed that primary school teachers needed more support than teachers from secondary schools or junior colleges, particularly in the areas such as CL knowledge, Chinese culture knowledge, content related pedagogical knowledge and design. This may be because most of the CL teachers at the secondary level or junior college have an undergraduate background about the Chinese language, but in Singapore primary CL teachers have diverse educational backgrounds.

Teachers Said They Needed Continued and Persistent Training on Curricular Knowledge, Pedagogical Design and the Use of ICT for CL Teaching and Learning: Customising Training Sequence

In Singapore, teachers are required to design school-based curriculum, use innovative teaching approaches or take use of new technology to empower CL teaching. Therefore, it is not surprising to find a great need for in-service training in these areas among all the teachers regardless of their age, experience or teaching levels, including those experienced teachers who have given a comparatively high rating to their professional proficiency. Noting teachers’ diverse backgrounds and capabilities of using ICT, we recommend developing the appropriate training sequence and customising it to teachers. For example, for non-tech-savvy teachers, we can design training sessions to help them experience and get familiar with the functions of ICT tools or Apps, and in this process to understand the pedagogical affordances of tools. For tech-savvy teachers, training can proceed from the need of specific teaching content and the approaches of activity enactment.

Beginning Teachers Needed More Support from the Experienced Teachers, Particularly in Classroom Management and Learning Assessment: Encouraging Collaboration and Leveraging ICT to Provide Follow-up Guidance

According to Morantís stage theory (1981), in-service teacher education programme should take into account the experience of teachers. The results of this study confirmed that the difference of teachers in perception of their current knowledge and competencies is related to teaching experience. Our data also evidenced that experienced CL teachers felt more confident about their knowledge and competency than CL teachers in the early teaching years. Initial teaching stage has been well recognised as a particular and pivotal stage of teacher learning. Teachers in early years often feel unprepared for classroom management challenges and consistently rate classroom behaviour as a top reason for leaving the profession (Ingesoll, 2001). In our study, while most beginning CL teachers felt well prepared for the teaching content, they were less confident in classroom management and learning assessment.

Rather than a didactic approach, collaborative and interactive partnership or training activities were welcome by our interviewed teachers. To improve proficiency regarding classroom management and learning assessment, informal workplace learning should be emphasised compared to formal training. Beyond formal training, informal workplace learning or feedback through collaborative learning is an important mechanism for fostering teacher professional development (Bayrakc, 2009; OECD, 2014). Using existing collaboration platforms such as Professional Learning Communities to enhance teaching has been mentioned in Singapore government’s Mother Tongue Languages Review
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Committee Report (2010). Therefore, strategies about facilitating professional communication among teachers need to be further integrated to teachers’ training.

Collaborative approaches should be employed to examine and analyse teaching activities. When a training activity is followed by opportunities for practice and feedback, it will result in the best involvement by teachers (Duke, 1986; TALIS, 2013). We suggest providing follow-up communication and guidance for teachers after they attend one-time workshop or training days to assist them in integrating the new ideas or strategies into daily instruction.

Moreover, several researchers have pointed out that ICT can be an extremely useful tool for feedback while and after training activities (Morrison, Carlton, Henk, & Thornburg, 2007). To fit teachers’ busy schedules and draw upon powerful resources that are often not available locally, the benefits of online training for in-service teachers have been widely discussed (Pape, Prosser, Griffin, Dana, Algina, & Bae, 2015; Whitehouse, Breit, McCloskey, Ketelhut, & Dede, 2006). In our study, some teachers also expressed their desire for experiencing online training or online networked learning, and they hoped in this way to have a better understanding of greater use of social technologies for self-directed and collaborative learning. Except for existing collaboration platforms, more web-based applications or online learning communities focusing on specific topics can be designed and organised to offer persistent teacher professional development.

Gaps between Teachers’ Perception of Proficiency and Training Needs: Assisting Teachers to Understand the Theory behind Practice

Neither the analysis of the teacher proficiency nor of their perceived training needs is adequate to design an appropriate curriculum for in-service teacher education (Fok, Chan, Sin, Ng, & Yeung, 2005). Therefore, we took teachers’ perceived capacities and needs into account as we put forward training recommendations in our study. The message from teachers regarding training needs was clear that training activities planned with sufficient relevance to particular classroom practices were in high demand. As shown in the data, although most teachers felt less confident in action research methods, they did not think additional training in this area was needed. In their own opinions, teaching practice had taken up too much their time and energy, and, hence, they seemed reluctant to perform action research or lesson study. From the viewpoints of teacher education researchers, however, analysing and reflecting on practice area valuable way to improve teaching and promote student learning; the paradigm of teachers’ professional development should move to lifelong learning (Fraser, 2007; Friedman & Philips, 2004), and action research as a form of practitioner research encourages teachers to become lifelong learners (Pipere, Veisson, & Salite, 2015; Sowa, 2009).

Superficially, there is a dilemma between teaching and doing research. Teachers and teacher education researchers are apt to view things from their own stances. Fundamentally, maybe it is due to a lack of sufficient theoretical knowledge. As found in our study, a large part of the participants had no clear understanding of the conceptual or theoretical knowledge about action research, lesson study, or even assessment for learning, though these terms were not strange to them. Our results indirectly reflected that the effort of education reforms for catering 21st century learning had been working well, as teachers have had a strong awareness of implementing collaborative learning, self-directed learning or assessment for learning. Yet, to do it well, more support and efforts are still needed.
Therefore, our central claim is that teacher training should place more emphasis on the theoretical and research background that is necessary for quality teaching and learning. For sustainable development, the training for teachers should focus not only on improving existing practice, but also on assisting teachers to understand what they are doing and how to do well, based on independently made professional judgements.

Conclusion

Based on the analysis of both teachers’ proficiency and their perceived needs, the present study has provided insight into the professional proficiency among CL in-service teachers with diverse backgrounds in Singapore. The findings can shed light on shaping the forms and priorities of in-service training for teachers in other subjects as well.

The findings were drawn according to the perception-based nature of the data. However, self-report measures have been criticised for assessing confidence rather than actual proficiency (Lawless & Pellegrino, 2007), so the perception-based data may not provide accurate value of teachers’ proficiency. The study has provided insight into the trend of training needs. However, teachers’ professional proficiency still needs to be further validated with classroom observation. Further research is needed to explore in which mode online and face-to-face professional development can be provided for teachers to improve the effectiveness, or what strategies can be addressed to help build up professional learning communities for effective and persistent learning.

References


Whitehouse, P., Breit, L., McCloskey, E., Ketelhut, D. J., & Dede, C. (2006). An overview of current findings from empirical research on online teacher professional develop-
Correspondence concerning this paper should be addressed to Yun Wen, Dr., Singapore Centre for Chinese Language, Nanyang Technological University, 287, Ghim Moh Road, Singapore 279623. Email: yun.wen@sccl.sg

Appendix 1

Results of Exploratory Factor Analysis _ Section 1 (n=1044)

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
<th>Factor 5</th>
<th>Factor 6</th>
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</tbody>
</table>

Sequel to Appendix 1 see on the next page.
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Sequel to Appendix 1.

Factor 6: Research knowledge, $\alpha = .87$, Mean=5.00, $SD = 1.2$

<table>
<thead>
<tr>
<th>K27</th>
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<tbody>
<tr>
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</table>

Percentage of variance 21.50 % 19.40 % 14.06 % 12.43 % 8.61 % 7.75 %

Overall $\alpha = .98$ Total variance explained was 83.75 %

Appendix 2

Results of Exploratory Factor Analysis _ Section 2 (n=1044)

| Factor 1: Classroom management, $\alpha = .97$, Mean=5.79, $SD = .91$ |
| P16. | .810 |
| P15. | .801 |
| P18. | .797 |
| P19. | .797 |
| P17. | .779 |

| Factor 2: Content-based Pedagogical design, $\alpha = .96$, Mean=5.61, $SD = .93$ |
| P4.  | .758 |
| P6.  | .752 |
| P3.  | .739 |
| P5.  | .727 |
| P2.  | .723 |
| P1.  | .647 |

| Factor 3: Pedagogical design, $\alpha = .92$, Mean=5.56, $SD = .91$ |
| P7.  | .727 |
| P8.  | .661 |
| P11. | .560 |
| P9.  | .517 |

| Factor 4: Learning Assessment, $\alpha = .93$, Mean=5.73, $SD = .88$ |
| P13. | .670 |
| P12. | .665 |
| P14. | .598 |

| Factor 5: Pedagogical research, $\alpha = .89$, Mean=5.37, $SD = 1.08$ |
| P22. | .830 |
| P21. | .754 |

Percentage of variance 25.36 % 24.60 % 13.31 % 12.10 % 11.42 %

Overall $\alpha = .98$ Total variance explained was 86.78 %
Appendix 3

Results of Exploratory Factor Analysis _ Section 3 (n=1044)

<table>
<thead>
<tr>
<th>Factor 1: ICT for supporting collaborative &amp; self-directed learning, $\alpha = .98$, Mean=5.23, SD =1.07</th>
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<tbody>
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<td>T13. .795</td>
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<tr>
<td>T14. .794</td>
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<td>T11. .783</td>
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<td>T10. .778</td>
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</table>

<table>
<thead>
<tr>
<th>Factor 2: ICT for improving Chinese teaching &amp; learning, $\alpha = .95$, Mean=5.55, SD = .96</th>
</tr>
</thead>
<tbody>
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<td>T4. .804</td>
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<td>T3. .780</td>
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<table>
<thead>
<tr>
<th>Factor 3: Integrating ICT in Chinese teaching and learning, $\alpha = .97$, Mean=5.29, SD =1.01</th>
</tr>
</thead>
<tbody>
<tr>
<td>T8. .750</td>
</tr>
<tr>
<td>T7. .745</td>
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<tr>
<td>T9. .683</td>
</tr>
<tr>
<td>T6. .626</td>
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<tr>
<td>T5. .605</td>
</tr>
</tbody>
</table>

Percentage of variance 33.91% 31.38% 25.49%

Overall $\alpha = .98$ Total variance explained was 90.78%

Appendix 4

One-way ANOVA with “School Types” as the Independent Variable

<table>
<thead>
<tr>
<th>Factors</th>
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<th>$F$</th>
<th>Sig.</th>
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<td>.72</td>
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<td>.70</td>
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<td>.09</td>
</tr>
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<td>.17</td>
<td>.85</td>
</tr>
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<td>.45</td>
</tr>
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<td>.62</td>
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<tr>
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<td>.46</td>
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<td>.05</td>
<td>.95</td>
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</tr>
<tr>
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Note. $df =$ degrees of freedom, *$p < .05$, **$p < .01$
### Appendix 5

**One-way ANOVA with “School Levels” as the Independent Variable**

<table>
<thead>
<tr>
<th>Factors</th>
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<th>Sig.</th>
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<tr>
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<td>.033</td>
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<tr>
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Note. $df =$ degrees of freedom, *$p$ < .05, **$p$ < .01

### Appendix 6

**One-way ANOVA with “Teachers’ Age” as the Independent Variable**

<table>
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<tr>
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<td>KCR</td>
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<td>.010</td>
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<td>KA</td>
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<td>5.50</td>
<td>6.34</td>
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<td>.018</td>
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</table>

Note. $df =$ degrees of freedom, *$p$ < .05, **$p$ < .01
This quasi-experimental study investigated the effect of teaching aesthetic skills to faculty members on development of their effective teaching performance through a two-group pretest-posttest design. The sample included 32 faculty members at a major Iranian university who were divided into the experimental (11 participants) and control groups (21 participants). The experimental group was taught to use aesthetic skills in the teaching and learning processes; however, no intervention was applied to the control group. To evaluate the effective teaching performance of the faculty members, a tailor-made questionnaire was used in two pretest and posttest stages, where randomly chosen students were asked to express their opinions about the faculty members’ performance. The sample size of the students was 1096 in the pretest stage and 935 in the posttest stage. Paired t-test results showed that there was no significant difference between the mean effective teaching scores of the faculty members in the control group in the pretest stage and in the posttest stage. However, the mean effective teaching scores of the faculty members in the experimental group were found to be significantly higher in the posttest. In addition, although there was no significant difference between the mean effective teaching scores of the two faculty groups in the pretest, faculty members in the experimental group outperformed their counterparts in the control group. Based on the findings, applying aesthetic skills by faculty members in the teaching and learning processes can pave the way for sustainable development of their effective teaching performance. Therefore, faculty members are recommended to acquire the required knowledge and skills to better use aesthetic skills in the teaching process.

Keywords: higher education, faculty members, effective teaching, aesthetic skills

Introduction

Nowadays educational systems have an important mission for responding to the needs of different communities. The complex organizational nature of educational centers, accompanied by evolving pedagogies, requires multiple professional development strategies
to effectively address needs, respond to emerging trends in teaching and learning and facilitate improvements (Mohammadi & Moradi, 2017). Sustainable development of education is impossible without the professional competence of teachers. Special attention should also be paid to the training of teachers, youth leaders and other educators (UNESCO, 2005). In this way, the problem of improving the teachers’ professional competence is relevant in terms of sustainable development of education (Korsun, 2017), and for educational improvement, teacher professionalism is essential (Reid & Horváthová, 2016). Yoo (2016) has argued that to ensure sustainable development, educators should focus on studies related to teacher programmes. In order to provide a sustainable development field in the higher education system, the quality of faculty members educating should be considered.

Faculty members and professors are among the most effective and efficient factors of the higher education system, and their professional performance and conduct are significantly manifested in the quality of education and their effective teaching performance. Teachers have the most highlighted contribution in students’ learning as well as the effectiveness of the educational systems (Gholami & Qurbanzada, 2016). As Biggs (2007) states, teaching at university and teaching-related activities are considered as the heart of higher education systems, and provision of high-quality teaching can lead to short- and long-term efficiencies in the educational system and can also improve specialized services in the community in a way that micro and macro scientific changes and the development of scientific excellence are influenced by a progressive and dynamic teaching process. Therefore, today there is a special global attention to the quality and effectiveness of teaching in higher education.

Considering the major role of effective teaching by faculty members in achieving the objectives of the higher education system, several studies, such as Murray (1980), Marsh (2001), Cashin (1995), Young and Shaw (1999), Chalkley, Fournier, and Hill (2000), Rueda (2002), Marzen (2003), Berg and Lindseth (2004), Muijs, Campbell, Kyriakides, and Robinson (2005), Knapper and Cropley (2000), Miller and Miller (2004), Dalby (2001), Nicoll and Harrison (2003), Codde and Joseph (2004), Algozzine, Beattie, Bray, Flowers, and Grete (2004), Nelson (1998) and Asadi and Gholami (2015) among others have been conducted to determine the effective teaching components in higher education. According to these studies, the most important and comprehensive effective teaching components include: designing teaching strategies, implementation of teaching strategies, classroom management, human relationships, evaluation, and desirable personality traits.

In addition to determining the components and criteria of effective teaching, another critical issue is identification of those skills and characteristics which can help professors to better utilize the effective teaching components. Faculty members need specific capabilities, skills, and characteristics to optimally utilize each of the effective teaching components and to develop their teaching quality. Based on theory and the views of scholars such as John Dewey, Elliot Eisner, Maxine Greene, Mehrmohammadi, etc., it can be said that aesthetic skills are among the most important and, yet, neglected factors which can significantly contribute to improvement of effective teaching performance of university professors.

The term aesthetic is a fairly young term in philosophical and aesthetic literature, and it is not older than one century. However, it can be meaningful to some extent for anyone, even in the first confrontation. The term aesthetic comes from the Greek word
“aisthetikos” and Greeks consider it as one’s ability to perceive via his/her senses (Pourhoseni, Sajadi, & Imani, 2014). The word “art” comes to our mind when we hear the words beauty and aesthetics. Today, in studies in the field of philosophy, “aesthetics” is considered as a part of the “knowledge of philosophy”. Indeed, sometimes some scholars consider it as equal and synonymous with “philosophy of art”. However, beauty is far more extensive than the area of art, is not limited to artistic works, and has a wide range of vast areas, ranging from the natural world to the spiritual affairs and beyond them (Bavandian, 1999).

Due to the great importance of aesthetic in the development of human and emotional capacities, aesthetic-related studies have increasingly expanded in various scientific areas (Shelley, 2009). Education is one of the scientific areas influenced by aesthetic-related issues. Aesthetic skills and attitudes are crucial elements in development of different personality dimensions. They are also fundamental capacities and key aspects for stabilization of education-related activities and teaching and learning processes. According to experts, neglecting aesthetic education is a serious obstacle to the realization of fundamental objectives of higher education systems (Kaelin, 1989). Therefore, colleges and universities must take the responsibility to promote teaching on the basis of aesthetic criteria. They must also discover the aesthetic dimensions of teaching in higher education and effective ways to implement them. This way they will become a practical guide toward the theories of aesthetic education (Gadsden, 2008), and this will be realized only in the light of utilization of teaching methods based on the aesthetics principles and criteria by faculty members. Applying these skills in teaching and learning processes will provide a sustainable and active learning opportunity to share experiences and enjoy learning, and this way teaching and learning activities will become interesting and exciting activities for students and professors. In fact, the aesthetic dimension of formation of teaching and learning processes has a significant impact on its essence (Mehrmohammadi & Abedi, 2001), and teaching and learning are aesthetic experiences (Amini, 2005).

Today, educators need aesthetic education to increase the integrity of their educational knowledge. Therefore, many scholars have insisted on the importance of aesthetic-based education (Miller, 2011). According to Bianling and Zhengzhou (2014), there are reasons for applying the idea of aesthetic-based education in higher education systems, such as the need to understand the scientific concepts and phenomena as a whole, the need for obtaining an integrated understanding of multiple concepts, learners’ need for an active experience, the desire and passion of learners to enjoy learning, and the need to stimulate the creative imagination and thinking of learners in the teaching and learning processes. Accordingly, the idea of aesthetic education can lead to the harmonious and sustainable development of all aspects of learners and can promote all their talents.

In this regard, John Dewey believes that aesthetic components play an important role in the teaching and learning processes. According to him, teaching and learning are aesthetic experiences and aesthetic components such as feeling, imagination, intuition, reflection, will, association, and affection should be considered in the teaching process (Amini, 2005). Elliott Eisner also gives a special importance to the aesthetic nature of teaching and learning processes, and this is because of its necessity for teachers to acquire a thorough perception and interpretation of classroom events which is obtained only through ingenuity, insight, creativity, and imagination (Eisner 1994, cited in Mehrmo-
Investigating the Effect of Teaching Aesthetic Skills to Faculty Members.

Also, studies by Girod, Rau, and Schepige (2010), Hobbs (2012), Chou, Ching Cheng, and Cheng (2016), Medina (2012), and Kokkos (2011) indicate that aesthetic understanding of teaching and learning processes and paying attention to the aesthetic nature of education can prepare the ground for sustainable development of the quality of learning and teaching; however, despite the emphasis of experts and scholars on the necessity of paying attention to the aesthetic components in the teaching process and their major role in improving instructors’ teaching performance, few field studies are available in this area. Meanwhile, the current educational system has ignored the aesthetic dimensions of education and teaching (Aligh, 2011; Alexander, 2000; Yoo, 2014).

On the other hand, it seems that the majority of university professors have not undergone formal education to acquire the required skills for proper utilization of effective teaching components (such as aesthetic skills). Most professors are experts in the content, issues, and the material they teach; however, they have not undergone the needed training to teach in accordance with the developments of various fields of science and the growing needs of students (Barratt & Murray, 2004, McDougall & Drummond, 2005). Many of them do not know enough about the desirable teaching, planning, and evaluation methods, and this is a major educational gap in the higher educational system. This is so because the effectiveness of a teaching method depends on the professors’ skills and their ability in determining their educational objectives and expectations, creating a supportive learning environment, applying appropriate teaching methods, establishing desirable relationships with students, and using proper assessment and evaluation procedures (Houston, Clark, & Levine 2004; Steinert, 2005). Few studies have investigated the effect of aesthetic skills on development of teaching quality of faculty members in Iran and in other countries. Below is a review of some similar studies conducted in various countries:

Nasrabadi et al. (2013), in their study, concluded that aesthetic-based educational environments create capabilities in individuals to develop their social aspect (acquisition of experience in social and personal life, simplicity, elegance, coordination and harmony, emotions and feelings, wisdom, empathy, and accountability), personal aspect (formation of science and knowledge along with research to develop all personal aspects and to connect material and spiritual aspects) and purposiveness and insight (creativity, construction, practice, integrating experiment and experience with science, and formation of aesthetic taste), and thus learners will acquire aesthetic experience and knowledge with full satisfaction.

Girod et al. (2002) studied the effectiveness of an education method, designed based on Dewey’s aesthetic theory, and compared the learning of two groups of students in two classrooms, using semi-structured interviews. There were two different educational objectives in the two groups (aesthetic understanding of teaching and conceptual understanding of teaching). The results revealed the higher efficiency of teaching activities designed based on the aesthetic understanding of teaching, and the students in this classroom were more satisfied with the quality of the learning experience.

Hobbs (2012) conducted a study entitled “examining the aesthetic dimensions of teaching: the relationship between teacher’s knowledge, identity and passion”. This research used experimental data to investigate the role of teachers’ aesthetic understanding of teaching in the discovery and application of effective teaching methods in mathematics.
The results showed that in order to effectively teach different topics, a teacher should have an aesthetic understanding of different topics and must pay attention to various dimensions of aesthetics in education.

As noted before, providing high quality and effective teaching at universities is among the most important and determinant factors in achieving the missions and orientations of the higher education system. In this line, theory and experts’ opinions show that applying aesthetic skills plays an important and valuable role in the development of teaching and learning quality. However, few studies have investigated this issue in Iran and in other parts of the world. Therefore, this study investigated the effect of teaching “aesthetic skills” to faculty members – as missing links – on development of their effective teaching performance and tapped the neglected factors in the research literature.

Method

This quasi-experimental study adopted a two-group pretest-posttest design. The aim of this study was to investigate the effect of teaching aesthetic skills to faculty members on their effective teaching performance.

Participants

The study population included all the faculty members and students of the University of Isfahan in the first and the second semesters of the academic year of 2016–2017. Using simple random sampling method, 38 faculty members of the University of Isfahan were selected, who were then divided into control and experimental groups. 21 individuals were assigned to the control group, and 17 others were assigned to the experimental group. Six faculty members refused to continue attending the workshop or did not attend a minimum number of workshop sessions; thus, the size of the experimental group was reduced to 11. Therefore, a total of 32 faculty members participated in the study (11 participants in the experimental group and 21 participants in the control group).

In order to investigate the effective teaching performance of the faculty members, three classrooms were selected from different educational levels and academic years for each of the faculty member. Simple random sampling method was used to select students to evaluate their professors. First, classrooms and students associated with each of the professors were identified, and then three classrooms were randomly selected to evaluate each of the professors. The students answered the effective teaching performance questionnaires. The sample size of the students was 1096 in the pretest stage. 585 of the students evaluated the performance of the faculty members in the control group, while 511 individuals evaluated the performance of those in the experimental group. The sample size of the students was 935 in the posttest stage, of which 508 individuals evaluated the performance of the faculty members in the control group, and 427 individuals evaluated the performance of those in the experimental group.

To create homogeneity between the participants in the control and experimental groups, the professors were selected to be somewhat homogeneous in terms of gender, academic rank, teaching experience, and their average teaching evaluation scores by students. The average teaching evaluation scores of the faculty members in the experimental group was 81.36/100, while the average teaching evaluation scores of those in the
control group was 82.33/100. Indeed, the difference between the average scores of the faculty members in the experimental group and those in the control group was insignificant. In terms of academic rank, there were two associate and nine assistant professors in the experimental group and three associate and eighteen assistant professors in the control group. Therefore, the test and control groups were homogeneous in terms of academic rank. With regard to teaching experience, in the experimental group, four people had a work experience of one to five years, five people had a work experience of six to ten years, one person had a work experience of 11 to 15 years, and one person had a work experience of 16 to 20 years. In the control group, six people had a work experience of one to five years, nine people had a work experience of six to ten years, four people had a work experience of 11 to 15 years, and two people had a work experience of 16 to 20 years. Therefore, the test and control groups were homogeneous in terms of teaching experience. In terms of gender, the experimental group included four females and seven males, while the control group included seven females and fourteen males.

**Instruments**

Using research literature, a questionnaire was designed by the researcher, based on the 5-point Likert scale, to collect data. This questionnaire contained 30 five-choice questions in the form of six components, including: designing teaching strategies (questions 1–5), implementation of teaching strategies (questions 6–10), classroom management (questions 11–15), human relationships (questions 16–20), evaluation (questions 21–25), and desirable personality traits (questions 26 to 30). The scores of each of the questions ranged from 0 to 4, and the lowest and highest scores for each of the components ranged from 0 to 20. Therefore, the overall scores of each professor for all the six components of effective teaching ranged from zero to 120. Content validity was used to check the validity of this questionnaire. To measure the content validity of the questionnaire, it was provided to a number of professors and scholars in the area of teaching, and necessary corrections were made. In addition, test-retest method was used to test the reliability of the questionnaire. For this purpose, the questionnaire was completed by 52 students at two different times. The results showed a very high total correlation for all the six components ($r = 0.82$).

**Procedure**

In the pre-test stage, tailor-made questionnaires were distributed among the students attending the classes held by the target professors, and they were asked to complete them. This way, data were collected to determine the effective teaching performance of the professors before conducting the intervention. After conducting the pretest, an aesthetic skills-based teaching workshop was held for the members of the experimental group. No intervention was applied to those in the control group; thus, they continued teaching with their traditional teaching approach.

The inclusion criteria included: teaching at the University of Isfahan as a faculty member, teaching in two semesters of the academic year of 2016–2017, and willingness to participate in the research and to study and follow the aesthetic skills-based teaching process during the semester (members of the experimental group). The exclusion criteria
included: unwillingness to participate in the teaching workshops, skipping some sessions, and unwillingness to follow and use the aesthetic skills-based teaching process (those in the experimental group). Participants in the experimental group participated in the aesthetic skills-based teaching workshop for 6 sessions and 12 hours and were trained by two faculty members specialized in dialogue-based teaching. In addition, some relevant sources were handed to those in the experimental group to use in their teaching process. After the workshop and before the posttest stage, the researcher also visited the professors in their offices and encouraged them to utilize aesthetic skills in their classes. After conducting the required coordination with the deputy of education and other authorities, the researcher visited the faculty members who were selected to attend the workshops and talked with them about the importance of the workshops, the time and location, the procedures, and the advantages of participating in the workshops. All this procedure took around four months. The researcher, then, consulted with the supervisors and workshop instructors about the content and sources, time and location, procedures, provision of meals and snacks, and giving presents to the participants during the workshops. In the following stage, the faculty members of the experimental group were invited to participate in the workshop entitled “utilization of aesthetic skills in the teaching and learning processes” on the due date. Moreover, before holding the workshops, the goals, the study strategies, and the possibility of the positive impact of aesthetic skills-based teaching on the teaching quality were explained to the professors of the experimental group. To comply with ethical principles, the participants studied and signed some written consent forms.

About three months after the workshops and after several sessions of teaching different courses to the students, the posttest stage was conducted. The tailor-made questionnaires were again distributed among the students, and, this way, the data of the posttest stage were also collected through the professors’ self-assessment of their own teaching.

The teaching workshops were held by professors and experts in applying aesthetic skills in the teaching and learning processes. The workshops were held on the basis of training packages and flexible scenarios designed based on the content of valid sources. A training package was designed, developed, and handed to two workshop instructors. To develop the training package, all the documents, sources, and studies related to aesthetic skills in general and those associated with aesthetic teaching were first studied and analyzed in detail. Then, the researchers and the workshop instructors consulted with each other to determine the issues and factors associated with applying aesthetic skills in the teaching and learning processes; the training package was developed and provided to the workshop instructors. The instructors then utilized this training package to teach the aesthetic concepts, principles, and skills to the professors through different ways, such as lectures, discussions, audiovisual equipment, provision of training sources and books, and PowerPoint presentations, and in a collaborative atmosphere. All the participants were asked to use these major skills in their teaching process. Free books and relevant sources were also given to the faculty members for further study.

Based on the views of scholars, scientific documents, and related studies, the most important component of aesthetic teaching taught to faculty members included: paying attention to the emotional dimension along with the cognitive dimension in the teaching-learning process, providing open-structure project-based learning opportunities, Coher-
In this study, the effect of teaching aesthetic skills to faculty members was investigated. The study aimed to understand the impact of aesthetic skills on teaching and learning activities. It focused on the role of teaching aesthetic skills in enhancing ethical values, integrity, and creativity in the classroom. The study also examined the flexibility in choosing and implementing teaching approaches, the importance of imagination in developing learners' creativity, and the effective use of visual contact in the teaching process.

Data were analyzed using SPSS 22, employing descriptive statistics (frequency table, percentage, mean, standard deviation) and inferential statistics (independent and paired t-tests).

**Results**

In this section, demographic information about the participants is first presented, and then the data and explanations about the main results are provided.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Control Group</th>
<th>Experimental Group</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N = 21 (65.6%)</td>
<td>N = 11 (34.4%)</td>
<td>N = 32</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>7 (33.3%)</td>
<td>4 (63.6%)</td>
<td>11 (65.6%)</td>
</tr>
<tr>
<td>Male</td>
<td>14 (66.7%)</td>
<td>7 (36.4%)</td>
<td>21 (34.4%)</td>
</tr>
<tr>
<td>Academic Rank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assistant professors</td>
<td>18 (85.7%)</td>
<td>9 (81.8%)</td>
<td>5 (15.63%)</td>
</tr>
<tr>
<td>Associate professors</td>
<td>3 (14.3%)</td>
<td>2 (18.2%)</td>
<td>27 (84.37%)</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 to 5 years</td>
<td>6 (28.6%)</td>
<td>4 (36.3%)</td>
<td>10 (31.25%)</td>
</tr>
<tr>
<td>6 to 10 years</td>
<td>9 (42.9%)</td>
<td>5 (45.5%)</td>
<td>14 (43.75%)</td>
</tr>
<tr>
<td>11 to 15 years</td>
<td>4 (19%)</td>
<td>1 (9.1%)</td>
<td>5 (15.62%)</td>
</tr>
<tr>
<td>16 to 20 years</td>
<td>2 (9.5%)</td>
<td>1 (9.1%)</td>
<td>3 (9.38%)</td>
</tr>
</tbody>
</table>

Table 1 indicates that among the 32 faculty members participating in the research, 21 (65.6%) were assigned to the control group, and 11 (34.4%) were assigned to the experimental group. 11 individuals (34.4%) were female, while 21 individuals (65.6%) were male. In terms of academic rank, there were 27 assistant professors (84.37%) and 5 associate professors (15.63%). In terms of teaching experience, 10 professors (31.25%) had a working experience of 1 to 5 years, fourteen (43.75%) had a working experience of 6 to 10 years, five (15.62%) had a working experience of 11 to 15 years, and three (9.38%) had a working experience of 16 to 20 years. In terms of gender, the experimental group included four females and seven males, while the control group included seven females (33.3%) and 14 males (66.7%). In terms of academic rank, there were two associate (18.2%) and nine assistant professors (81.8%) in the experimental group, and three associate (18.2%) and 18 assistant professors (85.7%) in the control group. In terms of teaching experience, in the experimental group, four participants (36.4%) had a working experience of 1 to 5 years, five (45.6%) had a working experience of 6 to 10 years, one (9.1%) had a working experience of 11 to 15 years, and one (9.1%) had a working experience of 16 to 20 years. In the control group, six participants (28.6%) had a working experience of 1 to 5 years, nine (42.9%) had a working experience of 6
to 10 years, four (19%) had a working experience of 11 to 15 years, and two (9.5%) had a working experience of 16 to 20 years.

Table 2 presents the findings of the comparison between effective teaching performances of the professors in both groups in the pretest stage with the posttest stage experimental group. Paired t-test results showed that there was no significant difference between the mean effective teaching scores of the professors in the control group, in the pretest stage and their scores in the posttest stage ($p<0.05$). In addition, there was no significant difference between the mean scores of the professors in the control group in the pretest stage and their scores in the posttest stage, in terms of each individual component of effective teaching. The results also showed that the mean effective teaching scores of the professors in the experimental group (professors who underwent training intervention and learned aesthetic skills) were significantly higher in the posttest stage after the intervention, compared to their scores in the pretest stage – before intervention ($p<0.05$). In addition, the mean scores of the professors in the experimental group were significantly higher in the posttest stage, compared to their scores in the pretest stage, in terms of all the components of effective teaching ($p<0.05$).

### Table 2
**Paired T-test on Mean Effective Teaching Scores of Faculty Members in Pretest Stage with Posttest Stage in Two Groups**

<table>
<thead>
<tr>
<th>Components of Effective Teaching</th>
<th>Pre-test Mean</th>
<th>Pre-test SD</th>
<th>Post-test Mean</th>
<th>Post-test SD</th>
<th>Paired t-test</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>13.04</td>
<td>2.51</td>
<td>12.58</td>
<td>2.66</td>
<td>t = -3.408</td>
<td>20</td>
<td>0.433</td>
</tr>
<tr>
<td>Experimental group</td>
<td>13.55</td>
<td>2.44</td>
<td>16.62</td>
<td>1.90</td>
<td>t = 4.077</td>
<td>10</td>
<td>0.031</td>
</tr>
<tr>
<td>Implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>13.68</td>
<td>2.04</td>
<td>13.08</td>
<td>1.46</td>
<td>t = -2.308</td>
<td>20</td>
<td>0.317</td>
</tr>
<tr>
<td>Experimental group</td>
<td>13.57</td>
<td>2.14</td>
<td>16.98</td>
<td>2.22</td>
<td>t = 3.159</td>
<td>10</td>
<td>0.022</td>
</tr>
<tr>
<td>Classroom Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>13.76</td>
<td>1.97</td>
<td>13.96</td>
<td>2.02</td>
<td>t = -6.664</td>
<td>20</td>
<td>0.601</td>
</tr>
<tr>
<td>Experimental group</td>
<td>13.59</td>
<td>1.88</td>
<td>16.63</td>
<td>2.09</td>
<td>t = 4.022</td>
<td>10</td>
<td>0.042</td>
</tr>
<tr>
<td>Human Relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>15.06</td>
<td>2.42</td>
<td>14.90</td>
<td>3.04</td>
<td>t = -3.771</td>
<td>20</td>
<td>0.664</td>
</tr>
<tr>
<td>Experimental group</td>
<td>14.89</td>
<td>2.58</td>
<td>16.90</td>
<td>1.59</td>
<td>t = 3.338</td>
<td>10</td>
<td>0.039</td>
</tr>
<tr>
<td>Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>13.46</td>
<td>3.35</td>
<td>14.11</td>
<td>2.55</td>
<td>t = -2.031</td>
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<td>0.476</td>
</tr>
<tr>
<td>Experimental group</td>
<td>13.42</td>
<td>2.11</td>
<td>16.77</td>
<td>2.44</td>
<td>t = 3.851</td>
<td>10</td>
<td>0.019</td>
</tr>
<tr>
<td>Desirable Personality Traits</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>15.93</td>
<td>3.58</td>
<td>14.57</td>
<td>2.66</td>
<td>t = -2.670</td>
<td>20</td>
<td>0.499</td>
</tr>
<tr>
<td>Experimental group</td>
<td>15.33</td>
<td>3.14</td>
<td>17.87</td>
<td>2.38</td>
<td>t = 4.127</td>
<td>10</td>
<td>0.026</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control Group</td>
<td>84.93</td>
<td>16.14</td>
<td>83.20</td>
<td>14.39</td>
<td>t = -20.852</td>
<td>20</td>
<td>0.299</td>
</tr>
<tr>
<td>Experimental group</td>
<td>84.35</td>
<td>14.29</td>
<td>101.77</td>
<td>12.59</td>
<td>t = 22.574</td>
<td>10</td>
<td>0.029</td>
</tr>
</tbody>
</table>

As indicated in Table 3, the results of the independent T-test showed that there was no significant difference between the mean effective teaching scores of the professors in the control group with the mean effective teaching scores of those in the experimental group in the pretest stage ($p<0.05$). In addition, in the pretest stage, there was no significant difference between the mean scores of the professors in the control group with those in the experimental group, in terms of each individual component of effective teaching.
Table 3
Independent T-test Results on Effective Teaching Scores of Faculty Members of Both Groups in Pretest Stage and Posttest Stage

<table>
<thead>
<tr>
<th>Components of Effective Teaching</th>
<th>Control Group Mean</th>
<th>SD</th>
<th>Experimental group Mean</th>
<th>SD</th>
<th>Independent T-Test t</th>
<th>df</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Designing Teaching</td>
<td>Pre-test</td>
<td>13.04</td>
<td>2.51</td>
<td>Pre-test</td>
<td>13.55</td>
<td>2.44</td>
<td>t = -3.089</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>12.58</td>
<td>2.66</td>
<td>Post-test</td>
<td>16.62</td>
<td>1.90</td>
<td>t = 7.606</td>
</tr>
<tr>
<td>Implementation of Teaching</td>
<td>Pre-test</td>
<td>13.68</td>
<td>2.04</td>
<td>Pre-test</td>
<td>13.57</td>
<td>2.14</td>
<td>t = -7.330</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>13.08</td>
<td>1.46</td>
<td>Post-test</td>
<td>16.98</td>
<td>2.22</td>
<td>t = 6.507</td>
</tr>
<tr>
<td>Classroom Management</td>
<td>Pre-test</td>
<td>13.76</td>
<td>1.97</td>
<td>Pre-test</td>
<td>13.59</td>
<td>1.88</td>
<td>t = -7.002</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>13.96</td>
<td>2.02</td>
<td>Post-test</td>
<td>16.63</td>
<td>2.09</td>
<td>t = 7.606</td>
</tr>
<tr>
<td>Human Relationships</td>
<td>Pre-test</td>
<td>14.90</td>
<td>3.04</td>
<td>Pre-test</td>
<td>14.89</td>
<td>2.58</td>
<td>t = -7.064</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>14.11</td>
<td>2.55</td>
<td>Post-test</td>
<td>16.77</td>
<td>2.46</td>
<td>t = 6.428</td>
</tr>
<tr>
<td>Evaluation</td>
<td>Pre-test</td>
<td>13.46</td>
<td>3.35</td>
<td>Pre-test</td>
<td>13.42</td>
<td>2.11</td>
<td>t = -9.819</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>14.11</td>
<td>2.55</td>
<td>Post-test</td>
<td>15.33</td>
<td>3.14</td>
<td>t = -4.107</td>
</tr>
<tr>
<td>Desirable Personality Traits</td>
<td>Pre-test</td>
<td>15.93</td>
<td>3.58</td>
<td>Pre-test</td>
<td>17.87</td>
<td>2.38</td>
<td>t = 6.358</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>14.57</td>
<td>2.66</td>
<td>Post-test</td>
<td>17.78</td>
<td>2.38</td>
<td>t = 6.358</td>
</tr>
<tr>
<td>Total Components</td>
<td>Pre-test</td>
<td>84.93</td>
<td>16.14</td>
<td>Pre-test</td>
<td>84.35</td>
<td>14.29</td>
<td>t = -38.411</td>
</tr>
<tr>
<td></td>
<td>Post-test</td>
<td>83.20</td>
<td>14.39</td>
<td>Post-test</td>
<td>101.77</td>
<td>12.59</td>
<td>t = 37.753</td>
</tr>
</tbody>
</table>

In the posttest stage and after the intervention, the mean effective teaching scores of the professors in the experimental group were significantly higher than those in the control group (p<0.05). In addition, in the posttest stage, the mean scores of the professors in the experimental group were significantly higher than those in the control group, in terms of all components of effective teaching (p<0.05).

Therefore, teaching aesthetic skills to the faculty members prepared the ground for their effective teaching performance development.

Discussion and Conclusion

The findings showed that teaching aesthetic skills to the faculty members of the experimental group paved the way for development of their effective teaching performance and enhanced their potential to utilize all of the six components of effective teaching (designing teaching strategies, implementation of teaching strategies, classroom management, human relationships, evaluation, and desirable personality traits). Few studies have investigated the effect of aesthetic skills on development of teaching quality in Iran and in other countries; however, the findings of a limited number of similar studies, such as Nasrabad et al. (2013), Girod et al. (2002), and Linda (2012), are consistent with the findings of this study. These studies confirmed the positive role of applying aesthetic criteria in improving and developing the quality of teaching and learning. The results of this study also confirm the views of leading scholars of the field of education, such as John Dewey, Elliot Eisner, Maxine Greene, Mehrmohammadi, etc., who have insisted on the importance of aesthetic skills and criteria in sustainable development of the quality of teaching and learning.
The major aesthetic skills taught to the faculty members in this study, which are utilized in the teaching and learning processes, include: paying attention to the emotional dimension along with the cognitive dimension in the teaching-learning process, providing open-structure project-based learning opportunities, Coherence and integrity in teaching and learning activities, attention to the situation and conditions of the classroom, flexibility in the choice and implementation of teaching approaches, utilizing the element of imagination to develop the creativity of learners in the teaching process, application of visual contact in the teaching process, attention to ethical values in the teaching and learning processes, and using fair qualitative and process evaluation methods. In fact, even a basic utilization of these skills by professors in their teaching and communication with students could significantly develop their effective teaching performance. In the researchers’ eyes, utilizing these aesthetic skills by the professors in the teaching and learning processes can prepare the ground for the enjoyment, emergence, and purification of students’ learning experiences and professors’ teaching knowledge. It can also foster a spirit of creativity, increasing the self-esteem and emotional, personal, and collective satisfaction of students and faculty members, and, altogether, these factors will result in the realization of effective teaching and learning.

Based on the findings of this study, university faculty members should acquire aesthetic teaching skills with an aesthetic attitude, and they must care about aesthetics in the teaching and learning processes. Different variables, such as the diversity of student needs and differences, faculty members’ decisions and beliefs, intuitive, creative, innovative and emotional activities, unique classroom conditions, complexities and delicacies of teaching, utilizing intuitive perceptions, and instant insight and creativity in creating professional teaching knowledge, affect the teaching and learning process. Thus, it is necessary to take an aesthetic look at the teaching process to pave the way for the application of each of the effective teaching components and sustainable development of faculty members’ effective teaching performance.

Despite the findings of the present study which confirm the significant role and effect of aesthetic skills in the development of effective teaching performance of professors, and in spite of the strong theoretical basis of aesthetic teaching approach in the area of education and teaching and growing importance of aesthetic teaching in the higher education system, applying aesthetic skills in the teaching and learning processes has been neglected by the higher education system authorities and university professors. Applying aesthetic skills in the teaching and learning processes at universities is a missing link and a neglected factor. Therefore, these findings can be a step towards highlighting the importance of aesthetic criteria and skills in the sustainable development of teaching quality of university faculty members.

Training aesthetic skills to the faculty members was one of the important challenges in this paper. Actually, aesthetic skills training to professors and also measuring the impact of this training on the teaching performance of professors are very difficult tasks and for these reasons, this issue can be considered as the challenges and limitations of the present study. Nevertheless, because of the importance and value of aesthetic skills in the field of education and the important roles these skills can play in developing educational knowledge of the professor, we tried to teach these skills to the professors through qualified instructors and examined the effect of this on the teaching performance of professors. Despite the problems mentioned above, this study and its results can be an important step in considering the role and effect of aesthetic education in improving teaching performance.
Investigating the Effect of Teaching Aesthetic Skills to Faculty Members...

Note:
(1) This study is part of a larger study as PhD dissertation in Educational Sciences at the University of Isfahan.

Acknowledgements
The researchers would like to express their gratitude and appreciation to the Deputy of Education at the University of Isfahan for their assistance in conducting the workshop, esteemed faculty members, and dear students for their kind participation in this study.

References


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**Appendix**

**Teaching Performance Questionnaire**

To evaluate the effective teaching performance of faculty members, a tailor-made questionnaire was used in the pretest and posttest stages, where students were asked to express their opinions on faculty members’ performance. This questionnaire was developed with reference to the research literature and based on the 5-point Likert scale. The questionnaire contained 30 five-choice questions in the form of six components, including: designing teaching strategies (questions 1–5), implementation of teaching strategies (questions 6–10), classroom management (questions 11–15), human relationships (questions 16–20), evaluation (questions 21–25), and desirable personality traits (questions 26 to 30). The scores of each of the questions ranged from 0 to 4, and the lowest and highest scores for each of the components ranged from 0 to 20. Therefore, the overall scores of each professor for all the six components of effective teaching ranged from zero to 120.

**Dear Participant**

The following questionnaire is designed to conduct a scientific research to evaluate the effective teaching of faculty members of the university. Please study the questionnaire carefully and determine the performance of the respective professor in each of the items raised in this questionnaire. Thank you in advance for your sincere and honest cooperation.

Gender:  
Field of study:  
Educational level:  
Course title:  
Semester:  
<table>
<thead>
<tr>
<th>No.</th>
<th>Items</th>
<th>Always</th>
<th>Most times</th>
<th>Some times</th>
<th>Rarely</th>
<th>Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Providing students with training objectives before beginning the teaching and learning processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Providing topics, content, syllabus and resources before beginning the teaching and learning processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Providing an appropriate schedule for teaching and learning activities and presenting them to students before beginning the teaching and learning processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Providing appropriate teaching and learning patterns, methods and strategies in accordance with the topics and syllabus of each course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Determining learning activities and assignments (scientific and research assignments) for students and their evaluation methods</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Mastering different teaching patterns, methods and techniques in accordance with the subjects of the lessons and different learning situations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Mastering the application of teaching aids and technologies such as video projector, overhead, etc. in the teaching and learning processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Guiding students to pursue their studies and research in accordance with their motives, interests and their scientific and research potentials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Providing students with group learning opportunities to participate in scientific and research activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Summarizing and organizing topics skillfully</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Punctuality and timely presence in classroom and sensitivity toward timely presence of students in the classroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Establishment of necessary discipline in the classroom to create an optimal learning environment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Time management and optimal use of time to advance the teaching and learning processes in accordance with presented syllabus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Using appropriate admiration and criticism techniques regarding students’ learning activities and academic performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Ability to keeping track of classroom activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Establishment of friendly relationships with students both inside and outside the classroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Using respectful words to address students and respecting them inside and outside the classroom</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Reasonable response to students’ suggestions, criticisms and views</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Understanding students’ individual differences and independent identities and supporting them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Observing values and ethics in teacher-student relationships</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Providing appropriate quantitative and qualitative tests to evaluate students’ learning trend in the teaching and learning processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Compliance of the content of classroom evaluations and exams with the goals, subjects and topics provided during the course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Providing continuous feedback to students about their learning quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Observing ethical considerations and using an appropriate and fair scoring or ranking system in evaluating student performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Continuous review of the results of student evaluations to address learners’ learning weaknesses</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>Appropriate dress and appearance in the classroom and in teaching/learning situations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>A deep sense of responsibility, duty and commitment to teaching profession</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>Physical, mental and intellectual health</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>Interest and love for education, teaching and learning activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>Adherence and commitment to social and moral norms and religious beliefs</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
The Resolution of Conflict between Teacher and Student: Students’ Narratives

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Abstract

The important thing for teachers is to solve conflicts with students correctly and effectively without damaging the relationship, losing the cooperation with students or disrupting educational process. Although there is a great concern about the way a teacher manages students’ behaviour, there is very little relevant data concerning teacher-student conflict. The article aims at revealing the characteristics of conflict resolution between students and teachers from the students’ point of view.

To investigate the process of conflict between a teacher and a student, a case study method was used. Respondents were asked to recall a conflict occurring between them and a teacher during the school years, describe how the incident was handled, and the consequences of it. The number of respondents constituted 30 students.

Students and teachers actually engage in a range of behaviours. In accordance with the theoretical framework, the four behavioural categories were grouped. Students reported that during the teacher-students conflict a full palette of strategies (dominating, integrating, accommodating and avoiding strategies) was used. Findings revealed that forcing was expressed by arguments, involving a third party and aggression. Avoiding was expressed by crying, avoiding the contact. Accommodating was expressed by pretending and giving in. Apologising, making a compromise, compensation, talking about the problem were examples of an integrating strategy.

The results indicated that participants reported 28 behavioural reactions to a classroom conflict. Among them, 12 were those of teacher engagement, and 16 of student engagement. In line with the conglomerated conflict behaviour framework, students reported that both conflict parties (students and teachers) in the case of active student position engaged in more than one type of behaviour in response to a single incident.

Understanding students’ experience would allow teachers to better respond and manage students’ reactions, as well as help teachers prevent behaviours such as aggression and promote other behaviours such as motivation.

Keywords: conflict, reason, resolution, student, teacher

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Introduction

Considered to be a key indicator of subjective sustainability, the socio-emotional competency includes the ability to find a protective internal mechanism in complicated situations and the ability to communicate positively. Possessing such competency requires one to create and keep friendship relations (Kuurme and Carlsson, 2010). After all, the idea of sustainable development is the idea of harmonious coexistence of subjects, societies, and the surrounding world (Makarevičs, 2008). The necessary socio-emotional competences are acquired by students under supervision of teachers. M. Sakk (2015, p. 100) has emphasised “the initial and basic role of the teacher is to form learners’ learning skills, emotional competency and social skills so that they could cope at school”.

It is being emphasised in the pedagogical literature that a harmonious relationship between students and teachers based on mutual respect, understanding, kindness and cooperation is essential for a positive school climate and the success of education (e.g., Aramavičiūtė, 2005; Pagliaro, 2011). Without the cooperation, the school or the individual members classroom cannot function (Ozgan, 2016: 147). It is important for students to gain a positive experience from learning. Socialisation into the existing reality cannot serve sustainability if there are too many signs of a negative conflicting relationship.

However, some studies (e.g., Archambault, Kurdi, Olivier, and Goulet, 2016; Čiuladienė, 2013) have revealed that the reality of school is characterised not only by constructive but also by destructive interactions. Teacher-student relationships dominated by a conflict are negatively associated with student behavioural and affective engagement in learning. Moreover, conflict in the teacher-student relationship significantly and positively correlates with peer victimization (Archambault et al., 2016).

However, the studies carried out concerning conflicts between teacher and students are quite limited (Dogan, 2016). Based on quantitative data, the researcher has argued that teachers tend to apply respectively domination, reconciliation, integration, avoidance and compromise strategies for the resolution of conflicts experienced between a teacher and a student. However, qualitative research has explored negative ways in which teachers perceive and manage conflicts and the disputants. Langaretti and Wilson (2006) found that the majority of responses used by teachers in the playground were contending strategies, including verbal abuse and physical involvement, a less frequently used strategy was withdrawal (inaction, referring to other teacher, ignorance and sending away), the least common approach was problem solving. In the study, none of the teachers used smoothing or compromising.

Teachers’ conflict management needs to be studied to improve the management. In fact, only a few studies have been conducted on this issue in Lithuania. Whereas conflict handling behaviour of individuals is directly related to culture (Ohbuchi, Fukushima and Tedeschi, 1999), this study is based on narratives of Lithuanian students. The study aims at displaying the main characteristics of teacher-student conflict management. The questions to be answered are the following: 1) what teacher’s behaviour is associated with the cause of teacher-student conflicts? 2) What reactions are used when a conflict between a teacher and a student occurs?
The Resolution of Conflict between Teacher and Student: Students’ Narratives

Theoretical Framework

A set of three concepts to explain the nature of conflict is used here after Mayer’s (2000) explanation of the dynamic of conflict. Three dimensions restrict to focus on the thoughts, feelings and behaviours related to a conflict issue. Thoughts about failure to satisfy the interests and a situation concern a cognitive (perceptual) dimension. The assessment of a situation is framed by person’s beliefs and perception about him/herself and the other party, interpretation of facts and data, attribution of motives and beliefs about the other party’s intentions. Besides, emotional reactions also appear (an emotional dimension). From a conflict dynamic perspective, it is critical to assess the conflict from the emotional point of view to understand what emotions the parties are carrying in relations to the conflict, and how these emotions may affect the resolution process. In addition to perception and feelings about a conflict, parties also make choices on how to behave in response to the conflict (a behavioural dimension). Over and above, one party’s behaviour may trigger another party’s response, with the first party quite unaware of how their behaviour is contributing to the problem (Furlong, 2005, p. 169).

Based on this dimension model, a conflict is to be defined as a situation when two or more parties experience emotional frustrations and interaction struggles due to perceived incompatibility of interests. Personal interests can affect the decision to use a particular strategy or strategies in order to manage a conflict (Wilmot and Hocker, 2001).

Wilmot and Hocker (2001, p. 130) defined conflict resolution strategies (styles) as patterned responses, or clusters of behaviour that people use in conflict. Conflict researchers classify conflict resolution strategies in different ways. However, most researchers use a five-strategy approach defined by Kilmann and Thomas, which includes collaboration, accommodation, competition, avoidance, compromise. There are several ways in the literature to characterise these five strategies by combining them into two grid dimensions, such as concern for self and concern for the other (Rahim, 1986); activity and passivity; cooperativeness and assertiveness (Wilmot and Hocker, 2001); appropriateness and effectiveness (Gross and Guerrero, 2000); and distributivity and integrity (Van de Vliert et al., 2004).

Avoidance represents a low level of concern for self and a low level of concern for the other; it is marked by passivity; it is uncooperative, ineffective, and inappropriate. Accommodation represents a low level of concern for self but a high level of concern for the other (it is a strategy by which individuals give up their own needs and conform to what the other wants). It is a passive and indirect response. It represents a high level of cooperativeness; in this strategy, protecting the relationship is the most important outcome. Individuals who use this strategy are perceived as appropriate but not effective. Competition (dominating / forcing) represents a high level of concern for self and a low level of concern for the other. Competition cannot be used without an activity – there is a need for active work and high-energy involvement. It is defined as that of high level of assertiveness and as uncooperative one. Collaboration (problem solving / integrating) represents a high level of both opponents’ concerns (for the collaborating strategy identifying a mutual satisfying solution is the goal). It is an active strategy; it expresses a high level of cooperativeness by cooperativeness. It is both effective and appropriate (it provides each disputant with access to the other person’s perceptions of incompatible goals, thereby enabling them to find a solution that integrates the goals and needs of both
Compromise is a middle ground, where there are moderate degrees of concern for self and concern for the other. Compromise can be either active or passive, depending on its type. This strategy is also seen as moderately direct and cooperative, effective and appropriate.

Conflict resolution strategies may take different methods (tactics forms). Tactics are individual moves people make to carry out their general approach (Wilmot and Hocker, 2001, 130–150). The classification differs from one author to another. In reference, it could be stated that all of the avoidance tactics involve refusing to engage in the conflict. Although competition comes in many tactics, its function is always to pursue one’s concerns at the expense of the other concerns. All competitive tactics involve pressuring the other person to change. Collaboration involves descriptive and disclosing statements and soliciting disclosure and criticism from the other party.

In daily life, these basic reactions are used as components of more complex reactions. For those complex reactions of a conflict issue, the term of conglomerated conflict behaviour may be used (Van de Vliert et al., 2004). The conglomerate perspective posits that any reaction consists of multiple components of conflict behaviour, and that these components moderate each other’s effect on the substantive and relational outcomes of the conflict. The theory of conglomerate conflict behaviour states that the components of conflict behaviour should be considered as interrelated. Conglomerations of escalation contending and de-escalation accommodating, integrating, or avoiding might well be more effective than contending in and of itself (Euwema, van de Vliert, Bakker, 2003).

Procedures

The instrumentation and procedures replicated those of Horan, Chory and Goodboy (2010) where a questionnaire format was employed. Participants were asked to recall the conflict with a teacher they experienced at school. The first question asked about teacher behaviour (what did the teacher say or do that made you think he/she were unfair?). Next participants were asked to describe their feelings after this unfair act. Finally, they were asked to write how they reacted to this unfairness, what way a teacher reacted to their response.

Data Analysis

A method of involving data analysis is the content analysis (Berg, 2007). Transcriptions of the provided teacher-student conflict situations were read several times with the purpose of extracting important statements, which were directly related to the variation of conflict causes and resolution strategies.

Answers were deductively coded according to a set of three categories, which were derived from dimensions of the conflict process: perception of cause, feeling to an unfair teacher’s action, and actions (those of teacher and student) aiming to resolve the issue. Content analysis helps teachers interpret thoughts, feelings and actions expressed by young people dealing with a conflict in the educational setting. Each behavioural response constituted a separate unit. Then, after in-depth analysis of the responses, they were organised in accordance with various coding schemes. Firstly, a two-category scheme was decided upon. Passive orientation was defined as inaction /acceptance. Active orientation occurred when students took actions to express their dissent. Secondly, a four-
category coding system was agreed upon. It was identified that four conflict resolution strategies were used: integrating, forcing, avoiding and accommodating. Forcing focuses on wanting to win the conflict (to force the violation) and unwilling to reconcile. Forcing assumes victory of one party at the expense of the other. Accommodating emphasises the preservation of relational concern by obliging to others’ desires. Integrating emphasises both the resolution of the conflict and the preservation of the relationship. Integrating style means satisfying the goals and needs of both parties in conflict. Avoiding represents withdrawal from the situation and avoiding the other party.

Participants

The data were collected from students of Mykolas Romeris University. Participation in the study was voluntary, and students had time in class to complete the task. The investigation was led under requirements of the social research ethics: respondents were informed about the objectives and contents of the survey, confidentiality was kept to preserve personal data of the respondents and voluntary participation guaranteed by asking of personal consent to participate with the possibility to withdraw from it at any moment. The questionnaire was self-administered and required approximately 30 minutes to complete.

The number of respondents constituted 30 students. There were 22 females, 5 males and 3 unidentified. The student respondents were graduates and postgraduates. Their average age was 24.9.

Limitation of the Research

The cases of the conflicts between teachers and students, which are analysed in the article, are presented from the perspective of one side of the conflict – student’s; therefore, it is taken into account that the conflicts, which were the most memorable to students, are presented, especially, when the beginning of a conflict was related to, in students’ assessment, inappropriate actions of a teacher.

Findings

1. Student’s Perception and Feelings regarding a Conflict Situation

In the opinion of students, the case of a conflict arises from the unfair assessment of the student’s work (by a lower grade than a student expected). On the basis of the presented case descriptions, two subcategories can be distinguished:

1) An assessment is not objective. In the opinion of a student, teachers, when assessing, did not adhere to the principles of assessment (10, 18). The cases, when a student marked a negative attitude of a teacher towards a group (teachers practiced a different assessment system towards individual students), were classified in this subcategory (9, 1, 22, 14, 13, 2, 20). The students claimed that the teachers assessed differently students, such as freshmen (9), students who were low achievers (22), not belonging to the category of “teacher’s pets” (13, 14, 22) or simply “certain students” (17, 10).
2) **An assessment does not correspond to reality** (in the opinion of a student) – a teacher did not give a grade which is due to a student (8, 18). For example, a student is accused of cheating or lying. However, not due to the fact that a teacher had evidence, which substantiated such a decision, but because s/he thought like that – teacher’s decisions were based on an initial preconceived negative attitude. A teacher, on the basis of his own invented unreasonable presumptions, punished a student by lowering his/her grade (1) or by refusing to enter a grade, which was due to a student, into the registry (8). Consequently, the second subcategory is comprised of the cases when a negative attitude of a teacher is not towards a group, but only towards a student – a teacher does not believe in the student’s integrity and / or does not trust his/her abilities, does not believe that a student performed the task him/herself and acquired the necessary skills to perform the task (8, 18), does not believe that a student is able to solve problems related to education (19). On the other hand, it should be borne in mind that the label of “a negative attitude of a teacher” reflects a student’s approach, which may differ from a real attitude of a teacher towards a student. During one of the conflicts, three students made the same number of mistakes in the task they had performed. Two students received the same assessment, whereas the third one received a grade which was lower by one point. When the latter student inquired the teacher why his assessment was different, the teacher responded that, in this way, he wanted to encourage him to make even a greater effort. The case may be interpreted controversially – it could have been that the attitude towards the student was extremely positive (the student was assessed as the one who was more gifted than his classmates). However, the student, when perceiving the situation as conflictual, felt injustice, great disillusionment towards the teacher, and feels grievance up till now, when a few years have passed since the event (2).

Having been assessed, in their opinion, incorrectly, students felt grievance (18, 22), felt bad (2, 14, 18), felt humiliated, underestimated (1, 9, 10, 13, 18), lost their motivation to learn (9), as well as felt anger, disappointment (4, 8, 9, 10, 20).

An analysis of the cases has enabled the authors to distinguish one more cause of conflicts. It is **an inadequate reaction of a teacher towards the situation** (7, 11, 16). Here, two subcategories have also been distinguished:

1) **Unjust punishment imposed by a teacher.** In one of the cases (16), a conflict started when a teacher learned that one student (8 years old) would sell children’s jewellery to other classmates. He imposed 4 punishments on the student: he informed the headmaster of the school about the situation, assessed the student’s behaviour by giving a negative grade, scolded him in front of all the schoolmates and informed his parents. In this case, the teacher did not assess the student’s transgression and did not choose a punishment which was adequate to the transgression and effective; he disregarded a circumstance that the student did not have sufficient knowledge and skills to assess the impropriety of his actions, because he was a second form student. The student’s reaction towards numerous punishments was expressed by a deep sorrow, the feeling of hopelessness, the fear regarding negative reaction of parents and punishment (16).
2) Psychological abuse towards students. Such teacher’s actions as insulting, offending, humiliation of a student (11, 15, 19), shouting at a student without providing appropriate information on the performance of a task (6), threats of punishing (20) were classified under this subcategory. Due to such teacher’s behaviour, students lost their motivation to learn and commenced skipping school (19), felt humiliated, felt shame (11), felt offended (15), felt sorrow, annoyance (20).

2. Teacher-Student Conflict Resolution Strategies

The results indicated that participants reported 28 behavioural reactions to a teacher-student conflict. Among them, 12 were those of teacher engagement, and 16 of student engagement. Table 1 provides the results of data content analysis.

Table 1

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Student actions</th>
<th>Teacher actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrating</td>
<td>Apologises</td>
<td>Apologises</td>
</tr>
<tr>
<td></td>
<td>Clarifies the situation by asking additional questions</td>
<td>Proposes compensation</td>
</tr>
<tr>
<td></td>
<td>Compromises</td>
<td>Clarifies the situation by listening to a student, asking additional questions</td>
</tr>
<tr>
<td>Forcing</td>
<td>Argues</td>
<td>Argues</td>
</tr>
<tr>
<td></td>
<td>Blames a teacher</td>
<td>Gives a scolding</td>
</tr>
<tr>
<td></td>
<td>Stops effort</td>
<td>Reduces grade</td>
</tr>
<tr>
<td></td>
<td>Lies</td>
<td>Involves parents</td>
</tr>
<tr>
<td></td>
<td>Involves parents</td>
<td>Involves the administration</td>
</tr>
<tr>
<td></td>
<td>Involves administration</td>
<td>Threatens</td>
</tr>
<tr>
<td></td>
<td>Threatens the teacher behind his/her back</td>
<td>Humiliates</td>
</tr>
<tr>
<td>Avoiding</td>
<td>Cries</td>
<td>Takes no comment (does not speak on the subject)</td>
</tr>
<tr>
<td></td>
<td>Comes out of the class (slams door)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does not communicate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Changes class</td>
<td></td>
</tr>
<tr>
<td>Passive orientation</td>
<td>Descends / complies</td>
<td>Descends / complies</td>
</tr>
<tr>
<td>Accommodating</td>
<td>Does nothing</td>
<td></td>
</tr>
</tbody>
</table>

Both students and teachers actually engage in the range of behaviours. In accordance with the theoretical framework, the four behavioural categories were grouped. Students reported that during the teacher-students conflict a full palette of strategies (dominating, integrating, accommodating and avoiding strategies) was used. Findings revealed that forcing was expressed by arguments, involving a third party and aggression. Avoiding was expressed by crying, avoiding the contact. Accommodating was expressed by pretending and giving in. Apologising, making a compromise, compensation, talking about the problem were examples of integrating. In line with the conglomerated conflict behaviour framework, students reported that both conflict parties (students and teachers) in the case of active student positions were engaging in more than one type of behaviour in response to a single incident.
An analysis of the cases of the conflict between a teacher and a student enabled the authors of the research to systemise the obtained findings and create a conflict resolution algorithm determining the connection between the actions (selected strategies) of conflict participants and the consequence (result) of a conflict (Fig. 1).

The course of a conflict was determined by an approach towards a conflict taken by a student – passive or active and, consequently, a conflict resolution strategy. If from the very beginning (during a conflict identification stage) a passive approach is chosen, the conflict is not solved, whereas the initial reaction of a student towards the conflict that manifests through negative feelings, which s/he experiences – mortification when seeing injustice (7, 16, 21), the feeling of being humiliated, underestimated (17) –, remains unaffected sometimes even after a long period since the conflict occurred (the student does not communicate with the teacher (17), (7)).

An example of the passive approach of a student towards a conflict could be the case when a student was asked to come up to the blackboard to solve a problem, and when s/he came up to the blackboard and erased what was written on it, the teacher told him to sit down and entered a two for mathematics into the registry (7). An inadequate reaction of the teacher towards the situation and the further actions of the teacher, namely during a parent meeting the teacher told his parents that the student was not able to solve the problem, determined the negative reaction of the student, due to which s/he took a passive approach and decided not to take any actions. The negative feelings of the student, due to the incorrect behaviour of the teacher, remained and are experienced up till now, after the passage of a few years. In this case, the conflict remains unresolved – the teacher became even less respected and disliked by the students, whereas the student feels grievance up till now (7). Therefore, by taking a passive approach towards the arisen situation, the student failed to create an opportunity for the teacher, whose actions, actually, became the cause of the conflict, to learn about the student’s experiences and, likely, to assess his/her own actions. In this situation, the student’s reaction towards the conflict was the only thing on which it depended whether the conflict would be resolved.

When analysing the cases, it became clear that when a student chose an active approach towards the arisen situation, an opportunity to resolve a conflict increased significantly (1, 5, 8, 9, 10, 15, 27). The first strategy, which is chosen by a student showing an active student’s approach towards an arisen situation, is integrating. A student him/herself chooses an opportunity to clarify with a teacher when s/he is dissatisfied with the assessment issued by a teacher (1, 2, 3, 4, 5, 7, 8, 9, 10, 12, 13, 14, 18, 20, 22, 23, 24, 25, 26, 27, 29, 30). As the findings of the study demonstrate, a strategy and a method chosen by a student – to clarify with a teacher on his/her own – tends to be successful only in those cases when another side of the conflict, a teacher, applies the same integrating strategy (for example, listens attentively to the student’s needs (1, 5)). The case when a student, who was dissatisfied with the assessment of the performed task, asked the teacher to comment on the assessment could be such an example. At first, the teacher did not respond to the student’s needs and ignored the request by failing to present a clarification, due to that fact the student became angry and refused to perform the further tasks. However, when the teacher, nevertheless, agreed to explain the assessment criteria (responded to the student’s needs), the student listened to the teacher’s observations, understood the mistakes, which s/he made while performing the task, and felt satisfaction – the conflict was resolved. When evaluating the sequence of the applied strategies, the first strategy (integrating), which was chosen by the student,
was appropriate however, the course of the conflict resolution depended on the teacher’s reaction towards the strategy applied by the student. Due to the fact that the initial reaction of the teacher was not positive and not responding to the student’s address, there was no positive conflict resolution. Only when the teacher changed his/her strategy by responding to the student’s needs to learn the assessment criteria and commented on the performed task, the conflict was resolved and, likely, did not have a negative effect on the further relationships (5). This example also shows that a teacher is the leader of teacher-student mutual relationships due to the instruments of power s/he possesses; therefore, in active student-student interrelationships a teacher plays a key role.

Despite the fact that the examined cases, when students record a conflict due to inappropriate actions of a teacher, show a negative attitude of a teacher towards a student, the case, when the beginning of a conflict is related to the lowering of a grade, which reflects good teacher’s intention, deserves attention. In the case under examination, after three students performed a task, they made the same number of mistakes. Two students received the same assessment, whereas the third one received a grade which was lower by one point. When the latter student inquired the teacher why his assessment differed from that of other students, the teacher responded that he wanted to encourage the student to make even a greater effort, i.e., to motivate. At first glance, it seems that the teacher’s intentions are good; however, the further course of the conflict shows that not only did the student have no intention to make a greater effort, but he felt injustice, great disappointment regarding the teacher, whereas grievance is felt up till now, after the passage of a few years (2). When the conflict occurred, an active approach of the student, which was taken by him, and the appropriate method, clarification, did not create preconditions to resolve the conflict because the response chosen by the second participant of the conflict, teacher, to use the instruments of power he possessed when motivating the student, not only failed to contribute to the resolution of the conflict, but deepened it even more.

In those cases when a student’s clarification with a teacher is unsuccessful and a conflict remains unresolved some students become disappointed and take no actions (4, 12, 13, 14, 18, 20, 22); however, others keep on taking an active approach and try other methods to resolve a conflict (8, 9, 10). Addressing other persons – addressing the school administration (headmaster, deputy headmaster and the like) – can be identified as an effective method of conflict resolution chosen by a student. In all the analysed cases, when a student addressed the representative of the school administration, i.e., a person who possessed more power than a teacher, a conflict was resolved. In addition, it became clear that in all the analysed cases a student had a particular proposal how to resolve a conflict. Therefore, in this case, not only did the student take an active approach by deciding to act, but also became engaged in the conflict resolution him/herself as a resolver with his/her proposal, although not possessing the power of decision to implement that proposal. The student engaged the representative of the school administration in the conflict resolution essentially only due to the fact that the latter possessed the instruments of power (levers), for example, the student addressed the headmaster requesting to substitute the teacher (9), or the one who had an opportunity to perform the function of assessment, the deputy headmaster, requesting to assess the performed task and decide whether the teacher assessed appropriately (8, 10).

Students sometimes resolve a conflict without addressing third parties, who possess power, but exercise the power they possess by uniting themselves. The conflict began
because of a teacher’s reaction towards the student’s behaviour – when a student, to whom it was irrelevant to take a biology examination, refused to perform a task, the teacher began to insult, to humiliate the student in front of all the group mates with delight (15). The student became irritated and went out of the classroom. The next day all the students from his form, by showing solidarity with the injured student, locked themselves in the classroom and refused to let the teacher into the classroom. Such unification of the students to resist the improper behaviour of a teacher assisted in resolving the conflict – the teacher apologised to the student, whereas the student also apologised. However, in the future the teacher lost the respect of his students. This situation, like wise other cases, which have been examined before, shows that if a teacher does not respond to a student’s need to clarify an arisen situation, it can be done only by the persons who possess a greater power than the teacher (the representatives of the school administration) or the plurality of persons (students).

**Figure 1.** The actions (selected strategies) of conflict participants

**Discussion**

Conflict researchers have shown that controversy has positive effects in certain cognitive processes and that conflicts of a cognitive order are more related to group productivity than those of an affective order (Sauquet, Bonet, 2003). Conflict helps one to solve problems, improve work effectiveness and strengthen involved parties’ relationships (Tjosvold, Hui and Law, 2001). However, it is of great importance that attempts are made to resolve a conflict. Effective conflict management encourages motivation, enhances morale and promotes individual and organisational growth (Rahim, 1986). Ineffective conflict management, in contrast, generates more conflict and negatively affects the organisation as a whole. Children who report a frequent conflict with teachers are more likely to present psychosocial difficulties, such as aggressive behaviours, depression, loneliness, anxiety, and low self-esteem (Archambault et al., 2016).
The aim of this study was to investigate students’ opinion on teacher-student conflict reasons and students and teachers’ behavioural reactions to conflict. Due to the fact that the analysed conflicts are presented from the viewpoint of a student, consequently, the beginning of a conflict, i.e., certain actions of a teacher, are also identified as the cause of a conflict by the students due to the experienced negative feelings towards an arisen situation. The analysis of conflict causes enabled the authors to reveal situations related to the teacher’s actions, which were perceived as the beginning of a conflict by students, but not necessarily by teachers. The identification of the causes of a conflict created an opportunity for teachers to observe their own behaviour, actions, which they possibly disregarded and did not foresee, the experiences students went through because of their actions “through the student’s lens”.

The present study showed that when resolving a conflict between teachers and students, which was recorded by a student, who felt bad due the teacher’s actions, the decisive criterion, which determined the outcome of a conflict, was a student’s approach towards an arisen conflictual situation. Regardless of conflict causes, if a student takes a passive approach, i.e., takes no actions in order to resolve a conflict, the course of the conflict is paused and the student, who recorded the conflict, remains with the same negative feelings, which s/he experienced when recording the conflict. If a student chooses an active approach, opportunities to resolve a conflict increase significantly; however, a crucial factor, which determines the further course of the conflict, is the teacher’s actions which either respond or fail to respond to the student’s needs.

The findings demonstrated that both teachers and students’ behavioural reactions ranged from aggression to withdrawal. Besides, students tended to use avoiding quite often. This tendency was in accordance with other investigations. Avoidance occurs in a superior-subordinate relationship when the former makes a decision that the latter does not like but feels that he or she has no choice but to comply with the wishes of the superior (Rahim, 1986). Davidson, McEwee and Hannan (2004) have argued that lower power participants are often more concerned about preserving their relationship with their superior (i.e., using obliging strategies) than winning a negotiation, especially when their superior has influence over their future well-being. This is especially true when superiors are authoritarian and can use coercive power to control the behaviour of subordinates. Coleman (2006, p. 124) has stated that the overwhelming evidence seems to indicate that the powerful tend to like power, use it, justify having it, and attempt to keep it. High-power decision makers have little interest in expanding resources (integrating) as they can achieve their goals by using dominating strategies.

Teacher’s domineering (forceful) conflict behaviour is not consistent with the principles of sustainability as the sustainable school adopts the democratic and participatory process of decision-making – the sustainable school adopts participatory and student-centred approaches that develop students’ skills, abilities and qualities for critical thinking, intercultural understanding and willingness to participate (Kalaitzidis, 2012). Moreover, education for sustainable development aims at promoting abilities such as decision making, conflict management, initiative for action, personal and social communication abilities and the development of mutual trust and acceptance of difference (Mitakidou and Tamoutseli, 2011). Thus, teachers should embrace collaborative style and power sharing.

The findings are in line with the other studies indicating the importance of teacher’s conflict resolutions skills, and revealing their insufficient level. For instance, Okeke and Mtyuda (2017) have acknowledged that only 39 % of the teacher participants are efficient
at disciplining students. Ortega and Fuentes (2015) have concluded that the quality of teaching depends on the quality of communication in the classroom. In the study, 53.3% of the respondents believe that communication skills are worked on sufficiently, 80% believe that these skills are not acquired. Similarly, Ficarra and Quinn (2014) have indicated that teachers have identified classroom management as an area for which they need additional on-site training that will establish or further develop skills not sufficiently addressed in pre-service programmes. According to Kuurme and Carlsson (2010), a routine hierarchical working system and bad relations diminish the quality of school life. The researchers argue that “a human being cannot develop into an authentic person with repressive pedagogy, when being under the will of an external authority and dealing with it constitutes the core of the experience” (p. 72). However, M. Sakk (2013) has found in her investigation that the role of the teacher does not allow learners to express their opinion or thoughts as the teachers are focused on teaching their subject and on learners’ learning (in its narrow meaning) rather than on the social development of children.

Dogan (2016, p. 210) has cautioned that preferring mostly the strategy of domination by teachers may be evaluated as clamping down on teachers. Wrong choices made by teachers negatively affect the psychology of students and teachers as well as the relation between teachers and students, and it does not contribute to a solution. The students might think that all communication methods are blocked with the teacher as soon as the teacher applies the domination strategy in conflict situations. Johnson and Johnson (2006) have indicated that the imposed resolution refers to the conflict suppression, and underlying grievances are not resolved and positive long-term relationships among parties are not established.

Johnson and Johnson (2006) have listed a plenty of positive school conflict outcomes, such as focusing attention on problems to be solved, clarifying disputants’ identity and values, revealing how disputants need to change, increasing higher-level cognitive and moral reasoning, increasing motivation to learn, providing insights into other perspectives and life experiences, strengthening relationships, adding fun and drama to life, increasing disputants’ ability to cope with stress and be resilient in the face of adversity, and increasing general psychological health. However, the constructive results depend on the competencies parties apply in managing their conflicts. The most productive conflict management strategies are those that tend to take into account the interests of both parties, and also those avoidance strategies tend to be less productive. Integrative solution of interpersonal conflicts requires mutual facing of the problem and taking part in mutual problem solving discussions in order to reach the rational agreement, which is also a mutual advantage of both sides of the conflict (Johnson and Johnson, 1994).

For the resolution of student conflicts with teachers, the strategy of integrating should be a more common choice. In terms of effectiveness, this strategy produces the most positive results: as the opponents get to know themselves better, their relations improve and the cause of the conflict can be eliminated more easily. If the primary actions taken fail, other ways of resolving the conflict should be sought. The variety of ways to implement the integrating strategy provides real possibilities for solving even a prolonged conflict. Constructive conflict resolution depends on the ability to choose from a wide repertoire of strategies and tactics to support a specific desired outcome (Wilmot and Hocker, 2001, p. 130). Resolving conflict in a constructive (cooperative) way involves teacher’s endeavours to perceive accurately student’s positions and motivation, recognise the legitimacy of each other’s interests, and search for a solution accommodating the needs of both sides.
References


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Teacher Education for Sustainability: The Awareness and Responsibility for Sustainability Problems

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Abstract

The theoretical framework of the present research is based on the socio-psychological model of sustainable behaviour by Juárez-Nájera (2010). For the purposes of this paper, just part of the research is related to personal norms. The paper provides the results of the awareness of consequences and the attribution of responsibility for environmental/sustainability problems among students of the four Faculties of Teacher Education in four countries, Bosnia and Herzegovina, Croatia, Slovenia, and Serbia. Research results indicate that students from Croatian and Slovenian Faculties of Teacher Education are characterised by a more pronounced awareness of environmental/sustainability problems than the students from Bosnia and Herzegovina and Serbia. The responsibility for environmental/sustainability problems is higher among the students of the Faculty of Teacher Education from Croatia and Serbia than among students from Bosnia and Herzegovina and Slovenia. It seems that a country is the major determiner of awareness and responsibility for environmental/sustainability problems. In general, the results of the present research provide significant guidelines for the reflection on the future of initial teacher education for sustainability and need for conducting interdisciplinary and cross-cultural research on personal norms and sustainable behaviour.

Keywords: awareness, education for sustainable development, responsibility, sustainable behaviour, university students of initial teacher education

Introduction

The scope of Sustainable Development (SD) is constantly intensifying and is being analysed through an interdisciplinary approach. Since the development of a number of approaches to transformation and implementation of SD is not possible without education, a change towards the environmental and sustainable behaviour (SB) is also not possible if the current behaviour is not changed through systematic education (Huckle, 2006). Teachers, as holders of interdisciplinary education, play a key role in this process. According to Besong and Holand (2015, p. 5), “the purpose of integrating sustainability in higher education programmes is to enable students to improve the quality of life on this planet while building fair, equitable and just futures for all. To effectively do this, the knowledge, skills and dispositions of higher education students need to be re-oriented...
towards sustainability.” Framing interdisciplinary curriculum in a way that connects and develops various domains of learning encourages the development of those factors that affect the formation of SB, in particular, the behaviour of the future teachers – students, whose role is essential in the education for sustainability for future generations and sustainable citizens of a global society. The students are often a mirror of their teachers; hence, values, attitudes and behaviour of teachers are often reflected through their students.

According to the available literature, there is no universally accepted definition of the terms “pro-environmental behaviour”, “environmental behaviour” or “sustainable behaviour”. Different definitions of these concepts may be found in numerous studies (Kollmuss and Agyeman, 2002; Steg and De Groot, 2010; Stern, Dietz, Abel, Guagnano, and Kalof, 1999). One possible demarcation of pro-environmental and environmental behaviour is based on the following: environmental behaviours are intentional behaviours that affect the environment, while pro-environmental behaviours are protective behaviours that affect the state of the environment, i.e., they are forms of socially desirable environmental behaviour (Krajhanzl, 2010, p. 252). The concept of SB is related to the afore-mentioned concepts and has developed from previous theories and models of pro-environmental and environmental behaviour. In accordance with these considerations, the present paper is based on the following definition: “SB is a set of effective, intentional, and expected actions for the purpose of accepting responsibility for the prevention, preservation, and protection of natural and cultural resources, including the integrity of animal and plant species, as well as the individual and social well-being and financial security of current and future generations” (Juárez-Nájera, 2010, p. 56). Since the present research was based on the socio-psychological model of SB by Juárez-Nájera (2010), the authors have also accepted this definition because it describes both the behaviour and the model itself.

Many authors associate the interpretation of environmental, pro-environmental, and SB with social factors as possible predictors, and they place an emphasis on the psychosocial interpretation of these behaviours. Such explanations are in accordance with the modern notion that environmental problems are becoming part of a wider problem of people’s attitudes towards the environment. They are socially conditioned; therefore, their causes are found in the approaches that are based on external factors rather than internal, i.e., they are found in environmental factors such as demographics and geography, economics, politics, education, and culture.

**Theoretical Framework of the Research**

The theoretical model, which forms the foundation of this cross-cultural research, was taken over from Juárez-Nájera (2010), who included in the construction of the so-called socio-psychological model of SB some of the key theories that focused on questions of the causes, impacts, predications, and manifestations of ecological/pro-ecological behaviours. The theoretical model/socio-psychological model of SB by Juárez-Nájera (2010) contains operational definitions of the four fundamental dimensions of SB: universal human values, consciousness of ecological problems, responsibility for environmental problems, and inter- and intra-intellectual personal intelligence (see Andić and Tatalović Vorkapić, 2014, 2015). The author based the first scale on the “Questionnaire on SB”, which she constructed to measure SB based on the universal values of Schwartz (1977).
The second and third scales are based on Schwartz’s norm activation theory and its modification by Stern et al. (1999), the norm activation model, and the fourth scale is based on connecting emotional intelligence by Boyatzis & Sala (2004) and Gardner’s theory of multiple intelligences (1983). The focus of the present research, for the sake of practicality and scope of all results, is on the second and third scale relating to the area of personal norms. Attitudes (reflecting individual specific beliefs about behaviour) and external factors affect the intentions, and as such represent key components in the formation of behaviour (Andić and Tatalović Vorkapić, 2015). The backbone of the research is Schwartz’s norm activation theory (NAT, 1970), also known as the norm activation model (NAM, Schwartz, 1977; Schwartz and Howard, 1981, modified by Stern et al., 1999). The central element of the norm activation theory refers to personal norms. Intention is defined as a key factor that encourages pro-social behaviour. Within Schwartz’s NAT theory, and later NAM models, four situational activators of personal norms stand out (awareness of a need or a problem, situational responsibility for a need or attribution of responsibility for negative consequences of inaction, efficiency as an identification of actions for detecting the needs of others or other people’s values, the ability to facilitate relief) and two activators at the level of personality traits (awareness of consequences and denial of responsibility). Two conditions are necessary for the activation of personal norms: awareness of consequences and acceptance of personal responsibility (Stern et al., 1999). The core of the NAT theory is based on a complex model and the relationship in the decision-making process in a variety of moral situations. NAM explains pro-environmental behaviour as a product of personal norms whereby pro-environmental behaviour is considered to be pro-social behaviour. In 1999, Stern incorporated it into the VBN theory, i.e., the value-belief-norm theory. Stern also included Schwartz’s theory of environmental value (1973, 1978) within the VBN theory and the so-called NEP scale, better known as the New Environmental Paradigm. The NEP scale (Dunlap and Van Liere, 1978) originally comprised 12 items grouped into three categories that referred to the balance of the environment, limiting the growth and people’s power over nature, but it was later modified due to criticism (it was revised by Dunlop et al., 2000) (Andić and Tatalović Vorkapić, 2014). Other authors have dealt with the development of this theory and models: Guagnano, Schwartz and Howard (1981, 1982); Heberlein (1972); Stern and Dietz (1995, 1998); Stern, Dietz and Kallof (1993); Stern et al. (2000) (Blamey, 1998). This model, as well as its upgrade in the form of a socio-psychological model of SB by Juárez-Najera (2010), was the basis for the implementation of detailed research. In the present paper, the authors provide only partial results of the research.

**Literature Review**

Based on current literature, research on pro-ecological/SB has focused on the research/testing of various internal and/or external factors. For example, gender and sex (Stern, Dietz, and Karloff, 1999; Zelezny, Chua, and Aldrich, 2000, etc.), socioeconomic conditions (Davey, 2012), educational content, level (Scott and Willits, 1994) and length (Kollmuss and Agyeman, 2002, p. 248), age and level (Davey, 2012, p. 27).

Studies on geographical locations and cultural characteristics (Kelly, Kennedy, Faughnan, and Tovey, 2004) show that there is a clear division among environmental
values, attitudes, and behavior in European countries (Kelly et al., 2004, p. 14). Those studies focused on countries belonging to different geographical, cultural, and socio-political regions of Europe, and differences were expected. Schultz, Gouveia, Cameron, Tankha, Schmuck, and Franek (2005) conducted research on six continents, analysing the geographical context. The research results confirmed the cross-cultural generality in four (out of six) samples used in the research: values of personal abstinence (according to Schwartz). Ecological behaviour was moderated from the awareness of the consequences and attributing responsibility for the perception of global ecological problems, however, not for local problems in the context of the value of personal gain and ecological behaviour. Milfont, Sibley, and Duckitt (2010) extended the research (by Schultz et al. from 2005) in 50 countries and confirmed the cross-cultural applicability of the theory of moral-norms activation among cultural groups of respondents.

The importance of the role of institutions can also be significant because “if the role of colleges and universities is to educate members of the society, then they must be an active instrument of sustainable movement” (Beringer, Malone, and Wright, 2006, p. 1). Molina, Fernandez-Sainz and Izaguirre-Olaizola (2013, p. 13) proved in their research conducted at four universities that formal education and knowledge of environmental problems clearly affected pro-environmental behavior, but in a very complex way. Objective and subjective knowledge affect the environmental performance of students from highly developed and developing countries, while the level of education, i.e., the type of qualification is significant only in developed countries.

**Context of the Study**

The present research dealt with the Faculties of Teacher Education in countries that occupy the same geographic area – better known as the territory of the former Yugoslavia, i.e., the region of Southeast Europe/Western Balkans. Each country considered within the framework of the research has found itself at different levels of the transition processes embedded in the democratization of the society. In cultural terms, this area is defined by very similar linguistic expressions. Education systems in these countries are very similar. In higher education institutions, there are also similarities in settings. Departments are autonomous units that operate within the faculties and offer study programs for preschool or elementary school education and their curricula are in line with the curriculum of other faculties responsible for teacher education. The analysis of study programmes/curricula for preschool teacher/elementary school education has been found to have common characteristics: all four faculties have programmes/curricula aligned with the Bologna process. Teacher education models include the undergraduate and graduate university level, and professional levels. It is important to note that during the implementation of the research, the Republic of Slovenia was the only member of the European Union (since 2004). The Republic of Croatia was in the process of meeting the conditions for the European Union membership. Serbia and Bosnia and Herzegovina are not yet its members, though they are trying to initiate the accession process. The described context is related to the selection of faculties, i.e., the sample of students who participated in the research. The reasons for the choice or selection of faculties for participation in the research included geographic affiliation to the region or countries in the region, socio-cultural and political contexts related to language and script, nation-
ality of students and EU membership, similarity of study programmes, and accessibility to the institution.

Therefore, the basis of research hypotheses was that there would be no differences among our respondents. However in the present research, the authors did not refer to a representative sample for all faculties or for the entire country but to the students of four Faculties of Teacher Education in these four countries. The differences would not be present either in the level of responsibility or awareness. The authors started from the assumption that education could be a predictor of SB if it systematically encouraged value changes, attitudes, personal norms, sense of responsibility, intelligence, and other (Andić and Tatalović Vorkapić, 2014, p. 81). Referring to the students of the Faculties of Teacher Education, who are one of the holders of education in their countries, it was expected that their results would be significantly above the mean value. The mentioned viewpoint opens up the way for many opportunities in the construction of interdisciplinary programmes/courses for teacher education based on psychological, social or educational premises that are “changing” past behaviour.

Methodology

Aim, Tasks, and Hypotheses of the Research

The aim of the research was to measure the awareness of environmental problems and responsibility for environmental problems/sustainability among the students from four Faculties of Teacher Education in the four different countries (Bosnia and Herzegovina, Croatia, Slovenia, and Serbia).

To reach the aim, the following tasks were set:

a) to measure the awareness of environmental/sustainability problems among university students from four faculties of teacher education;
b) to measure the responsibility for environmental/sustainability problems among university students from four faculties of teacher education;
c) to perform the correlation analysis between the awareness and responsibility for environmental/sustainability problems and socio-demographic variables (age, study year, study programs); and
d) to test the significance of differences in the awareness and responsibility for environmental/sustainability problems among university students from four faculties of teacher education.

Given the extremely small number of research on this subject in terms of testing the difference in awareness of and responsibility for environmental/sustainability problems, the following hypotheses were set:

H1) the value of the awareness of environmental/sustainability problems is expected to be above the mean value on the measuring scale among the group of university students;

H2) the value of the responsibility for environmental/sustainability problems is expected to be above the mean value on the measuring scale among the group of university students;

H3) a significant positive correlation is expected to be found between age and course attendance with awareness and responsibility for environmental/sustainability problems regardless of the country;
H4) significant differences are not expected in the awareness and responsibility for environmental/sustainability problems among the group of university students.

Participants

In the research, a convenient sample of students was included from four faculties of teacher education in four countries: Bosnia and Herzegovina (N = 150), Croatia (N = 283), Slovenia (N = 146), and Serbia (N = 133), total N = 712 (M = 31, F = 681)\(^4,5\), due to the two factors: close cooperation with these universities and geographical nearness. The average age of all students was M = 21.365 (SD = 2.708), age range between 18 and 43 years, and the distribution significantly deviated from the normal (K-S, z = 4.954, p = 0.001). Detailed information on the sub-samples with regards to each country is shown in Table 1.

<table>
<thead>
<tr>
<th>Countries</th>
<th>Bosnia and Herzegovina (BIH)</th>
<th>Croatia (HR)</th>
<th>Slovenia (SLO)</th>
<th>Serbia (SRB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Faculty of Teacher Education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>undergraduate</td>
<td>52</td>
<td>71</td>
<td>57</td>
<td></td>
</tr>
<tr>
<td>graduate</td>
<td>22</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>integrated (undergraduate and graduate)</td>
<td>183</td>
<td>16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>professional</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Early and pre-school education</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>undergraduate</td>
<td>59</td>
<td>100</td>
<td>1</td>
<td>59</td>
</tr>
<tr>
<td>graduate</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>professional</td>
<td></td>
<td>64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attended a course</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>80</td>
<td>135</td>
<td>39</td>
<td>81</td>
</tr>
<tr>
<td>No</td>
<td>70</td>
<td>148</td>
<td>107</td>
<td>52</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
<td>283</td>
<td>146</td>
<td>133</td>
</tr>
</tbody>
</table>

Measuring

In the research, a measuring instrument was used with the original title “Questionnaire on SB” (Juárez-Nájera, 2010), which was adapted and validated in the language area of the research under the name Scale of SB (Andić and Tatalović Vorkapić, 2015).

The Scale of SB in the original (Juárez-Nájera, 2010)\(^6\) and the Croatian version (Andić and Tatalović Vorkapić, 2015)\(^7\) consist of four scales: Schwartz’s universal human values, awareness of environmental/sustainability problems, responsibility for environmental/sustainability problems, and intra- and interpersonal intelligence for sustainability. The questionnaire also includes questions on the respondents’ socio-demographic characteristics (name, level, and year of study, gender, age, and attending a course on ecology/sustainability). In the research, we used the original questionnaire and we conducted...
only a linguistic adaptation of the questionnaire. The Scale of Awareness of the Consequences contained nine items pertaining to the examination of awareness of the consequences of global environmental/sustainability problems such as climate change, destruction, and disappearance of tropical forests, air, water, and soil pollution, survival of plant and animal species on the individual, personal, family and national levels (Juárez-Nájera, 2010). The respondents were offered three options (1 – a very serious problem, 2 – a somewhat serious problem, 3 – not so serious problem) to which they responded by circling the appropriate answer. Factor analysis resulted in a one-factor structure with eigenvalue of 4.54, which explained 50.4 % of the total variance. In this paper, the reliability analysis showed a satisfactory level of reliability of the Cronbach alpha coefficient $\alpha = 0.847$ in the total sample and in the sub-samples of countries (BIH $\alpha = 0.833$; HR $\alpha = 0.841$; SLO $\alpha = 0.894$; SRB $\alpha = 0.804$). The Scale of Attribution of Responsibility included the following items: the examination of accepting responsibility for the current problems of environment/sustainable development on a personal and national level; responsibility of business companies for global problems such as climate change, preservation of tropical forests, toxins in the soil, air, and water, pollution of the environment, and the prevention and elimination of these environmental problems (Juárez-Nájera, 2010). The scale consisted of nine items and the respondents selected one of the answers on a scale of 1 to 5 (1 – strongly disagree; 2 – partly disagree; 3 – maybe; neither agree nor disagree; 4 – partly agree; 5 – strongly agree). The factor analysis obtained one factor with eigenvalue of 4.4, which explained 48.8 % of the variance. In this paper, the level of reliability of the total sample was Cronbach $\alpha = 0.792$ and on the sub-samples of countries (BIH $\alpha = 0.756$; HR $\alpha = 0.815$; SLO $\alpha = 0.813$; SRB $\alpha = 0.769$).

**Data Collection and Data Analysis Procedures**

The research was conducted and administered in four countries. In all these countries the questionnaire was prepared in agreement with individual lecturers and during class. In this paper, the procedures of the factor analysis (exploratory factor analysis under the component model and application of oblimin rotations) were processed, and the results obtained on the scales of awareness of the consequences and the attribution of responsibility were shown. An identical number of items were held due to a possibility of comparison with the results from the original research. Students were duly informed about the application of the questionnaire and their participation in the research was voluntary, anonymous and in accordance with ethical considerations. Since the participation of all students was completely anonymous, there were no ethical problems within the process of gathering data. All the statistical analyses were performed using Statistical Package for the Social Sciences (SPSS), Version 22.

**Results**

Shown here are the results of the analyses carried out in the four countries: awareness of environmental/sustainability problems (Table 2) and responsibility for environmental/sustainability problems (Table 3).
Students identified the covered environmental/sustainability problems as a very serious problem. By testing the differences with the Kruskal-Wallis test (significant deviation from normal distribution), it was determined that: Croatian (M = 1.34, SD = 0.328; $\chi^2 = 23.311, p = 0.00$) and Slovenian students (M = 1.35, SD = 0.375; $\chi^2 = 14.315, p = 0.001$) expressed a significantly greater awareness than Serbian (M = 1.46, SD = 0.349; $\chi^2 = 15.217, p = 0.001$) and Bosnian students (M = 1.46, SD = 0.367; $\chi^2 = 11.141, p = 0.001$) (Table 2). Significant differences in the awareness were confirmed between the students from Bosnia and Herzegovina and Serbia, as well as between the students from Croatia and Slovenia.

The level of students’ responsibility for problems was relatively high, i.e., in terms of the scale students, on average, partially agreed with the claims in the scale. When comparing the average responses, it was noticeable that the highest level of accountability was achieved on a sample of students from Croatia (M = 4.236, SD = 0.456), followed by the students from Serbia (M = 4.152, SD = 0.561), Bosnia and Herzegovina (M = 4.093, SD = 0.521), and Slovenia (M = 4.041, SD = 0.518). The Kruskal-Wallis test showed that the students from Croatia estimated their level of responsibility significantly higher than students from other countries, i.e., students from Bosnia and Herzegovina ($\chi^2 = 18.301, p = 0.001$), Slovenia ($\chi^2 = 16.196, p = 0.001$), and Serbia ($\chi^2 = 15.632, p = 0.001$), while the students from Serbia showed a significantly greater responsibility than the students from Slovenia ($\chi^2 = 5.081, p = 0.024$). Other differences were not proven to be statistically significant.

Spearman’s rank correlation coefficients were also calculated in the analysis of the relationship between the results of the scales of Awareness and Responsibility on a sample of students from the four faculties of teacher education and separately for the
students from Bosnia and Herzegovina, Croatia, Slovenia, and Serbia, taking into consideration their age, study level and whether they attended a course on ecology/sustainability (Table 4). It is important to analyse age as a separate variable from the study level, since students are more/less heterogeneous by age at the same study level, due to Bologna process at faculties.

Table 4
Spearman’s Rank Correlation Coefficients between the Awareness and Responsibility for Environmental/Sustainability Problems

<table>
<thead>
<tr>
<th>Awareness</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
</tr>
<tr>
<td>BH</td>
<td>-.053</td>
</tr>
<tr>
<td>HRV</td>
<td>-.035</td>
</tr>
<tr>
<td>SLO</td>
<td>-.075</td>
</tr>
<tr>
<td>SRB</td>
<td>-.225**</td>
</tr>
<tr>
<td>Total</td>
<td>-.016</td>
</tr>
<tr>
<td>Study level</td>
<td></td>
</tr>
<tr>
<td>BH</td>
<td>-.040</td>
</tr>
<tr>
<td>HRV</td>
<td>-.051</td>
</tr>
<tr>
<td>SLO</td>
<td>-.008</td>
</tr>
<tr>
<td>SRB</td>
<td>-.165</td>
</tr>
<tr>
<td>Total</td>
<td>-.050</td>
</tr>
<tr>
<td>Attendance of a course on ecology/sustainability</td>
<td></td>
</tr>
<tr>
<td>BH</td>
<td>-.013</td>
</tr>
<tr>
<td>HRV</td>
<td>.009</td>
</tr>
<tr>
<td>SLO</td>
<td>-.047</td>
</tr>
<tr>
<td>SRB</td>
<td>.252**</td>
</tr>
<tr>
<td>Total</td>
<td>.001</td>
</tr>
</tbody>
</table>

**p<0.01; *p<0.05

Significant correlations were found only among students from Serbia. According to results, highest value of statistically significant correlations shows that senior students are more aware of problems ($r_{bo} =-.225$, $p<0.01$) as are also those students who attended a course that included contents on ecology/sustainability ($r_{bo} =.252$, $p<0.01$).

With respect to the Responsibility, the Croatian subsample showed a significant positive correlation between age and responsibility ($r_{bo} =.134$, $p<0.05$). In other words, with the increase in age there appears an increase in the estimated responsibility of students for environmental/sustainability problems. This connection was also established on the entire sample ($r_{bo} =.098$, $p<0.05$). Similarly, it was established that with a higher study level, students showed significantly higher responsibility for problems ($r_{bo} =.098$, $p<0.05$). This small correlation coefficient is the only significant correlation regarding the study level and age. Since it was expected to determine different relationships of age and study level with focused variables, these results confirmed the need to analyse age separately from the study level.

**Discussion**

The obtained results of the awareness of environmental/sustainability problems indicate significant differences among the students from the four faculties of teacher education in the four countries. In terms of awareness, Slovenian and Croatian students have evaluated problems as being very serious, with high and statistically significant values, while in the case of the Bosnian and Serbian students the high values are not statistically significant. Here, the following should be emphasised: in the present research, the authors were dealing with a very specific sample – students from four faculties of teacher education and not a representative or a random sample of all faculties of teacher education and the entire country. In the context of the obtained results, the high values of awareness can be explained by modern educational policies that could have affected the attribution of greater importance to teacher education. The results of the final UN report on the Decade of Education for Sustainable Development 2005–2014 confirm a
significant increase in study programmes, research, and practice for the implementation of ESD in higher education institutions, especially in teacher education. The report indicates that all Member States have concluded that teacher education is of high priority in the post-period of the Decade, which should be more systematically accessed and continuously upgraded (2014, pp. 94–95). We can also offer an explanation that is based on a system of initial teacher education in these four countries, i.e., attaching importance to environmental/sustainability problems and their implementation in the programmes of teacher education, which certainly confirms the results. Filho’s (2011, p. 121) analysis indicates the following. The Republic of Slovenia is at an advanced level positioned (ESD is already part of educational programmes, including initial and vocational education, both inside and outside of schools; the public awareness is promoted actively and there are a number of organisations and associations that support and continue its implementation). The Republic of Croatia is located at a high level in the implementation process (there is a progressive implementation/involvement in part of the educational programme; there are education and training available at several levels, but they are rather limited, while public awareness is often left unnurtured). The results are also in line with the fact that Croatia was in the negotiation process for EU accession, meaning that it was compulsory to meet the requirements set out in Chapter 27 and implement those processes. Bosnia and Herzegovina and Serbia are at the initial level (they are limited to traditional approaches, the promotion of ESD is at an early stage, and there is little emphasis on public awareness). For several decades in Slovenia a systematic policy of education has been giving increasing importance to this problem, especially at the level of study programmes of teacher education. Already in 2008 and 2009, new curricula in Slovenia emphasised an even broader interdisciplinary approach to SD in preschools and elementary schools. In the study programmes for teacher education, including the faculties where the present research was conducted and whose study programmes were analysed, courses are offered that directly and indirectly deal with problems of environment and sustainability. As for the results of Responsibility obtained from the research, the differences concerning the Slovenian respondents can be with the following attitude explained. As stated earlier, Slovenia is the only country among the surveyed countries that was at the time of the research a member of the European Union, which in this case turned out to be an important factor. Strict legal provisions to protect the environment have had an impact on the Slovenian respondents’ assessment in the attribution of responsibility because it is clear that they attribute their confidence in solving these problems to competent bodies rather than attributing them to personal responsibility. These results are consistent with the results of research by Kelly et al. (2004) on the understanding of the seriousness of environmental problems and the attribution of responsibility, but also with the research by Filho (2011), where Slovenia is on equal footing with a number of European countries positioned at an advanced level of implementation.

The situation is very similar with the Croatian respondents. The highest awareness is present precisely among the Croatian respondents. The explanation of these results is twofold. Firstly, at the time of this research Croatia was in the process of entering the European Union and the stricter environmental EU policy affected the fact that ecology and ESD significantly penetrated into the focus of interest of public policy and the educational policy as well. This is also evident considering the fact that the first Parliament on Education for the Environment was held in 1996, the second in 2002, and the Republic
of Croatia was one of the signatories of the Kyoto Agreement. SD and ESD have been designated as a strategic issue for the country, a fundamental educational value, and a cross-curricular theme. The authors of the present research point out the following: respondents in the Croatian sample were all students enrolled at the Faculty of Teacher Education, University of Rijeka, and they were all female. Explanation of the result differences by gender, i.e., of the higher values, is in line with the research presented in the theoretical part of this paper. However, in the context of these results, regardless of the mostly female sample of respondents, it should be emphasised that the explanation is also based on the content of educational programmes for future teachers, similar to the Slovenian respondents.

Croatian respondents are students of the Faculty of Teacher Education in Rijeka, a faculty at which systematic pedagogical thinking and working in the field of education for the environment have been present since the early 1990s. Currently all university students of initial teacher education are attending the obligatory course “Pedagogy of SD” at the University of Rijeka. University students at other faculties, included in the present research, are attending only elective courses during their initial teacher education. The concept of SD and implementation on different levels of practice is included in the Strategy of the University of Rijeka. There is a long tradition of the School of SD aimed at university students. In this way, the resulting high values of the results in awareness, but also in responsibility, are, on the one hand, expected among the Croatian respondents, and, on the other hand, easily explainable. Previous research conducted at the University of Rijeka (Borić, Jindra, and Škugor, 2008; Rončević and Rafajac, 2012) is consistent with the results of the present research. In relation to the students’ attitudes, students in their senior years of study demonstrated a greater awareness and perception of the responsibilities of all stakeholders in the promotion and implementation of ESD. Programmes for the education of elementary and preschool teachers in Serbia offer courses on environmental protection and SD only in the senior years of study. The results obtained from the respondents from Bosnia and Herzegovina, despite the fact that they are lower in comparison with other respondents, indicate high values. Analysis of these study programmes suggests that three elective courses related to the environment, sustainable development, and intercultural education are offered. The analysis has also made it clear that the results of the Croatian respondents, but also those from other countries, can be brought into connection with the study year/level of education and age. Research results confirm the connection between attending a course with a higher level of awareness among students in senior years of studies in Serbia. Therefore, with an increase in age there appears an increase in responsibility: students from senior years of study demonstrate greater responsibility for environmental problems.

This is certainly related to the fact that courses related to ESD are usually offered in the senior years of teacher education study. It is also a good indicator for the creation of future initial educational programmes for students of faculties of teacher education, and not only in Serbia but also in other countries, which suggests that such content should be offered much earlier and a more systematic access to higher education should be provided. If we observe the results of awareness and responsibility as a whole, it is clear that one does not imply the other. Besong and Holland stated as a conclusion of their own research (2015, p.18), “These findings clearly indicate that despite general awareness on environmental matters there is the need to mainstream climate change education in higher education curricula so as to provide learners with the knowledge,
skills and competencies to carry out strategic planning...”. Finally, a discussion of these results simultaneously raises a few more questions: why are education and training for sustainability not significantly developed in teacher education? Why do these issues appear only in senior years of study and why are there so few courses? At the same time, it raises the question: who will ultimately create such curricula and courses, and implement the approaches in the higher education of teachers? According to Nikolic, Milutinovic, Nedanovski and Mrnjaus (2017, p. 924), “Higher education in South Eastern Europe (SEE) is currently confronted with the pressures and expectations of a variety of academic and non-academic factors in the form of low investment in education, higher pressure on the system coupled with the low capacity of public universities to absorb the increased number of students, low student scholarships and high enrolment fees and increasing absorption of students at private universities, followed by lower quality control mechanisms”. Ultimately, it can be concluded that the professional development of university lecturers in this part of the European region is poorly developed and mostly still marginalised. This is not in line with the fact that there is a long history on the European soil of the existence of significant policy documents that bind European universities to implement sustainable development in higher education. Some of these universities belong to countries where the present research has been conducted. In addition, the authors of the research would like to point out that “…the seeds of a CPD attitudes and a commitment to career-long sustainable professional development should be established in teachers during pre-service and in-service training (Mohammadi and Moradi, 2017, p. 36). Such an attitude suggests that higher education institutions, which include the initial education of future teachers in sustainability, especially in this part of Europe, need not only to reinforce the implementation of sustainability content in their curricula, learning and teaching, or study programmes, but it is also necessary to strengthen and establish an institutional support (Redman, 2013) and professional development system in order to monitor and evaluate these processes (Mohammadi and Moradi, 2017).

Conclusions and Implications

In relation to the hypotheses set in the present paper, the authors can conclude that the hypothesis about the high values of awareness and responsibility in all respondents has been confirmed. The third hypothesis has been only partially confirmed and it refers to the expected correlation of responsibility and awareness and socio-demographic variables (age and previous course attendance) whereby in the majority of the countries there have been no significant correlations. Positive correlations have been obtained from respondents from Serbia and especially from Croatian respondents with respect to age and responsibility. The last hypothesis has not been confirmed because statistically significant differences in awareness and responsibility have been found among the respondents. Results of the research indicate that the greatest awareness of environmental/sustainability problems is present among the students of the Faculty of Teacher Education in Croatia and Slovenia, among whom the authors have not found statistically significant differences compared to the results of respondents from Bosnia and Herzegovina and Serbia, among whom the authors have also not found statistically significant differences. Results of the responsibility for environmental/sustainability problems indicate the highest level present among students from Croatia and Serbia, and lower among the students
from Bosnia and Herzegovina and Slovenia. It is clear from these results that there is a difference among the students of the faculties of teacher education and it is the result of both national education policies and levels of implementation processes into study programmes of teacher education, especially in terms of these four Faculties of Teacher Education from where the respondents come from. In this regard, the importance of highlighting the membership/process of EU accession in the countries where the research has been conducted suggests that this has proved to be an important factor in the discussion of the obtained results.

Croatian respondents have at their disposal study programmes that are most common in the content of ESD, in relation to others. With the Slovenian respondents, the situation is very similar and corresponds to the process of implementation and attribution of significance to this problem, but also to the status of Slovenia as the EU Member State. Results in relation to gender, although not specifically researched, correspond to the fact that the research has for the most part been conducted on female respondents. In terms of age, the results correspond to the fact that these courses in study programmes appear later during the senior years of study and among older respondents, i.e., on the entire sample. Among Croatian students, these results correspond to the accountability and among Serbian students — to the awareness concerning attending a course on ecology/sustainability. Finally, attending a course on ecology/sustainability has not proven to be significant in any of the groups of students; however, by implication, the results indicate that these courses should start earlier.

Although the sample size is satisfactory, this is an appropriate and specific sample, students from the four faculties of teacher education in four countries, so the guideline for future research would be to test the findings on a random sample. The limitation of the research is the fact that students from other educational directions were not included, for example, subject teachers or members of professional development services (psychologists, special education teachers).

In relation to the hypotheses of the research, some have been confirmed while others have not been, the authors can point out that they are certainly a basis for further research. The authors can suggest further development of ESD and sustainability that will promote key elements: knowledge domains and pedagogies for the development of values, attitudes, awareness, and responsibility as personal norms and other important factors that may contribute to the construction of SB and implementation of ESD.

Future research should certainly include a larger and more representative sample that will include students from all faculties of teacher education and universities at the national level, which would be an initial step in the implementation of the results of the present research. A further step would be the possibility to apply it to faculties of teacher education and compare it with other universities so that the comparison of the results could be generalised better and set as a kind of research framework of this problem, including the policy and cross-cultural domain as an additional scientific contribution to researching this problem.

Any future research on such a foundation and the comparison of their results would certainly be more appropriate. In those contexts, future studies, from the position of the requirements of modern educational policies in which teacher education for sustainability and ESD is recognized, should be a fundamental priority in developing the concept and the levels of implementation of ESD at the global level.
Notes:

(1) For more details, see Andiç and Tatalović Vorkapić (2015).

(2) As far as we are aware, such research has not been carried out at faculties of teacher education in the countries where we conducted our research. Similar studies have been carried out, some of which are mentioned in the discussion.

(3) The group of students implies Bosnian, Croatian, Slovenian, and Serbian university students.

(4) “Similar to the findings across Europe, elementary and compulsory schools are characterised by marked feminization of the profession, and generally there is a high level of competition for enrolment in subject and class teaching, as well as in entering the profession” (Vizek Vidović, 2005, p. 14).


(6) In the original research, Juárez-Nájera (2010) applied the questionnaire to 80 respondents, students from a Mexican university, and 37 respondents from a German university.

(7) Validation and adaptation of the questionnaire were carried out on a sample of 480 students from the University of Rijeka (Croatia), whereby the adaptation included exclusively the linguistic adaptation, and the scales were used in their original form. In the validation of the questionnaire, the ratio of respondents by sex was 40% male and 60% female respondents (Andiç and Tatalović Vorkapić, 2015).

(8) The same linguistic/speech area.

(9) The Kruskall-Wallis test was used as a non-parametric test. $\chi^2$ presents a measurement unit for test and significance of differences.

(10) Significance results of test are bolded.

(11) K-S ($z$, $p$) presents Komogorov-Smirnov test, test results with $z$ value and $p$ value as an indicator of using non-parametric statistics, $^* p = .001$; $^{**} p = 0.005$; $^{***} p = 0.05$.

References


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Gender Identity of Students and Teachers: Implications for a Sustainable Future

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Abstract

Considering the gender identity as a crucial aspect of the culture that shapes our daily life and recognising the research gap on this topic in the context of sustainable education, the paper describes the quantitative cross-sectional study on gender identity of students and teachers comparing the respondents by their age and sex. Three age groups (106 female and 62 male) participated in the study: 18–19-years-old pupils from comprehensive and vocational schools (n=59), 20–15-years-old university students (n=52) and 24–64-years-old teachers working at respective schools and universities (n=57). The original Bem Sex Role Inventory was administered to measure the individual gender identity types of masculinity, femininity, and androgyny. The majority of respondents from all age and sex groups described themselves as androgynous. Male and university students featured the scattering of scores more toward masculinity, while the scores of female, pupils, and teachers were more inclined toward femininity. No statistically significant differences were found among the three age groups, while sex appeared to be more influential factor causing significant differences between male and female in terms of gender identity with male’s inclination toward masculinity and female’s inclination toward femininity. Dominance of androgynous individuals challenges the current approaches to the gender education in the context of sustainable development.

Keywords: gender identity, androgyny, masculinity, femininity, education for sustainable development

Today it becomes self-evident that gender identities and gender relations are significantly connected with the cultural progress since they determine the daily life of each person, family, workplace, and wider community. At the same time, global changes, especially social and economic turbulences push the cultural values toward modification and variations, different interests intervening this process (Schalkwyk, 2000). In this paper we suggest the possibility of creative adaptation of gender analysis, advocated for over 20 years, to the educational issues related to sustainability. Gender stands for the socially determined difference of cultural norms and expectations linked to the biological differences between the sexes. These social constructions of gender vary in time and place and between the cultures (European Commission 2009, part 1.2.).
Gender Analysis: Imperative for Sustainability Issues and ESD

In a traditional sense, the gender analysis could be explained as the process implemented during the program and project design “assessing the impact that a development activity may have on females and males, and on gender relations (the economic and social relationships between males and females which are constructed and reinforced by social institutions). It can be used to ensure that men and women are not disadvantaged by development activities, to enhance the sustainability and effectiveness of activities, or to identify priority areas for action to promote equality between women and men” (Hunt, 2004). The aim of gender analysis is to increase the quality and effectiveness of initiatives as well as to redress inequalities and inequities (Badjanova & Iliško, 2015; Badjanova, Raščevskis, & Iliško, 2017).

Considering education as a part of the culture and conceiving education for sustainable development (ESD) as some global educational project, it is obvious that both ESD and teacher education (TE) for sustainable development (SD) should also be based on gender analysis. A gender analysis, therefore, should provide information and inquiry about the social groups that would be affected by an initiative (namely, ESD and TE for SD) – about their gender differences, gender identities, relationships, etc. In the presented paper we intend to shed some light on the gender identity of pupils, students and teachers both at comprehensive schools and university as they all should potentially be involved in the global processes of educational paradigm shift towards sustainability (Pipere, 2016; Salóte, 2015). The literature search shows the gap in the research on ESD in terms of gender issues, albeit, the disregard of this aspect of culture would possibly lead to unwanted consequences.

A clear global mandate was imposed on ESD and HESD to integrate gender in all activities by the Bonn Declaration: “ESD should actively promote gender equality, as well as create conditions and strategies that enable women to share knowledge and experience about social change and human well-being” (UNESCO 2009, paragraph 15 m). So far the major focus of gender analysis in terms of ESD has been related to gender equality focus on women and girls only. In this paper we will try to develop the deeper understanding regarding the gender identity, much less investigated topic in the field of sustainability.

Gender Differences in Environmentalism and Sustainability

As a majority of studies have shown, women display stronger environmental attitudes and behavior than men (Heinzle, Kanzig, Nentwich, & Offenberger, 2010; Hunter, Hatch, & Johnson, 2004; Vinz, 2009; Xiao & Hong, 2010; Zelezny, Chua, & Aldrich, 2000). However, few studies have shown no differences or even stronger engagement in environmental behavior by men (Eisler, Eisler, & Yoshida, 2003). The theory on gender roles and socialization (Howard & Hollander, 1996; Unger & Crawford, 1996; Wilkinson & Kitzinger, 1996) suggests that individuals in their social role of gender are molded by expectations provided by cultural norms. Females across cultures are socialized to be more expressive, caring, interdependent, compassionate, nurturing, cooperative, and helpful in caregiving roles (Beutel & Marini, 1995; Chodorow, 1974; Eagly, 1987; Gilligan, 1982), while males are socialized to be more independent and competitive (Chodorow, 1974; Gilligan, 1982; Keller, 1985). In the study by Zelezny, Chua, and Aldrich (2000), females, regardless of age (i.e., youth or adult), reported more concern for the
environment and pro-environmental behaviour than males. Recent studies also show the gender gap between boys and girls, girls having stronger sustainability consciousness; this gap is increasing from 12 to 19 years of age and amplified in ESD-oriented schools (Olsson & Gericke, 2017). In this light, one of the Sustainable Development Goals (UNESCO, 2015) to achieve gender equality and empower all women and girls sounds hardly relevant at least for developed European countries, where, on the contrary, boys should be empowered more as to reach the gender balance in sustainability issues.

On the other hand, gender norms, identified as the social prescriptions of gender roles both in terms of masculinity and femininity, have been indicated as being in tension with the foundations of SD (Blake, 2006; Eisler, 1994; Franz-Balsen, 2014; Rogers, 2008). Traditional gender norms of masculinity, prioritizing domination, competitiveness and short term success on the individual or corporate scale or the so called “hegemonic masculinity” (Connell, 1995) oppose many documents containing guidelines for SD, for instance, Earth Charter (The Earth Charter Commission, 2000) and conflict with ethical, ecological and social implications of SD. The norms of femininity contradict with empowerment and participation of women in social activities for SD, however, some authors point to the “feminization of environmental responsibility” (Schultz & Stiess, 2009), since the woman have experience in social change and improvement of human well-being. According to Franz-Balsen (2014, p. 1981), “the social construct of hegemonic masculinity affects men most by the expectations they have to meet, but it is not tied to a male body: women may internalize the masculine norm of competitiveness and dominance just as well, because it is key for success in the workplace or in politics. In addition, as mothers educating a son to become a real boy/man, or as teachers, women may use the symbols and myths around hegemonic masculinity, thus “doing gender””. Therefore, we should ask, if the problem takes its roots in gender per se or in internalized norms carried both by female and male today in order to survive and reach their goals.

Gender Identity: Interdisciplinary View

Gender identity refers to the degree to which a person perceives the self to be masculine or feminine, considering the meaning of masculine or feminine in a given culture (Perry & Pauletti, 2011; Stets & Burke, 2000; Tobin et al., 2010; Wood & Eagly, 2009). Societal norms of ideal masculine and feminine person may inform our gender identity, when we compare our features with those from a gender category. Gender identity can justify the specific gendered behaviour in the social sphere (Tobin et al., 2010; West & Zimmerman, 1987). Therefore, gender identity influences how people perceive the world around them and how they behave (Vantieghem, Vermeersch, & Van Houtte, 2014). Gender identity evolves since early age due to cognitive and categorical processing through the lifetime. According to the social-cognitive gender schema theory, children develop their own ideas on the meaning of masculinity or femininity (i.e., gender schemas) very early and use these ideas to process information, in decision-making and in order to regulate their behavior (Starr & Zurbriggen, 2017).

The research on masculinity and femininity shows both the periods of agreement on theory and methodology and times of hot discussions and friction. From the end of the 1990’s the scholars have come to the agreement on multidimensional and multifactorial understanding of masculinity-femininity showing that overarching masculinity-femininity (gender identity) construct consists of the scores in different areas of human
life, like interests, attitudes, traits, appearance, behavior, etc. However, these areas do not show high correlation among themselves and correlations may vary on the individual level (Perry & Pauletti, 2011; Spence, 1993; 1999).

Androgyny: Concept and Contemporary Implications for Sustainability and Education

According to Ivtzan and Conneely (2009), a major distinction between physical differences of men and women are highlighted in all trait theories like Parson and Bales’ (1955) Instrumental and Expressive dimensions, Guttman’s (1965) Impersonal and Personal orientations or Bakan’s (1966) modalities of Agency and Communion. At last, in 1973, Block advanced the theoretical idea of gender identity secure enough to express both Agency (masculine personality) and Communion (feminine personality), thus incorporating both male and female features. Such a role would be beneficial in two opposing situations, ensuring larger repertoire of behaviour and, therefore, larger social success. Following Block, the construct of androgyny was first fully formulated by Sandra Bem (1974, 1975) arguing that masculinity and femininity represent independent clusters of socially desirable instrumental and expressive traits. Thus, the psychologically androgynous person possesses similar levels of feminine and masculine traits (Ivtzan & Conneely, 2009). Tests measuring androgyny provide two separate scales for Masculinity (including assertiveness, independence, etc.) and Femininity (including sensitivity, kindness, empathy, etc.) (Bem, 1974; Spence, Helmreich, & Stapp, 1975).

Psychological androgyny is linked with several important positive phenomena like psychological well-being, self-esteem, satisfaction with life, marital satisfaction (e.g., Baucom & Aiken, 1984), ego identity, parental effectiveness, perceived competence, achievement motivation, cognitive complexity when evaluating careers, creativity (e.g., Norlander, Erixon, & Archer, 2000), and behavioural flexibility (e.g., Bem & Lewis, 1975). Some of these phenomena, especially self-esteem, perceived competence, cognitive complexity, creativity and behavioural flexibility could be positively related to sustainability consciousness and behavior. The androgyny has also been linked with effective leadership as more integrative and flexible, and more appropriate for achieving high performance in today’s complex organizations (Kark, 2017). The fact that androgynous leaders were perceived by employees as better leaders and as ones that they identify with to a greater extent (Kark, Waismel-Manor, & Shamir, 2012) would also be extended to the context of education where school and university teachers would, possibly, be more or less deliberately assumed as the androgynous identity as to be more effective leaders for learning process and role models for their students.

However, considering the above-mentioned cultural and social context of views on masculinity and femininity, studies on gender identity should be based on measures relevant for given culture or subculture and renewed following changes in gender stereotypes with time in specific culture. The latest developments in this field of study suggest the discussion on individuals with instrumental and expressive traits instead of stereotypical masculine and feminine labels (Kark, 2017). For instance, in the 1970’s, the sample studied in the US by Bem contained only 21% of androgynous male and 29% of androgynous female students, which is quite natural considering gender role models popularized by society at this time. It would be interesting to explore the prevalence of androgynous individuals in the present time European society.
Research on Androgyny: Impact of Age, Gender and Educational Context

Regarding the age differences in terms of androgyny, middle-aged adults are more likely to be classified as androgynous (Fischer & Narus, 1981). Also some life-span gender differences in androgyny have been found, showing that men become more androgynous moving from young age to middle age and later periods of life (Hyde & Phillis, 1979; Hyde, Krajnik, & Skuldt-Niederberger, 1991). For women, the age pattern is not so clear, however, more recent study implicates that women also become more androgynous with age (Kasen, Chen, Sneed, Crawford, & Cohen, 2006). Small effect sizes when androgyny of men and women at similar age are compared suggest that men and women are more similar than they are different (Hyde, 2005; Strough, Leszczynski, Neely, Flinn, & Margrett, 2007) and, therefore, their engagement with environmentalism and sustainability further would be based on larger similarity and overlapping of traits than it was theorized before. Strough with colleagues (2007) encourage the exploration of gender identity in various age periods to see the impact of historical events on the interpretation of obtained results.

Analysing the androgyny in social context of educational institutions, it becomes clear that today such context is especially favourable for this type of gender identity. For instance, two recent studies in China’s universities have shown that the number of androgynous and undifferentiated students was much higher than the number of masculine or feminine students (Cai, Huang, & Song, 2008; Huang, Zhu, Zheng, & Zhan, 2012). According to Twenge (1997), college-age women’s masculine trait scores increased from 1975 to 1995, while men’s masculinity remained the same; he also revealed few cohort differences in men’s femininity over time. This was explained with social changes in women’s workforce participation as well as with shift in woman’s social roles in general (Eagly, 1987; Wood & Eagly, 2002). Androgynous gender role now is desirable in educators (Eichinger, Heifefetz, & Ingraham, 1991), stereotypes portrayed leaders as less masculine in educational organizations than in other domains (Koenig, Eagly, Mitchell, & Ristikari, 2011). Furthermore, according to Schwendenman (2012), “high achievement [at school] seems to be related to androgyny, a socially and psychologically healthy basis for human interactions, but a feminine role is perceived as counter to academic achievement, a finding parallel to the results of 1980”.

Measuring Gender Identity

The Bem Sex Role Inventory (BSRI) is the most well-known and validated gender identity measure used to study androgyny (Ivtzan & Conneely, 2009). It was created echoing the developments of women’s movement of the 1970s (Bem, 1974) “to measure the extent to which a person divorces himself from those characteristics that might be considered appropriate for the opposite sex” (p. 156). The BSRI assumes that qualities desirable for each sex differ in the U.S. culture, while people differ in the extent to which they follow these social standards (Bem, 1979). Initial research by this measure classified respondents into categories based on their scores on the masculine and feminine dimensions, yielding four groups of individuals: (a) masculine sex-typed, scoring high on masculinity and low on femininity, (b) feminine sex-typed, scoring high on femininity and low on masculinity, (c) androgynous, scoring high on both masculinity and femininity, and (d) undifferentiated scoring low on both masculinity and femininity (Wood & Eagly, 2015).
However, this measure has also been criticised regarding both its theoretical framework, research questions studied and proper usage of method by researchers. Hoffman and Borders (2001) suggest that in their own study college students perceived BSRI items very differently from the gender-stereotypical way applied by the 1970s college students who were judges during the test development. Similar to other scales (e.g., Personal Attributes Questionnaire, PAQ, by Spence et al., 1975), the BSRI appears to draw from more specific constructs like already mentioned instrumentality/agency and expressivity/communion (e.g., Abele & Wojciszke, 2007; Fiske, Cuddy, Glick, & Xu, 2002), rather than masculinity and femininity in general.

**Method**

This quantitative cross-sectional study aims at exploring the gender identity of pupils, students and teachers comparing the respondents by their age and sex. The authors are interested in the degree of androgyny in the given sample of Latvian inhabitants in the cultural and social landscape of the 21st century in general as well as considering different age groups and sex of participants closely linked with educational context and, therefore, unavoidably engaged with (or disengaged from) sustainability discourse. The following research questions were set: 1) What differences in gender identity exist among the three age groups (adolescents, early adulthood and adulthood)? 2) What differences in gender identity exist among the women and men in the studied sample?

**Participants**

Three age groups (106 women and 62 men) were selected according to the three stages of psychosocial development by E. Erikson (1982): adolescence, early adulthood and adulthood. Convenience sample of inhabitants from different regions of Latvia included 18–19-years-old (M=18.2, SD=0.42) pupils from comprehensive and vocational schools (n=59; 61% women/37% men), 20–25-years-old (M=21.9, SD=1.60) university students (n=52; 56% women/44% men) and 26–64-years-old (M=37.6, SD=10.2) teachers working at respective schools and universities (n=57; 41% women/16% men).

The data was collected in the 2016–2017, mostly recruiting the groups of participants in their places of study or work. The survey data was also obtained by e-mails contacting participants from distant regions of Latvia. The data collection was conducted by the main author of the paper as well as by properly trained research assistants. The informed consent from all participants was acquired before the administration of the survey, ensuring the consideration of confidentiality and anonymity regarding the received data.

**Measure and Data Analysis**

The original Bem Sex Role Inventory (BSRI, Bem, 1974) was administered to measure the individual gender identity types of masculinity, femininity, and androgyny. The measure consists of a list of 60 attributes and behaviours; 20 of which were verified to be more socially desirable when demonstrated by men (e.g., competitive, aggressive),
20 deemed more appropriate for women (e.g., understanding, compassionate, tender), and 20 of no-gender affiliation or neutral (e.g., friendly, conscientious). These traits were presented to the participants in a systemised order, however, to prevent order or fatigue effects on overall Masculinity or Femininity scores, and disuade them from recognizing the true purpose of the measurement. Participants rated each attribute by the way they perceived each according to a five-point Likert scale running from one (Strongly Disagree) to five (Strongly Agree). Thus, the BSRI was completed by simply writing a number from one to five next to all 60 words.

Bem’s (1974) reported test-retest reliability was .90 for masculinity and femininity and 0.93 for androgyny. The BSRI manual (Bem, 1981) reports that original tests in the US resulted in internal consistencies that ranged from 0.80 to 0.86. In this study, the internal consistency coefficient of the masculinity scale was 0.78, and the internal consistency coefficient of the femininity scale was 0.74.

The data was analysed initially obtaining the sum of 20 respective femininity items (F) and the sum of 20 respective masculinity items (M) for each respondent. Afterwards, the index of sex-type (IS, namely, gender identity type – further used interchangeably) was calculated using the formula \( (F - M) \times 2.322 \) (Bem, 1974). Masculinity was identified if IS<−1, femininity was identified if IS>−1; IS>2.025 denotes the pronounced femininity, while IS<−2.025 designates the pronounced masculinity. IS within the range from -1 to +1 designates the androgyny (Беспанская-Павленко, 2013).

The data further was analysed using the descriptive statistics, one-way ANOVA and t-test for independent samples.

**Results**

**Gender Identity in Sample Groups**

Out of all 168 respondents, only 10 (5.9 %) described themselves as masculine, 11 (6.5 %) as feminine, other 147 (87.5%) reported their gender identity as androgynous. More detailed overview featuring the distribution of different types of gender identity for various age and sex groups is presented in Table 1.

<table>
<thead>
<tr>
<th>Gender identity type</th>
<th>Women (n=106)</th>
<th>Men (n=62)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculinity</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Femininity</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Androgyny</td>
<td>31</td>
<td>20</td>
</tr>
<tr>
<td><strong>Sample (n=168)</strong></td>
<td><strong>41</strong></td>
<td><strong>53</strong></td>
</tr>
</tbody>
</table>

**Table 1**

*Distribution of Gender Identity Types in Age and Sex Groups of Sample (N=168)*

<table>
<thead>
<tr>
<th>Gender identity type</th>
<th>Pupils (18–19 year olds)</th>
<th>Students (20–25 year olds)</th>
<th>Teachers (26–64 year olds)</th>
<th>Sample (in total)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masculinity</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>9</td>
</tr>
<tr>
<td>Femininity</td>
<td>5</td>
<td>2</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Androgyny</td>
<td>31</td>
<td>27</td>
<td>36</td>
<td>94</td>
</tr>
</tbody>
</table>

Out of all 168 respondents, only 10 (5.9 %) described themselves as masculine, 11 (6.5 %) as feminine, other 147 (87.5%) reported their gender identity as androgynous. More detailed overview featuring the distribution of different types of gender identity for various age and sex groups is presented in Table 1.
As it is shown in Table 1, all age and sex groups of our sample consist predominantly of persons reporting themselves as androgynous according to BSRI. Among the oldest group of women, one participant described herself as having mostly masculine characteristics, while none of men has depicted himself through the femininity gender identity type.

**Gender Identity Differences by Age Groups**

Table 2 depicts the mean and standard deviation of sex-type index obtained through the formula mentioned above as well as the range of this index for different age groups.

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Range of sex-type index</th>
</tr>
</thead>
<tbody>
<tr>
<td>18–19 year olds</td>
<td>59</td>
<td>0.11</td>
<td>0.654</td>
<td>From -1.16 to +1.63</td>
</tr>
<tr>
<td>20–25 year olds</td>
<td>52</td>
<td>0.02</td>
<td>0.619</td>
<td>From -1.39 to +1.16</td>
</tr>
<tr>
<td>26–64 year olds</td>
<td>57</td>
<td>0.14</td>
<td>0.577</td>
<td>From -1.16 to +1.63</td>
</tr>
</tbody>
</table>

According to Table 2, the findings from 18–19-years-old pupils from comprehensive and professional schools show that their results fall into the range of scores designating the androgyny with scattering toward femininity. Interestingly, almost the same level of androgyny with scattering toward femininity has also been found in the oldest age group (26–64-years-old) comprising school and university teachers. Androgyny was self-reported also by 20–25-years-old university students, though in this case the scores were scattering towards masculinity.

Figure 1 features the boxplots showing the differences of three age groups in terms of their sex-type (androgyny) index. The boxplots display the full range of variation, the likely range of variation, median and outliers of obtained scores.

![Figure 1. Distribution of sex-type index by age (N=168)](image-url)
A one-way ANOVA was conducted to compare effect of belonging to specific age group on the sex-type index. The analysis of variance showed that the effect of age group was not significant, $F(2, 165)=0.62$, $p=0.541$. Therefore, it could be concluded that no statistically significant differences exist between three age groups (pupils, students and teachers) in terms of their sex-type index.

**Gender Identity Differences by Sex**

Table 3 depicts the mean, standard deviation, as well as the range of sex-type index obtained through the formula mentioned above regarding men and women of the given sample.

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>M</th>
<th>SD</th>
<th>Range of sex-type index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>62</td>
<td>-0.25</td>
<td>0.556</td>
<td>From -1.39 to +0.81</td>
</tr>
<tr>
<td>Women</td>
<td>106</td>
<td>0.30</td>
<td>0.561</td>
<td>From -1.16 to +1.63</td>
</tr>
</tbody>
</table>

According to Table 3, the findings for the sample group of men show that their results fall into the range of scores indicating the androgyny with scattering toward masculinity. Higher scores of sex-type index, also in the range of androgyny, are featured by women whose answers reveal the scattering towards femininity.

Figure 2 provides the boxplots featuring the differences between men and women in terms of sex-type (androgyny) index. The boxplots show the full range of variation, the likely range of variation and median of obtained scores.

![Figure 2](image-url)
An independent-samples t-test was conducted to compare sex-type index for men and women in the given sample. There was a significant difference in the scores for men (M=-0.25, SD=0.556) and women (M=0.30, SD=0.561); t(166)=6.09, p=0.00.

Discussion and Conclusions

The authors aimed to explore the gender identity of students and teachers by comparing the respondents by their age and sex, determining the prevalence of androgyny in the given sample of Latvian inhabitants in general as well as considering different age groups and sex of participants. In general, all age and sex groups in their majority contained individuals describing their gender identity as androgynous. Though, some groups featured the scattering of scores more toward masculinity (male, 20–25-years-old university students), while the scores of other groups were scattered more toward femininity (female, 18–19-years-old pupils, 26–64-years-old school and university teachers). No statistically significant differences were found among the three age groups in terms of androgyny, though, sex appeared to a more influential factor causing statistically significant differences between men and women in our sample (including people with a wide range of age). Both sex groups were found to be androgynous, though their mean scores were statistically different with male’s inclination toward masculinity and female’s inclination toward femininity.

Thus, our sample consists of respondents describing themselves predominantly as androgynous persons which is strikingly different from the initial findings by Bem in her sample of US students in the 1970’s, but which is quite natural in the current cultural and social situation of European country at the beginning of the 21th century considering the social changes in society. Also, one should account for the social role of research participants, as the previous research shows that both the role of student and teacher ask for androgyny in order to succeed in these roles and to cope with high demands placed by current social, economical and cultural situation in Latvia (Eichinger, Heife-fetz, & Ingraham, 1991; Koenig, Eagly, Mitchell, & Ristikari, 2011; Schwendenman, 2012).

According to Strough and colleagues (2007), the systematic interpretation of age-related differences in gender identity has not yet emerged in research literature, since the researchers seldom include several age groups from adolescence through later adulthood in one study. The presented study, therefore, makes some steps in this direction, although the respondents are representatives of one peculiar context of education and the age group of later adulthood is not included. Regarding the differences in terms of androgyny among the three age groups — in adolescence, early adulthood and adulthood, it should be noticed that although all age groups display the androgyny as their gender identity, the lack of statistically significant differences shows that age in this peculiar sample could not be viewed as an important variable causing variations in gender identity. However, if in the youngest group of adolescents who are pupils at comprehensive and vocational schools and in the oldest group of adults (teachers from schools and universities) the scores of androgyny scattered toward femininity, the middle age group of university students (early adulthood) was discovered as having scores scattering toward masculinity. This could be partly explained with the gender distribution within these age groups, since the students’ group included a larger proportion of men in comparison with other age groups. The obtained results seem to be in discord with the earlier study
showing a higher level of androgyny in middle-aged adults in comparison with younger individuals (Fischer & Narus, 1981) and also with more recent studies reporting that both men and women become more androgynous with age (Hyde & Phillis, 1979; Hyde, Krajnik, & Skuldt-Niederberger, 1991; Kasen, Chen, Sneed, Crawford, & Cohen, 2006). It is clear, though, that this is not the linear development and growth of androgyny with age is also influenced by other important variables as gender, social status, professional affiliation, etc.

Besides, it has been found that gender identity can change in response to immediate contextual demands (Leszczynski & Strough, 2007; Pickard & Strough, 2003), we could suggest that scattering towards masculinity or feminity in different social situations could change in line with the demands from environment. Possibly, in the highly competitive and demanding environment encountered during the studies at university, some students could choose the active coping style striving towards a more aggressive, dominating and independent behavior, since after leaving their family and school behind, they are entering new life, usually left on their own to survive in this new academic and social milieu (see Brougham, Zail, Mendoza, & Miller, 2009).

However, the statistically significant differences in androgyny between male and female were found in the studied sample. However, the scores of both sexes fell into the range of androgyny, the group of men described itself as more masculine or more instrumental in their behaviour, while the group of women – as more feminine or expressive in terms of BSRI items.

This finding could be explained by the peculiar context of the study, namely, educational discourse as already mentioned above. In this discourse both male and female in their professional roles have been demanded to be, on the one hand, competitive, independent, assertive, on the other hand, understanding, compassionate, tender, etc. Besides, Lahelma (2000) has found that pupils overwhelmingly rejected gender as a salient factor in teacher-pupil relations, and tended to stress instead that individual teaching ability has the greatest impact. Notwithstanding, the gender stereotypes are still strong in Latvia picturing women as caring housewives and men as emotionally distant breadwinners (ESF, 2017).

Several practical implications point to the links between obtained results and ESD. Dominance of androgynous individuals in different age and sex groups deeply engaged with educational discourse challenges the current approaches to the gender education in the context of SD. Androgyny of students and teachers shows that, in general, gender stereotypes might not be considered as factors inhibiting implementation of ESD in educational discourse, though, further research is needed to be sure if the same could apply with the sustainability communication in a wider community of Latvia. In the studied sample independence and assertiveness have been well balanced with empathy, patience and tenderness, therefore, at least in the given sample one should not encounter issues hindering sustainability-related life style.

Furthemore, the fact that androgyny is featured both by pupils and school teachers as well as by students and their university teachers seems to be potentially ruling out the possibility of conflicts when, for instance, instrumentally-oriented university teacher is trying to indoctrinate his or her cultural norms and worldviews to expressively-oriented student. Therefore, just performed gender exploration gives the possibility to build the gender education onto androgynous orientation, in order to analyse the specific contribution of each individual to sustainability irrespective of his or her gender identity.
According to Franz-Balzen (2014), gender competence is necessary both for teachers and any other participants working in the field of sustainability communication. We cannot deny that gender norms and identity are among the key elements of SD, since “they do not only influence people’s worldviews and direct their behaviors, they also shape the organizational structures of societies and contribute to unjustifiable hierarchies and exploitation of resources all over the world” (p. 1987).

Regarding the limitations of this study, at first, we should indicate that this study used the popular measure (BSRI) to evaluate the research participants’ identification with masculine, feminine and neutral traits in order to obtain the index of sex-type. Albeit this measure is commonly used to explore the gender identity, warnings regarding the construct validity of this measure should be considered when reflecting on the research outcomes. Also, to some degree the social desirability would have the certain impact on the results of this study, since students and teachers are social groups used to be assessed quite often and, probably, already have elaborated some coping mechanisms when dealing with negative self-perception caused by external evaluation. Finally, it should be noted that in the cross-sectional design of our study, age and gender are confounded and we did not attempt to distinguish group differences due to age from those due to gender.

In future it would be interesting to extend this study and explore the correspondence between the gender identity of the same age groups and social status from one side and their sustainability-related attitudes and self-reported behavior from the other side. Also, the mixed design studies, initially measuring the gender identity and then obtaining qualitative data from representatives of different types of gender identity regarding their experience of ESD as students and teachers could provide some understanding on relationships between gender norms and possibilities of ESD.

At the end we can conclude that the strong prevalence of androgynous individuals in our sample of students and teachers from comprehensive schools and universities representing different age and sex is a good news for those striving to shape all facets of educational system in Latvia in line with the principles and guidelines of ESD. At the same time, the study shows that some diversity and reasonable differences still exist between the gender identity of men and women in these age groups, so designating the peculiarities of gender roles so necessary for balanced, healthy and sustainable society.

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Gender Identity of Students and Teachers: Implications for a Sustainable Future


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Education towards Urban Sustainability: Lessons Learned from the Welfare Business Models of Kanazawa City, Japan

Aida Mammadova
Kanazawa University, Japan

Abstract

Education is considered a driving force for urban sustainable development and there is an urgent need to use different approaches to increase the awareness level in younger generations. Teaching about sustainability requires an integrated approach due to its complex concept, and in this study to show the interconnection of the social, environmental and economic sectors of the city the author decided to conduct fieldwork activities in the welfare business sectors, which is one of the leading practices used in the aging Japanese population. Japan’s population is aging with a declining birth rate, and the country is becoming a “super-aging” society with one out of every four persons aged above 65 years. There are crucial issues to provide social services, such as care for the elderly, child support programmes to reduce the child-raising anxieties, care for mentally and physically disabled people and others. In this study, the objectives were 1) to provide the fieldwork in small-scaled private and town-scaled business sectors and 2) to observe the interconnection of urban sustainability practices through the welfare with environmental, social and economic sectors. Private and public sectors were visited by 15 international students with different educational backgrounds, who had no idea about urban sustainability. In total, four welfare business sectors were visited by the students: two sectors were related to the farming activates together with care for disabled people, and the other two field trips were related to urban community-development business sectors. After the field trips, students evaluated a linkage among social, environmental and business sectors related with welfare practices. The awareness level of the students increased (85 %) towards the issue of sustainable urban development, and they were able to provide the recommendations for the inclusive, safe and resilient cities. These field trips showed very positive feedback, to educate the youth. In this study, the author presents the qualitative transdisciplinary field trip approach. However, to improve the methodology a cohort analysis with a quantitative data analysis will be performed in the further study.

Keywords: urban sustainability, education, welfare, field trips, community-oriented business
Introduction

Urban areas are facing major challenges such as demographic growth, environmental changes, economic crisis, and social issues, and there is an urgent need to raise the awareness of those issues as the population of the cities is increasing annually in the world. The main issue that impedes sustainable development is the lack of awareness of the present issues, especially in young generations who live in the cities. Education is considered a driving force for urban regeneration; however, in the age of rapid globalization, conventional teaching and pedagogic approaches used in the past may not be suited for the modern generations. Moreover, educators are facing many challenges in teaching sustainability as the subject. Sustainability has numerous definitions in different fields, and due to the diverse and sometimes even unclear terminology, it creates various interpretations in the world of science, economy, society and education. We cannot argue that the concept of sustainability has a clear meaning in a particular framework, however enforcing “sustainability” as a goal, makes the idea very obscure and questionable in higher education (Wals & Jickling, 2002). Some studies in the field of sustainable education have already evaluated the transdisciplinary research framework by integrating the experiential practices with the theoretical ideas, which will deepen and extend the education quality achievement towards sustainability and sustainable development (Salóte et al., 2016) by creating the methodology which will allow for the reintegration of the knowledge and creating a new science (Sommerville & Rapport, 2002). The complexity of the sustainability education system is also related to the complexity of social systems and research paradigm (Pipere, 2016), and represents the highly conceptualized situations and subjects.

Educational institutions are facing many difficulties in conducting sustainable development studies in higher education because there is no specific methodology and/or guidance. Many questions should be addressed, such as: In which particular directions should learning take place, as the definition itself is not clear? To what extend must higher education be involved in the local issues related to the Sustainable Development Goals (SDGs)? How far can participatory approaches be conducted within the educational framework to reach SDGs? What missions and objectives of the teaching and research programmes should be implemented to reach the SDGs, and to what extent should they be conducted?

Since 1992, after United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro (the so-called “Earth Summit”) the concept of sustainable development was widely accepted by the countless international organisations, national institutions, enterprises and local communities (Hawken, 2010). In 2016, seventeen SDGs were adopted by the United Nations, and Goal 11 “Make cities and human settlements inclusive, safe, resilient and sustainable” was confirmed to achieve urban sustainability with opportunities for all, with access to basic services, energy, housing, transportation and others. However, the question how we can achieve those goals is a major issue, and it requires the involvement of every person with a bottom-up approach. It should be noted that not all environmental, social or economic issues are solely about sustainability and its goals, as they are rather issues related to the human-nature inter-relationship, cultural identities and basic human values (Murray, 2011).

Hence, due to the complexity of the concept of sustainability, teaching about sustainability would also require an integrated and complex approach (Robertson, 2014), as it encompasses social, economic, cultural, ecological, ethical and spiritual aspects of all
our life. The extent of its application depends on how well the educators are familiar with its diverse concepts. Besides, sustainability cannot be fixed, and due to constant environmental changes, sustainability would change from situation to situation and over time, so academic programmes should be always renewed and reconsidered, as well as appropriate for teaching urban sustainability.

However, unlike many uncertainties, higher education still has a huge potential and capabilities to integrate sustainability studies, and create more diverse, participatory and independent approaches, without standardising the ideas and attributing only to the goals. Studies for sustainability can bring many benefits, by creating the diverse curriculum, study programmes or subjects with diverse ideas. This kind of an integrated educational approach with diverse goals and directions can help educate the generations with a wide range of viewpoints, increase the ability for independent and critical thinking as well as develop students’ own potential by becoming the self-actualized members of the society.

In the developed approaches to teach about sustainability, the author has previously created several and diverse education field trips. To raise the awareness of urban sustainable development, the author has conducted fieldwork activities where the author linked the biodiversity with the cultural diversity of Kanazawa City, and monitored the importance of the human capital for the preservation and management of the natural resources (Aida & Iida, 2016). Besides, the author has conducted SDG training courses and evaluated the sustainability levels of the city’s environmental and economic sectors, and monitored how those sectors depend on each other and function in an integrated manner (Mammadova, 2016). From the previously conducted studies, the author has found the importance of the communities that supports the idea of “benefit sharing” and “creating shared values” with each other for the sustainable regional development. Japan’s population is aging with a declining birth rate, and the country is becoming a “super-aging” society with one out of every four persons aged above 65 years. There are crucial issues to provide social services, such as care for the elderly, child support programmes to reduce the child-raising anxieties, care for mentally and physically disabled people and others. However, unlike all those issues Japan is creating the mutually supporting communities, where no one is left behind, and applies integrated collaboration to provide social services for all inside the community. Social welfare practice of Japan is one of the most successful practices conducted inside the country. Governmental support together with the involvement of the small business, local residents, volunteers and welfare service providers is all included to work in collaboration with each other to create the mutually shared community. Therefore, in this study to raise the awareness of the importance of the integrated approach towards sustainable urban development, the author decided to create the fieldwork activates inside the most successful practices of Japan, such as social services and welfare related business sectors of the City.

Welfare business sectors gradually imply the concept of community-based strategies in “creating shared values” (CSV) for all (Porter & Kramer, 2011). The business and management sectors of the City increasingly recognise the importance of the welfare and community-based business strategies, and the ideas of CVS and “corporate social responsibility” (CSR) are implemented almost in each urban business sectors of Japan (D’amato, Henderson & Florence, 2009; Tanimoto & Suzuki, 2005). Big companies and business sectors have created a negative image due to their harmful effects on the environment and society; however, businesses conducted in the proper way can be the
leaders to achieve sustainable development. One of the successful sustainable business practices for sustainable development is the business that cares about the improvement of the life of a community. The so-called community-based business development models with CSV were introduced by Michael Porter (Porter & Kramer, 2011), who was stressing that companies through their business activities should provide social solutions to the local communities and be an essential part of the community. CVS and CSR activities have been used in the Japanese society for a long time, and all business sectors are constantly implementing the CVS in their management system and company’s regulations as an “indispensable” part. Almost each company in Japan recognises the social contribution as the fundamental basis for the successful business management, and sets the goals to achieve prosperity in accordance with the public interests and public values (Nonaka & Takeuchi, 1995). Business models that contribute to the society are crucial in making differences towards sustainable development, by providing valuable, innovative products and services, employment, education and training opportunities.

In the subsequent sections, the author will discuss four Welfare Business sectors visited by the students and evaluate the linkage of the welfare business practices for sustainable urban development inside Kanazawa City of Japan. Kanazawa City’s population is almost half a million people, and the city has several very successful welfare-oriented business practices implemented at the private and governmental levels.

Methodology

The intensive fieldwork was conducted from April to June, during the spring semester at Kanazawa University. Participants were 15 international students with different backgrounds. Only the students who visited Kanazawa City for the first time, and had no information about urban issues were selected to participate in the course. At the begging of the fieldwork, students were given the basic lectures about sustainability, social structure and environmental features of the region.

Design of the Field Trips

Fieldwork was divided into four destinations and conducted every month together with the introduction lectures on welfare and sustainability. Field destinations were divided into the four main sectors with destinations described in Table 1. The objectives were 1) to provide the fieldwork in small-scaled private and town-scaled business sectors and 2) to observe the interconnection of urban sustainability practices through the welfare within each sector. The first two field trips were related to the farming activities together with care for disabled people, and the other two field trips were related to introduction to the successful urban community-based development models implemented inside the city. At the beginning of the course the author decided to introduce the small-scaled and private sectors in agriculture and care practice, such as Chihara and Rebas Farms, because they could raise the awareness on the issues of depopulation, aging, field abandonment and land management. As the outcomes, students would be able to learn effectively how the care for disabled people could benefit for the regional land revitalization with small employment opportunities and observe the care practices conducted in the welfare sectors for the disabled people. After the introduction of small business sectors, the author decided to show the macro-scale of the sustainable urban
town model with the main community-based care practices, such as the case of Taiyou-gaoka town and Share Kanazawa town models. These kinds of town models show the integrated approaches towards urban sustainability and provide the perfect educational practice for the students to experience all environmental, social and economic issues in the interconnected and interdependent manner. Students were able to observe and analyse how each sector was related to the other, and the loss or change in one of the practices would create the chain reaction and affect other members inside the community.

During each course, students conducted the interviews with the local people, owners of the business sectors and welfare workers. They were requested to find and record the interconnection of each destination with other social, environmental and economic sectors of the city. After the course, students submitted reports in which they described the following: 1) connection of each sector with other urban sectors; 2) benefits and issues related to social care services. The survey was conducted among the students to evaluate how the field trips raised awareness of the issues related to sustainable urban development. At the end of the course, the workshop was organised by inviting the professional speaker in the field of welfare, and students were requested to create the model of an inclusive, resilient, safe and sustainable city.

<table>
<thead>
<tr>
<th>Field Trips</th>
<th>Destinations and Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Chihara Farm</td>
<td>Private business farm for Asperger syndrome children</td>
</tr>
<tr>
<td>2 Rehas Farm</td>
<td>Rehabilitation centre + social activities and employment opportunities for people with disabilities</td>
</tr>
<tr>
<td>3 Taiyou-gaoka Town</td>
<td>Town with all facilities for three generations to live together in one community</td>
</tr>
<tr>
<td>4 Share Kanazawa</td>
<td>Town with all facilities for inclusive lifestyle of the community, mainly conducted by the elderly people and people with disabilities</td>
</tr>
</tbody>
</table>

**Table 1**

**Visited Sectors**

*Chihara Farm:* The small farmland that is owned and managed by the local businessman who provides the three main activities for the regional development such as: 1) providing employment for disabled people by working in collaboration with NPO of “Ishikawa Association for Asperger Children” and providing the individual care for them through the blueberry cultivation; 2) making vegetables and food products as “the ultimate food supplements”, without using any pesticide or chemical fertilizer; 3) regional revitalization by utilization of the abandoned farmlands and attracting more people for regional revitalization.

*Rehas Farm:* The rehabilitation farm that belongs to the “Creators Inc” Company. The company provides the employment for the disabled people by creating a business opportunity in four pillars: design and creativity, cleaning, food production and agricultural business. It is a facility for supporting employment based on the “Comprehensive Support Law for Persons with Disabilities”. They aim to provide employment opportunities to those who have difficulties in finding employment in general companies and to provide welfare services for people with disabilities. Company provides the “non-employment type” contract with disabled people that allows them to work relatively
freely. All employees with disabilities are under the constant care of professional occupational therapists. The work is mainly conducted in the herb farm, by planting and packaging the herbs.

**Taiyo-gaoka Town**: A small town inside Kanazawa City, which was established in 1992 by the local private company “Taiyo Planning Corporation” that decided to provide all social and welfare facilities for the new human settlements. The idea came to make a strong community-based town and bring all three generations of the families to live together. Japanese communities are facing a rapid decline because the population decreases and young people are leaving for big cities to pursue for higher education and employment. Taiyo-gaoka town provides all facilities for the human well-being starting from kindergartens, kid’s colleges, schools, universities, clinics, pharmacies, elderly day-services, wedding halls, leisure parks, football/sport grounds and many other facilities just within the area with 830 households and population of 2,533 people. All facilities were built in a very compact way with modern and traditional styles. Surprisingly, the average age of the residents is around ±33 years, which is considered to be very young in the whole Kanazawa City. It is an area designed specifically to accommodate families with young children and elderly parents, having care facilities for both, which enables people to continue to work while their family is cared for close by.

**Share Kanazawa**: Created by the local businessman, who has opened many facilities for the care of disabled and elderly people in the whole Ishikawa Prefecture. *Share Kanazawa* is the area with only 1.1 hectares and divided into South, Middle and North parts with shared rooms and housing facilities, public hot springs, Bars, Cafeterias, Music Halls, Town Cleaning centres, sport and relaxation centres and many others. *Share Kanazawa* is popular among non-residents as well as those who come to visit the community and spend the time in the friendly atmosphere. It is popular among the locals because of the strongest community-based CSV, as all the facilities are run and conducted by the local residents themselves, most of whom are people with physical or mental disabilities, university students or elderly. The housing rents are cheap compared to the other towns with many volunteering activities instead, where the residents constantly meet and communicate with each other. Persons without any discrimination can live and share community lifestyle.

### Field Trips Outcomes

Kanazawa City was able to show a good practice for urban sustainability studies through fieldwork for the welfare business sectors. 85 % of the students replied that the fieldwork helped raise the awareness of the issues related to sustainable urban development in Japan, such as depopulation, aging and urgent need of integrated activities with diverse environmental, social and economic sectors. The interconnected sectors and the model for inclusive cities were created with the following recommendations:

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**Environment, Energy and Transportation**

Creating business sectors with locally made products and natural ingredients  
Encouraging cities to produce more local goods and services  
Caring and using one’s own utensils for eating instead of disposable ones  
Less vending machines, unnecessary packaging, plastic bag and bottles  
Installing recycling machines with reward
Increasing use of renewable energy
Rain harvesting and wave energy
Connecting the machines in gums to the energy generator and creating energy while exercising
No machines with stand-by mode
Creating more natural waste tanks inside the community to produce natural fertilizers for farming
Installing a recycling system in each corner of the city’s blocks
More green space
Alternative and cheaper transportation
Accessible transportation for the elderly and disabled people

**Municipality, Police and Politics**
Lower tax rates for large companies and multinational corporations in exchange for assisting the area with renewable and affordable energy
Certification and reward system for volunteering inside the city
Creating “World Union Association” for working together towards the sustainable urban future
Returning back to the old trade system: e.g., one day volunteering on exchange to something
Creating community-based educational activities
Public health engineering, endemic plan
Promoting political interest in young people
Sustainability related reward giving, phone apps etc.
Creating SDGs controlling Police around the city

**Health Care, Elderly Care, Care for Disabled People**
Adequate health care access
Creating easy employment and work activities for the retired people
Increasing day service centres
Easily accessible facilities
Employment opportunities and no discrimination
Fair education for those with physical and mental disability
Art centres and therapy centres
Natural-labour maternity clinics
Preventive medicine centres
Public health care and education

**Academic Institution and Proper Education for All**
Sustainability courses in every school and for every level of students
Creating career and job search centres for the youth in the diverse sustainability sectors
Creating annually practical sustainability activities in public and private business sectors, local communities, hospitals, and social sectors

Care for disabled people in the business sectors showed the most positive results and was evaluated by the students in terms of the benefit for the society such as:

1. Renewal of health, as integral care within community reduces the stress level in people.
2. Integration of disabled people into the society makes cities inclusive for all.
3. Independence and equal social status of disabled people.
4. Diversification of agricultural products.
5. Disability as an advantage instead of the limitation as people with disabilities show more willingness to work.
6. New source of income and employment that can boost local economy.
7. Huge potential for the regional revitalization in the declining society of Japan.

Still in Japan, disability is considered the limitation and one of the students in his report explained how inspiring it was to see people with disabilities working in café and providing services for the customers in Kanazawa: “The 2013 study entitled “Review of Mental-Health-Related stigma in Japan” (Ando, Yamaguchi, Aoki & Thornicroft, 2013) states that 61% of employers would not consider employing someone with a history of mental health illness. And only 20% of psychological professionals believed that people struggling with mental illness do not require hospitalization to recover. Another research demonstrates that Asperger’s is a very serious social handicap in Japan, and it is hard for those affected to be accepted. In one blog on which someone with Asperger’s was seeking advice about his upcoming move to Japan, among the most popular responses was “hide your condition as best as you can” or even “you may be fired if your employer ever learnt of your condition”. These were unfortunate and shocking statistics, but after visiting the farms with blueberries in Kanazawa and visiting Share Kanazawa, I became very positive for their activities bridging the gap between fellow citizens. I commend them on their work so far, and hope that a focus on community-immersion will help them work towards urban sustainability”.

Discussion

As a result of the field trips, the students observed the interconnection of the Environmental-Business-Social Sustainability, and found out that the implementation of a community-based strategy to the business management system could positively influence sustainable urban development. The largest value that is observed in Japanese companies for social contributions is that the business sectors while providing the social welfare do not overuse or overexploit the natural resources and ecosystem services. In reverse, in most of the cases they go in parallel, contributing to the society while preserving the natural biodiversity. For example, the case with the Blueberry farming was to provide the job opportunities for the disabled kids, together with the regional revitalization of the abandoned farmlands.

Another student emphasised the importance of the capital to reach sustainability, and underlined that business for welfare could create the shared values to reach sustainability by contributing to financial sectors and providing employment opportunities. “Something that I did not expect to learn from this course was that the driving force for making changes for urban sustainability is the capital. Sustainability is not possible without the proper funding, and informed allocation of the given budget. The thing that welfare business showed is that considering the benefits for the communities with good intentions would be the driving force in making the world more sustainable. And although this is still somewhat true, a good intention itself is powerless without the proper capital. Pursuing only the personal financial income alone can be dangerous in the wrong hands, and in reverse providing only welfare activities is useless without any
means of implementation. Only when the two come together, like combination of business activities with the implementation of the community-based welfare practices and care can make progress towards urban sustainability.

Our field trips showed that “sustainability is not the same as conservation or preservation. It does not mean not to use resources, but to manage the limited resources we have in such a way that will not be detrimental to the environment. Sustainability is not just about environmental or natural resources but people. A city or community that has no people is not sustainable because there is no one to make use of resources”. Another student discussed how the perception of the sustainability changes after the fieldwork: “When thinking about sustainability in Japan, I used to only limit my scope to how Japan can make better recycling policies or produce more eco-friendly technology, for example. I did not realise that the aging population and low birth rates were also very much important aspects of sustainability and well-being. We have to care about the well-being of elderly as much as we do children and adults who are at the age to start families in order to sustain existing cities, or create new sustaining communities. While Japan is continuously developing an advanced technology to make people’s lives more convenient and to prolong our lives, by the rate of population decline, these technological developments would serve no purpose if there were not enough people to use it.”

Field trips in the welfare sectors showed the interconnection of human well-being with all other environmental sectors. One student stated, “Well-being is not just the condition of wellness on an individual basis. Well-being is not limited to personal health. This is affected by many factors and institutions outside of ourselves in the society. It is affected by where food comes from, what water, soil, or resources were used to cultivate that food, who is employed to pick our food and process it, how our water is treated to be drinkable when disseminated through city pipes, the recycle centres, land-fills, and places where our waste goes, the institutions that include all members of society from young to old, abled to disabled, etc. These are all issues that need to be addressed because they affect the physical, mental, and psychological well-being of a culture, a collective population of people who are susceptible to the same risks because of similar experiences or circumstances.”

These field trips were conducted as the pilot study to evaluate the teaching methods for urban sustainable development through the welfare business sectors. In future, the author intends to improve the methodology with quantitative data analysis.

**Conclusion**

In this study, the author has conducted the field trips in the small-scaled private and town-scaled business sectors to observe the interconnection of urban sustainability practices through the welfare with environmental, social and economic sectors. In total, four welfare sectors were visited by 15 international students. Field trips helped the students independently analyse the urban issues and raise the questions towards the sustainable, safe and inclusive cities. Besides, field trips raised the awareness on the complexity of the sustainability practice and interconnection of all urban sectors with each other.

Higher education bears the responsibility for educating the future global citizens and new generations with a wide range of viewpoints, developing the ability for independent
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and critical thinking and increasing students’ own potential by becoming self-actualized members of the society. Some researchers have already analysed the importance of the sustainability strategic plans at the curriculum level of higher education and encouraged students to be more engaged in the issues that will shape their future (Smith, 2011). Besides, re-orienting the teaching and learning practices towards the critical and transformative pedagogy can provide the opportunity for the teachers to construct the pedagogical environment, where they can directly communicate with the learners (Kostoulas-Makrakis, 2010), society, natural environment (Mandolini, 2007) and the local communities during the field trips.

In the present study, education in the welfare sectors helped the students analyse not only the sustainable sectors, but also realise the function of human rights and involvement of the government which would take the responsibility for the concept of the inclusive and global citizenship (Miedema & Bertram-Troost, 2015). The author has introduced the qualitative transdisciplinary field trip approach and presented the complexity of the sustainability concept. Especially the field trips in the town-scaled welfare sectors have shown the effective method to address the sustainability issues within the complexity of the system. However, to improve the methodological approach to the author will perform a cohort analysis with a quantitative data analysis in the further study.

References


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Factors Determining Children and Young People’s Well-being at School

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Abstract
The article addresses the issue of children and young people’s well-being at school. The issue has been known as topical for already some time. In recent decades, in order to be able to determine the true nature and essence of the phenomenon of well-being, the necessity to find the ways for identification of children and young people’s self-assessment of well-being at school has become very important. There are many challenges related to conducting new longitudinal studies on children and young people’s well-being. The phenomenon of well-being at school cannot be seen only in the context of local situation; it is deeply contextual. Its essence is also determined by the content and values that have emerged in the development of wider global or regional relations and attitudes. Therefore, for the formation of a broader perspective of the article, such phenomena as sustainability and unsustainability were used. This made it possible to refer to the trends of sustainability and unsustainability that had long been highlighted in the studies of global development and education. The analysis of the phenomenon of well-being at school is offered based on the research results within EU FP7 project “Measuring Youth Well Being” (MYWeB) that took a balanced approach to assessing the feasibility of a European Longitudinal Study for Children and Young People through prioritising both scientific and policy imperatives and was carried out in cooperation with eleven European countries. The aim of the article in accordance with one of the specific tasks of the project is to find out the meaning and significance that children and young people allocate to well-being. The article discusses one of the most relevant domains of well-being – school, and how it relates to happiness, life-satisfaction and psychological well-being of children and young people. The article outlines the results of fieldwork undertaken in project consortium countries (Croatia, Estonia, Georgia, Germany, Greece, Hungary, Latvia, Portugal, Slovakia, Spain, and the United Kingdom) with the goal to understand the subjective experiences of children and young people from different age groups, regions and socio-economic backgrounds. The results of the research confirmed that educational spaces could take a more significant role in promoting well-being of children and young people; in its turn, the education system must rebalance academic learning and emotional well-being.

Keywords: well-being, domains of well-being, longitudinal study, school, education sustainability and unsustainability
Introduction: Understanding of Well-Being

Sustainable well-being is one of the basic human needs. Currently the issue of making children and young people’s well-being sustainable has become a goal of public organisations worldwide, i.e., well-being and sustainability have come together on a global scale and raised two questions. The first question is how we can provide good well-being to children and young people. The second question is how we can provide intergenerational equity, i.e., how to meet the needs of the present without compromising the ability of future generations to meet their own needs. The principle of sustainability represents a key issue to address these questions.

It can be argued that well-being is supposed to be a central element of sustainable development of children and young people. Since education helps a person to gain his/her place in society, school is particularly correlated with well-being. A recent body of literature in education shreds some light on reorientation of school towards the aim of sustainable development (Salóte et. al, 2016). The European network of the Baltic and Black See Circle Consortium (BBCC) has experience in education research for sustainable development and proposes a concept of mission oriented pedagogy which “helps to reflect those cases when pedagogy and educators have not lost the highest humane ideals and the function of searching for sustainability which is characteristic to pedagogy” (Salóte, 2015, p. 27). The BBCC has created an open transdisciplinary research framework and a strategic vision that will help reorient education to sustainable development, i.e., to the main component of children and young people’s well-being.

An academic debate has emerged about the nature of well-being in philosophy and its measurement in sociology (Van der Deijl, 2017). Since well-being has captured and continues to capture academic and policy interest over the decades, it comes as a surprise that there is no universally accepted definition of the concept. The term well-being is used as an “over-arching concept to refer to the quality of life of people in society” (Rees et al., 2010, p. 8). In defining the concept of well-being, a distinction is also made between the hedonic and eudaimonic approaches (Ryan & Deci, 2001; Keyes, Shmotkin, & Ryff, 2002). Hedonic approach is commonly understood as subjective happiness and the experience that increased pleasure and decreased pain leading to happiness. Between many ways to evaluate the pleasure and pain continuum, researchers have used mainly assessment of subjective well-being (Diener & Lucas, 1999). The subjective well-being consists of three components: life satisfaction, high levels of positive affect and low levels of negative affect, together often summarized as happiness. It is worth noting that a high level of subjective well-being is not assumed to develop from the absence of negative mood, but from a positive balance of negative and positive mood (Fredrickson & Losada, 2005; Huppert & So, 2013). In other words, the hedonic well-being has been proposed to consist of positive affect, negative affect, and life satisfaction (Diener, Suh, Lucas, & Smith, 1999).

The eudaimonic approach in its turn is conceptualized as the outcome of positive goal pursuits (Ryan, Huta, & Deci, 2006). This approach maintains that not all desires, i.e., not all outcomes that a person might value, would yield well-being when achieved (Ryan & Deci, 2001). Focusing on meaning and self-realisation, the eudaimonic approach is made up of six elements: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance (Ryff, 1989). Ryff and Singer (1998, 2000) have explored the question of well-being in the context of developing a lifespan theory of human flourishing. Self-determination theory (Ryan & Deci, 2000) is
another perspective that has both embraced the concept of eudaimonia, or self-realisation, as a central definitional aspect of well-being and attempted to specify both what it means to actualize the self and how that can be accomplished. Specifically, self-determination theory posits three basic psychological needs (autonomy, competence, and relatedness) and theorises that fulfilment of these needs is essential for psychological growth (e.g., intrinsic motivation), integrity (e.g., internalisation and assimilation of cultural practices), and well-being (e.g., life satisfaction and psychological health) (Ryan & Deci, 2001).

Although there is much debate among the followers of these two approaches, evidence from a number of investigators (e.g., Biswas-Diener, Kashdan, & King, 2009; Compton et al., 1996; King & Napa, 1998; McGregor & Little, 1998; Proctor, Tweed, & Morris, 2014) has indicated that well-being is probably best conceived as a multidimensional phenomenon that includes aspects of both the hedonic and eudaimonic conceptions of well-being.

In the EU FP7 project “Measuring Youth Well Being” (MYWeB), we undertook a holistic approach focusing on both hedonic and eudaimonic aspects of well-being. In other words, we explored the psychological, affective (both positive and negative), and cognitive aspects (life satisfaction and its domain specific satisfaction) of well-being. It is argued that the affective aspect of well-being is less stable over time because of its reliance on people’s experience of positive and negative emotions, which typically varies over time. However, people’s evaluations of their overall (life satisfaction) or particular aspects of their life (domain satisfaction) are thought to be more stable over time (Rees et al., 2013). We carefully considered this important measurement aspect in our research because we were about to test the possibility of measuring children’s well-being over a period of time for which we will need a stable and reliable measure.

Fieldwork Characteristics

The aim of the fieldwork was to understand the subjective experiences of children and young people from different age groups, regions and socio-economic backgrounds. It served to take into consideration the views and opinions of children and young people on their understanding of well-being and its different dimensions. The field research was conducted using qualitative methods. Two instruments were used in the data collection: the first was individual interviews: researchers worked by focusing on children and young people’s daily lives and listening to their stories. The second was the focus group discussion for which a moderation guide was used by researchers.

The fieldwork was conducted in Croatia, Estonia, Georgia, Germany, Greece, Hungary, Latvia, Portugal, Slovakia, Spain, and the United Kingdom. The timing of the fieldwork was between October 2014 and January 2015. There was variation in the following characteristics of children and young people: age, gender, social background, political and civic engagement of young people, family situation, nationality/place of birth, personal characteristics such as a disability or dyslexia, type of school and the place of residence. The age of the respondents was mainly between 11 and 18 years, including some particular cases of younger children (9 or 10 years) or exceptionally, some older young people (21 years old at the maximum). Figure 1 below summarises the number of individual interviews and focus group discussions held, number of the participants, and the characteristics of the participants by gender for each country and in total.
School between the Major Domains of Well-being

To measure children and young people’s own assessment of their lives, a number of instruments have been developed over a past decade. The most widely used tool is Huebner’s Multi-Dimensional Student Life Satisfaction Scale, which measures well-being in five domains: family, friends, school, living environment and self (Huebner, 1991). Focusing on children and young people’s everyday lives and their stories constitutes an important dimension of a well-being approach. National datasets of the EU FP7 project “Measuring Youth Well-Being” (MYWeB) made it possible to explore what children and young people prioritize for their well-being. The thematic and content-based analyses of interviews showed that among the five domains usually determined, children and young people emphasized three leading domains: family, friends and school.

In all of the countries, family is the most important domain for children and young people. Despite the fact that many children have very long days at school and at extra-curricular activities, they still connect their well-being first hand with the situation inside the family (Ferrer-Fons, Serracant, & Soler-i-Martí, 2015a). It was always described by the young people as a core part of their lives and an important domain of their well-being. The key factor within family relationships tends to be the relationship children and young people establish with their parents: a positive relationship, in a balanced family environment, tends to be highly valued by children and young people. This means having a good relationship with both of the parents, even if they are separated. Discussions or disagreements are not necessarily disruptive, but a permanent and strong conflict...
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is an important negative factor in their lives. Family relationships also involve the relationship parents have between them, i.e., family quarrels, divorces, missing parents, etc. are the main focus of unhappiness among children and young people. Many young people have stressed the pain, discomfort and unhappiness that their parents’ quarrels and/or separation have caused them. The young people rate family as the main influence of their lives and describe their families as being a supportive and stable structure, which can offer a positive and constant support: “Family is always important because it’s always going to be by your side” (Interview, Ivan, male, 16) (Ferrer-Fons, Serracant, & Soler-i-Martí 2015b). This domain is not limited to the nuclear family as it also includes the extended family, which includes near relatives as grandparents and cousins.

The domain mentioned as the second most important in most of the countries – friends. The interviewees emphasised their need to socialise and the support provided by their peers. For some friends are there to support when problems occur at home, whilst for others it is more about a general support that does not necessarily entail addressing personal problems. This domain tends to be especially valued by teenagers, from whom isolation or problems (quarrels, misunderstandings, etc.) may take on a great importance. For over a third of respondents in Estonia, it was friends and hobby activities or circumstances where they met with friends, which was considered to be the most important aspect of well-being (Taru, Unt, & Reiska, 2015). The different theoretical dimensions of well-being (happiness, life-satisfaction and psychological well-being) are closely linked to the type of relationships children and young people have with their friends. While these relationships are often the main positive source of this domain, difficulties in these relationships are the most commonly cited sources of unrest.

For the most of interviewees, school is the third of the domains that determines the present quality of life and well-being of children and young people the most. However, the significance of each of domains varied from interview to interview. For some individuals and groups, school and education were the most important domains. Some interviewees in Croatia mentioned school as the second most important domain, for example: “Before, my family was most important to me, and then sports. And now school is in second place.” (FG, Loza, female, 14) (Braja-Žagec, Tadić, Babarović, Franc, Lipovčan, & Sučić, 2015). Another interviewee explained, “50% school, 50% family are the most important domains to me.” (Interview, Matija, male, 14) (Braja-Žagec, Tadić, Babarović, Franc, Lipovčan, & Sučić, 2015). Moreover, school is of particular importance to children with special needs: “The school helps out children who need help-kids, who have some difficulties, like me, they have assistants in the classroom, assistants help us with learning... School sometimes reduces the amount of school work... Also, for example, I can’t see what’s on the blackboard, so they copy things on paper and give it to me to rewrite it.” (Interview, Stjepan, male, 15) (Braja-Žagec, Tadić, Babarović, Franc, Lipovčan, & Sučić, 2015). In spite of the absence of one clearly dominant understanding of what was the most important domain, school seemed to be the idea which surfaced in different contexts and meanings.

Well-being at School

In recent years, well-being of children and young people is described in education policy using conceptual pairings common in political discourse, including wealth, health and happiness. From an adult-centred point of view, the domain school includes factors
such as access to education, duration of education, status of success according to the quality of education and the contribution of education to adulthood. From children and young people’s point of view, the main factors which determine their well-being at school include relationships with teachers, relationships with classmates and schoolmates, learning, academic achievement, stress and anxiety, and democratic school atmosphere.

Relationships with Teachers

In light of the large amount of time that children and young people spend at school, findings revealed the relationships with teachers as the most significant factor for well-being at school. The interviewees expressed different attitudes in relation to the role of teachers for their well-being. Some children had very close contact with their teacher and, thus, they had many good words to say about their teacher. However, the interviewees reported different experiences with teachers, some children stressed that it was vital to have teachers who were kind and did not shout at minor things like leaving books at home or having some little part of homework not done etc. Some children mentioned discrepancies between what teachers said and taught them, and what teachers actually did. For example: “I was at a bar and I saw my teacher smoking. So, she is saying one thing at school, and doing the opposite. That’s not very nice... I was bothered by this.” (Interview, Matija, male, 14) (Brajša-Žagec, Tadić, Babarović, Franc, Lipovčan, & Sučić, 2015). Teachers are widely criticized by children because of unfair treatment, which however cannot be discussed properly because of the unequal communicative positions:

I get angry if I experience injustice I really don’t like it and this causes many problems. That’s why I have 3 (on a scale of 5) for my behaviour, because if I’ve got a problem I express that ‘it’s unfair!’, because I feel this way and can’t prevent this even if I should. For example, if the teacher gives me detention for no reason. For example, last year one of my classmates kicked the dust-bin and I was punished, even though I wasn’t involved at all. [...] So I argued with the teacher for quite a while, because I felt it was unfair. (Interview, Peter, male, 13) (Sik, 2015).

As this quote shows, teacher-pupil relationships may often become controversial if there is no space for discussing dissent: Peter’s angry outburst prevents any rational communication. These “distortions of communication” (Habermas, 1990) no only limit the moral fundaments of a community by damaging democratic relationships, but also result in an alienating or anomie atmosphere. Such distortions of social integration affect many levels of well-being: they not only distort self-respect by undermining a fair institutional culture, but they also burden interpersonal relationships with distrust and cause psychological stress (cf. Sik, 2015).

The basic type of challenge mentioned by several young people is the lack of mutual understanding with teachers.

I don’t blame the teachers, because I understand they teach there for 25 years and I’m the 130th stupid kid they have to discipline, but they are fucking uninterested, that’s for sure. And they didn’t do anything to improve me or our relationship either. With one exception, teachers hated me. So I gradually became disinterested myself and started not to go to school. (Interview, Barnabás, male, 19) (Sik, 2015).
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As the interviewee explains mutual disinterest led in his case to skipping classes and caused serious problems in his career. If not treated properly, the original lack of understanding may result in serious conflicts and even include physical violence. The growing reflectivity and autonomy of young people not only allows for a more critical perspective on the school, but also enables them to confront teacher authority vehemently.

Well, my literature teacher, that was brutal. At the beginning we had a good relationship, but later whenever I entered the class, he asked, ‘How is that you’re still here?’ I laughed at first, but once he really got going against me. He started to say what a stupid family I have and how could my mother give birth to me and stuff like that. That was when I lost control. I stepped close to him and said, ‘Just repeat what you said!’ When he did, I pushed him over the table and threatened that if he ever said anything like that again, I would make him regret it. Then I left. Luckily he didn’t report this to the police or anything like that. (Interview, Nándi, male, 18) (Sik, 2015).

As this example shows, young people do not take the authority of teachers for granted, but evaluate them in a very critical way. Also, if a conflict emerges they are ready to defend themselves and fight back. In this context, interviewee’s aggression can be interpreted as a desperate attempt to stop and avenge the continuous verbal harassment. Obviously, such longstanding and escalating conflicts have a devastating effect on one’s well-being, as they create an extremely stressful and inescapable social environment (cf. Sik, 2015).

A positive and fair attitude is expected from the teacher. It is important for the young people that the teacher listens to them and accepts their viewpoint, devoting sufficient time to explaining the subject, helping them become competent in their subject and treating all the students equally, especially when giving grades.

Relationships with Classmates and Schoolmates

School was seen to have several positive meanings: it was associated with friends, with class and schoolmates that one meets at school. The interviewees gained a feeling of happiness and pleasure from good, friendly relationships with family members, classmates and teachers, from spending time together, from getting good grades and from good living conditions when nothing worried them or made sad:

Well, perhaps, when everything is good. When, well, everything is fine with me, I talk with everybody, well, on a day I don’t have any worries. That’s it. (Interview, Guna, female, 10) (Laudere, Ozolins & Stasulane, 2015).

Similarly, many children and young people have stressed the importance of having positive, meaningful relationships with their schoolmates and of being accepted; but in most of the countries analysed, children and young people have also mentioned the negative effect on their well-being that isolation can have. School-bullying is broadly perceived as a common event that can have a traumatic effect on those children and young people suffering from it.

On the negative side, school was associated with teasing, nasty nicknames, insults, threats, isolation manoeuvres, rumours and school-bullying. All the respondents would like to see a friendly and united class where it is cheerful, with no conflict or teasing.
among classmates. It transpires from the interviews that teasing and conflicts are more typical in younger classes due to children’s behaviour and mental capacity (they are better or worse in their studies), their family situation or the way in which the youngest children try to prove themselves. Bullying was mentioned numerous times by interviewees, some with stronger words than others. For instance, Jane keeps very negative memories of her time in school where she was bullied. She considers bullying to be a cause to her depression:

*I absolutely hated [school]. There was a lot ... it was bullying but I wouldn’t say it was physical bullying; it was like emotional bullying. I had to go through it and that was crap. It caused a lot of problems with me. That’s like one of the root causes of my depression.* (Interview, Jane, female, 18) (Ozan, 2015).

### Learning

The interviewees experienced stable well-being when they had a positive learning environment providing challenging, interactive and engaged learning experiences. Several interviewees mentioned that they derived excitement and satisfaction from learning and getting to know new things and new knowledge. Joy of learning new things at school and studying favourite subjects were mentioned as a source of well-being and satisfaction. Young people talked about learning, that they like learning and talked about specific topics they had covered recently which had been fun, for example, learning about planets, doing geometry in mathematics lesson etc. They did distinguish between instrumental value of knowledge and skills and then also mentioned separately that learning new things about subjects that they liked was exciting and interesting for them, that this was a value in itself. “Oh, I get so excited and satisfied when I learn new things about chemistry and biology at school!” (Interview, Eve, female, 14) (Taru, Unt, & Reiska, 2015). This girl also said that she wanted to specialise in gene-technology in future and that she also needed to develop logical reasoning. Another girl (Interview, Linda, female, 15) (Taru, Unt, & Reiska, 2015) said that she was very interested in knowing more about languages and several other subjects and that she studied those subjects with great interest. These themes did not come to the fore immediately; they were not mentioned among the first things. Besides, these themes were not mentioned by everybody – actually the majority of interviewees did not mention such experiences or such drive for self-improvement, self-actualisation and self-realisation. Therefore, it looks as if satisfaction derived from self-actualisation and self-realisation is important for relatively few. Interviewees who considered self-development, self-actualisation and self-realisation to be important were similar with other interviewees in other respects. This suggests that self-actualisation comes in addition to usual and normal aspects of life that were mentioned by other people. It does not replace more common experiences but it complements them or adds to them, adding details and making the mosaic more varied and more complex (cf. Taru, Unt, & Reiska, 2015).

For some interviewees, school was also associated with preparation for the future, i.e., for university studies, choosing a profession, finding a job that earns good money and brings pleasure.

Education is perceived by the children interviewed as necessary for obtaining a good job in the future. They associate education with job opportunities and consequently future quality of life. This link is very clearly understood by all of the interviewees:
You get to learn new stuff that you’d never heard of and so you get a good education if you want to work in somewhere that’s a good place to work at. (...) Because then you don’t have a miserable life because some people they don’t really pay attention in school and then when they grow up they have a really, really miserable life. (Interview, Grace, female, 12) (Ozan, 2015).

The respondents considered that if they were studying, attending school, and discovering a lot of new and interesting things were important and crucial, this was a guarantee for a successful future career, for well-being and for a good and well-paid job as well as personal development: “If you’re not in school, you won’t know anything!” (Interview, Kārlis, male 10) (Laudere, Ozolins, & Stasulane, 2015).

In many cases, however, learning appeared as the framework of their lives more than as a direct source of well-being. Among full-time students, their studies have a major importance, even among those who declare not to be interested in them. Studies rule their daily lives, both during school time and their leisure time (homework, exams, etc.), and they condition the people they meet and make friends with and shape many of their daily activities and conversations.

Academic Achievement

The academic achievement at school also plays a significant role in overall well-being. Even though not every child sensed the importance of school performance clearly, most of them referred to the feedback of the school as a key component of their everyday well-being. School is the main field of productivity in children’s life, where their individual capability is measured by the community. Consequently, they internalize the measures and evaluation of the school, culminating in the fetishizing of grades. Good grades are uncritically perceived as a sign of worthiness, while bade grades as a sign of incompetence. Being the primary source of self-esteem, school success expressed in grades plays a distinctive role in subjective well-being (cf. Sik, 2015).

The school is a distinctive terrain of potential difficulties and challenges, and basically personal educational failures are mentioned by children:

Q: You mentioned your parents are strict concerning your grades.
A: Well, they don’t like average or below average grades.
Q: What do you mean?
A: Well, they accept if I get a 3 (on a scale of 5), but not for every subject. They say I have the brains, but I’m lazy.
Q: Do you agree with this?
A: Partly yes, but frankly I can’t learn things I’m not interested in at all. Let’s take history: I’m a stable 3, sometimes I aim for a 4, but I’m not interested at all... And history is unfortunately particularly important for my father. (Interview, Klara, female, 13) (Sik, 2015).

As Klara expresses, grade quality is a social construct based on the expectations of parents, teachers and children. In many cases, these expectations are in conflict, which results in either actual social conflicts or internalized conflicts resulting in anxiety. In both cases, well-being is damaged (cf. Sik, 2015).

While for children school performance is something externally driven, for most young people it becomes important as a means to realise their goals. Accordingly, having
good grades is not a goal in itself anymore, but an indicator of being on the right track towards other goals. Also, young people reflect on a broader context of education, including its price and consequences for their job opportunities.

The school children emphasized that they were learning for themselves: “It’s like this, what your education is like, where you’ll work, it depends on this. One of the achievements you’ll have.” (Interview, Lauma, female, 10 years old) (Laudere, Ozolins, & Stasulane, 2015). Obviously, parents and teachers are happy when children do well and achieve in your studies. However, the school children admitted that it is possible to study and develop personality and that it is an important measurement of well-being. School is rated highly in the interviews – you gain a lot which is of use in your future adult life there. Young people attend school mainly to gain knowledge, developing themselves in this way and laying the foundations for a successful future (studies at university and a good career), and to have a good time forming friendly relationships and socializing with their peers. In less common situations, going to school is considered unnecessary and is done for the sake of the parents:

School isn’t useful. It’s education, and you can gain education at work, but well... The only reason why I try to do well is simply so that my parents would be proud of me. That’s the only reason. (Interview, Valdis, male, 15) (Laudere, Ozolins, & Stasulane, 2015).

Stress and Anxiety

Nevertheless, school was associated with stress and anxiety. One of the most widespread complaints was about a large volume of unnecessary information, though in some cases this was also valued positively, explaining that in choosing what to study, one could learn to select priorities: “I like coming to school, I like learning. Sometimes I don’t like the senselessness, as I intensely feel that some things are completely useless for my future, that it’s terrible how very unnecessary this is, and how aware I am of it.” (Interview, Liene, female, 18) (Laudere, Ozolins, & Stasulane, 2015). School can become a very stressful environment for a child who did not acquire what was taught in class:

If we don’t have a test on that day I like [school], but if we do have a test on that day I go all stressed out and all that because... sometimes the work is really hard and you don’t get it and when the teacher explains it to you, you don’t really get it and when it comes to do the homework you’re like I don’t know this. (Interview, Grace, female, 12) (Ozan, 2015).

The strict school programme and extra-school activities for the adolescents mean that they do not have enough free time to entertain themselves and rest. They feel pressured by society which “does not accept mediocrities” (FG, Spyros, male, 15) (Koronaiou, Alexias, Chiotaki-Poulou, Sakellariou, & Vayas, 2015) and expects too much of them. Young people were feeling exhausted and they expressed their will to finally have a stable national curriculum and examination procedure, with less study hours and more opportunities for leisure time. In addition, they said that they had many extra-school activities and even though most of them were satisfied with that, they also felt the pressure from their social environment and especially their family that they had to achieve high goals either at sports or in learning foreign languages to mention some of
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them (cf. Koronaiou, Alexias, Chiotaki-Poulou, Sakellariou, & Vayas, 2015). Young teenagers were more anxious about the future. The educational setting appears to favour stress and anxiety for most students. They expressed their anxiety regarding their ability to pass the national exams for the university and what they should do if they fail (cf. Koronaiou, Alexias, Chiotaki-Poulou, Sakellariou, & Vayas, 2015). The young people interviewed described how tests, assignments, exams were associated with some level of stress:

*I mean, honestly during this period where we had the mock [exam] I was, you know, out of a lot of sleep and really hectic it was, yes. (...) there is quite a lot of work, I mean, even the preparation for the real exams is just itself really tiring and when the real exams come it’s almost as if though you’ve forgotten all the things that you need to know because of the stress that you’ve gone through.* (Interview, Adnan, male, 16). (Ozan, 2015).

School anxiety is mentioned by a surprisingly high number of the interviewed children, which indicates that it is a general problem. The different levels of anxiety are a common psychological problem among children and young people oriented to good school performance: they specifically worry about good grades, show signs of depressed helplessness and try to escape from responsibility. These different reactions express the potential psychological disorders originating from school pressure, which seriously damage children’s well-being (cf. Sik, 2015). Exams or homework are fundamental parts of children and young people’s lives and their worries, stressful situations or expectations are very often related to their studies. In many cases, this has a direct effect on their well-being: academic results, the pressure of exams, the boredom of routine or the lack of interest in certain subjects was mentioned by interviewees as sources of satisfaction and dissatisfaction.

Democratic School Atmosphere

While the primary purpose of school is the academic development of children and young people, it affects their civic engagement and social development. Schools also serve as the first institutions with which children get in contact. In this sense, they are the sources of the first impressions concerning public institutions. Such experiences may result in a trustful attitude or disappointment.

*Q: If you have some problem here at school, do you feel that your voice is heard?*
*A: Well, I’m involved in the student parliament where we can express our opinions. But it doesn’t always have an effect.*

*Q: I see... And what are your experiences?*
*A: Well, we discuss issues like the new decorations. Sometimes unfortunately the bigger students don’t inform us about the gatherings. But the teacher told them already that it’s not fair.* (Interview, János, male, 12) (Sik, 2015).

An attempt can be made to establish a democratic school atmosphere where teachers participate in communication oriented to mutual understanding and democratic socialization occurs. Only such a climate is capable of grounding a trustful relationship with public institutions, which is an important aspect of feeling secure (cf. Sik, 2015).
The young people mentioned that despite the fact that they were asked to express their opinions during lessons at school or to reveal their position on some issue, these opinions were not always respected, and this was influenced not only by the theme being discussed but also by the teacher’s attitude. Such disconnectedness results in a more critical relation to school, which however does not lead to any sort of civic action because of inappropriate institutional culture.

Q: What do you mean by hushing up?
A1: Well when someone does something wrong, but it won’t have any consequence. (Focus Group, Edina, female, 16).
Q: And this happens at school?
A1: Yeah.
A2: It happens often. (Focus Group, Janó, male, 18).
Q: So why don’t you raise your voice?
A1: Because then it will be a problem that we are resisting.
A2: We can pretend to be a freedom fighter, but we won’t be able to accomplish anything.
A1: A student is always inferior compared to a teacher. (Sik, 2015).

As these students explain, even if they are aware of injustice in their school, they do not feel they have a chance do anything about it. Such an experience of powerlessness is an important factor of the potential threats of satisfaction as it indicates long-term institutional expectations (cf. Sik, 2015). While school is the primary institution for evaluating worthiness and determining social mobility, it is also an agency of discipline and punishment provoking resistance and revolt. Such instrumental and disciplinary functions make school another key dimension of the constitution of subjective well-being: school failures and dysfunctions are amongst the most important sources of anxiety, low self-esteem or deviant behaviour patterns.

Conclusions

The present paper has investigated the contribution of school contextual factors to children and young people’s well-being. Despite economic, social, cultural and ethnic differences between countries, project results have indicated a six-factor model that comprises relationships with teachers, relationships with classmates and schoolmates, learning, academic achievement, stress and anxiety, and democratic school atmosphere.

The fieldwork conducted in Croatia, Estonia, Georgia, Germany, Greece, Hungary, Latvia, Portugal, Slovakia, Spain and the United Kingdom (October 2014 – January 2015) reveals that the perception of well-being is greatly transformed as children become young people. Children have more difficulty to explain concepts related to well-being so family, school or peer environment appear to be very important. As they identify more easily with their parents and teachers’ perspective, family tensions or institutional injustices have a direct effect on the quality of their well-being. Moreover, children seem to have a less elaborated sphere of autonomy. Free-time activities that satisfy their desires are not linked to the process of identity construction, but remain merely as an instrument for having fun.

In contrast, young people have a more reflective relationship towards their family, school or peer environment. As they have already developed some autonomy and an
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independent perspective, they evaluate their broader context, potentials and responsibilities and initiate actions oriented to resolve potential problems or to achieve goals. In the reports, the experience of being active in social and political groups of different types appears to be an important factor affecting the perception and elaboration of discourse among young people, giving a more social and community dimension to the concept.

The study indicates the positive benefits of a contextualized approach to well-being that takes into account the subjective viewpoint of children and young people rather than merely objective data. The findings from the research conducted during the MYWeB project suggest that educational spaces could take a more significant role in promoting well-being of children and young people. The educational community mainly thinks of pupils’ well-being in material and organisational terms, but children and young people are more likely to enjoy life and school, and be successful and engaged in their learning. The education system must rebalance academic learning and emotional well-being; this is what children and young people need.

The findings of the research (specific features of the factors determining children and young people’s well-being) reveal that a school in particular and the society in general nowadays have mainly been characterized by unsustainability. Therefore, definite actions and reorientation activities leading to sustainability are recommended. The analysis of the nature of the phenomenon of well-being, including various attitudes and relationships in the organization of education environment, testifies to the necessity of the improvement of the education system via addressing the issue of the quality and sustainability of education in its wider perspective.

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References


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