

# The first undergraduate program in health promotion and prevention in Switzerland

## Context, concept and challenges

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## 1 Introduction

In this chapter, the undergraduate program in health promotion and prevention (HP<sup>1</sup>) at the Zurich University of applied Sciences (ZHAW), School of Health Professions, is portrayed. Launched in 2016, it is the only program of its kind in Switzerland and has attracted attention as an innovative program for a young professional field. By summer 2021 the third cohort of students is graduating. While societal interest in HP is growing, its significance and recognition as a professional field has yet to be consolidated. Referring to the German speaking part of Europe, to date there has been no clarification of roles, competencies or professional training and ethics in HP – in other words no clarity about the profession of HP practitioners (Bals and Wulfhorst 2008; Biehl et al. 2021; Göpel 2006; Streckeisen 2013; Walter

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<sup>1</sup> To our understanding health promotion and prevention are complementary fields of action within public health who both aim a maximum health gain. In this chapter we use the abbreviation HP referring to both, health promotion and prevention.

2015). The undergraduate program builds on a vision of HP referring to the Ottawa Charta: HP focusing on socio-environmental determinants of health on a community level has the potential to support most vulnerable groups in society. Health is produced in the environment where people live and work, which leads to the fact that health can be promoted in these environments via multiple stakeholders, e.g., families, schools, workplaces or health professionals and in specific by HP practitioners. HP is seen as field of action of Public Health (PH) with greatest practical relevance and therefore the need for special competencies in HP (Faltermaier and Wihofszky 2011). HP focuses on promoting protective factors for health and creating supportive environments, whereas prevention focuses on reducing risk factors for health (Hurrelmann et al. 2018). Both concepts aim a maximum health gain and are understood as complementary fields of action within PH.

As outlined, HP is still in the process of being professionalized. In this process the IUHPE is the driving force in that it promotes the dissemination of evidence based knowledge to the HP community and the advocacy for HP (Van Den Broucke 2020). There have been great achievements for HP since the Ottawa Charta, e.g. its own concepts and values, a specific competency framework (CompHP) (Dempsey et al. 2011), university programs, handbooks, journals, conferences, an expanding accreditation system for HP practitioners and programs and the implementation of HP in political health agendas (e.g. SDGs, national laws on health promotion and prevention) (Nutbeam 2019; Ruckstuhl and Ryter 2017; Van Den Broucke 2020; WHO 2017). Besides these achievements and enablers of professionalization of HP some barriers have been recognized: a lack of institutional structure, no sustainable financing, competing interests in the health sector and beyond, a lack of visibility of HP or the complexity of HP conceptualization (Barry et al. 2020; Barbara Battel-Kirk and Barry 2019a; Van den Broucke 2021). Moreover, the need for a stronger HP workforce is justified by a still lacking quality of HP practice (Barbara Battel-Kirk and Barry 2019a; Golden and Earp 2012; Reisig et al. 2016) and lacking HP practitioners (Hommes et al. 2020; Paccaud et al. 2013). There is a growing call for action of the HP community and workforce to further implement HP in practice, research, and politics (IUHPE 2021).

This undergraduate program at the ZHAW in Switzerland tries to ensure an ideal teaching-learning setting for HP, focusing on great practical training opportunities (work placements), skills training (research methods, project management and communication) and an interprofessional training involving other health professions. This program in HP wants to contribute to the professionalization and capacity building by training professionals for a research-based, practice-oriented and inter-professional approach to HP. This chapter depicts the undergraduate program in HP regarding its context and the program concept. Experiences with five years of program implementation are described including major challenges, visions for future steps and transferability to international contexts.

## 2 Institutional and political context

Professionalization processes, especially in HP, depend on the political and institutional contexts. Switzerland has about 8.5 million inhabitants in four different language regions. Despite a very high life expectancy and a good health status of the population in Switzerland, there are certain challenges for the healthcare system, such as non-communicable diseases (NCDs), mental illnesses and an aging society. Diseases and health behaviors are very unequally distributed in Switzerland. Furthermore, there is an unequal distribution of resources and unequal access to health services. There is also a lack of epidemiological data on certain diseases and their consequences in Switzerland, which is the basis for deriving needs-oriented measures (BAG and GDK 2016; De Pietro et al. 2015). The main responsibility for PH lies with the 26 different cantons (with 16,000 to 1,5 million inhabitants), whereas the national level has mainly coordinating tasks. Overall, there is a need for experts such as HP practitioners who can address these described challenges and advocate for health equity.

In Switzerland HP was pushed forward in 1990 by establishing the foundation “Health Promotion Switzerland”. The main aim was to tie in and coordinate cantonal activities in HP. Since 1996 the foundation has been financed by the compulsory health insurance of every citizen in Switzerland with 2.40 CHF per year. In 2018 this amount was doubled to 4.80 CHF per year to better deal with rising NCDs and mental health issues (BAG and GDK 2016; Schuler et al. 2016). “Health Promotion Switzerland” is the national representative of HP advocating for HP, initiating, financing, coordinating and evaluating programs (Oggier 2015; Ruckstuhl 2017). This progress is only achievable in collaboration with other main stakeholders of HP, like health leagues (e.g., cancer, AIDS), health insurances, the Federal Office of Public Health and the 26 Swiss cantons. Since 2000 every canton has been represented in the national “Consortium of Cantonal Delegates of Health Promotion” (VBGF) to further coordinate HP activities at the regional level in every canton (De Pietro et al. 2015). This consortium is an important stakeholder for the professionalization of HP as it advocates for HP at national and regional levels (Müller 2020). Further important stakeholders in the field of HP are different NGOs. Their work is financed by the public administration as well as by private donations. Moreover, the Swiss School of Public Health+ founded in 2005 is to be mentioned as a stakeholder for the professionalization of HP, which today consists of twelve Swiss universities promoting postgraduate education and research in PH (SSPH+ 2021). Finally, “Swiss Public Health” a professional association founded in 1972 is mentioned due to their engagement for PH professionals and advocating for PH. HP is part of this association and is constituted as a specialized subgroup of the association (Public Health Schweiz 2021).

Despite this institutionalization of HP in Switzerland as a strong enabler for the professionalization of HP, there are also barriers to be faced, three of which are to be mentioned here: First, there is a massive lobby (mainly from the alcohol and tobacco industry) combatting capacity building of HP (AWMP 2008). This was

demonstrated when in 2012 a draft law on HP was rejected (De Pietro et al. 2015; Ruckstuhl 2017). Second, the expenditures on HP in Switzerland are below Organisation for Economic Cooperation and Development (OECD) average. 2.4% of all health expenditures are spent on HP compared to an average of 3.1% in the OECD (De Pietro et al. 2015). This demonstrates the medical orientation of the health system in Switzerland. And last, the structure of the political system in Switzerland consisting of very different 26 cantons. They are responsible for their local health system, but the concrete solutions to deal with this responsibility are very different. Cultural and political reasons have led to 26 different approaches to reach PH.

### ***2.1 HP workforce in Switzerland***

There are only few studies on the HP workforce in Switzerland. About 10,000 people work in the field of PH, 40% of them in HP, without calculating HP in the workplace setting. Only 1/3 completed a professional training in PH or HP and therefore a majority are lateral entrants to this field of action (M. W. Frank et al. 2013; Paccaud et al. 2013). There is a lack of a young professionally trained PH workforce in Switzerland, which includes HP (Bucher and Meyer 2013; M. W. Frank et al. 2013; Heusser and Weihofen 2014). In 2020 a situation analysis identified specific recommendations for the work profile of the cantonal delegates of HP. The analysis indicates a great lack of personal and financial resources of HP at the cantonal level (Müller 2020).

### ***2.2 Professional training in HP in Switzerland***

In Switzerland first educational programs in PH started in the 1990s. A great variety of PH related programs ranging from sport sciences to health sciences were established at undergraduate and postgraduate level as well as in continuing education programs at different universities and institutions (Heusser and Weihofen 2014; Ruckstuhl and Ryter 2017). PH specific programs are only available via continuing education programs and a specific PhD program offered by the SSPH+ (Heusser and Weihofen 2014). The same was the case for specialized programs in HP, which were only available via continuing education programs mainly established at university of applied sciences at departments of social work. In 2016, the first undergraduate program in HP was established at the ZHAW, which is subject of this chapter. The ZHAW is Switzerland's largest multidisciplinary universities of applied sciences, with over 12,000 students. The School of Health Professions of the ZHAW is a renowned center for teaching, continuing education and research in the German-speaking context. The university offers undergraduate programs in occupational therapy, midwifery, nursing, physiotherapy and HP as well as some postgraduate programs. The undergraduate program in HP is run by the Institute of

Health Sciences. To comply with international standards of HP the undergraduate program is based on the CompHP (Dempsey et al. 2011). This competency framework is an essential development in the professionalization of HP, because it enables transparency, comparability and quality assurance of HP education, practice and policy (Barry et al. 2012; Barbara Battel-Kirk and Barry 2019b; Dempsey et al. 2011).

The establishment of the undergraduate program at the ZHAW was an important milestone in the professionalization of HP and PH in Switzerland (Ruckstuhl 2017), even though further developments in the professional education of PH and HP are necessary, e.g. foundation of undergraduate courses in the Romandy (French part of Switzerland) or postgraduate courses in HP and PH.

This short description of the institutional and political situation of HP in Switzerland is of relevance for contextualizing the undergraduate program in HP described in this chapter. In the following section, the undergraduate program in HP at the ZHAW is portrayed.

### **3 The undergraduate program in HP at the ZHAW**

#### ***3.1 The major hallmarks of the program***

The program (180 ECTS) is offered as full-time (three years) and part-time (five years) study program and qualifies for a Bachelor of Science in HP. It accommodates 66 full-time equivalents per year. The number of part-time students amounts to approximately 25 % of the total of enrolled students. The program encompasses modules of six different subject areas: 1) theory and foundations of HP (33 ECTS), 2) communication and transformation (30 ECTS), 3) consolidation and transfer (42 ECTS), 4) scientific work and research methods (24 ECTS); 5) practical training (incl. work placements) (36 ECTS) 6) interprofessional training (15 ECTS). The professional competencies of the undergraduate program are formally explicated by the CanMEDs model, as this is the general framework for all study programs at the School of Health Professions of the ZHAW (J. R. Frank 2005; Ledergerber et al. 2009). To comply with international standards of HP, the CompHP was integrated content wise in the seven professional roles of the CanMEDs model (see. figure 1).

- As **Experts**, graduates assume professional leadership for the planning, implementation, and quality assurance of population-based health promotion or prevention interventions.
- As **Communicators** graduates engage adequately with different reference groups of the population to address health promotion and prevention.
- As **Collaborators** graduates actively engage in interprofessional teams. As **Leaders** graduates conduct evidence-based health promotion and prevention interventions and evaluate their effectiveness.
- As **Health Advocates** graduates apply adequate strategies to promote health equity.
- As **Scholars** graduates commit themselves to lifelong learning and the development, dissemination and application of knowledge in health promotion and prevention.
- As **Professionals** graduates continually reflect their practice and promote the professionalization of the professional field of health promotion and prevention.

**Fig. 1:** Shortened version of the professional competencies of the undergraduate program in health promotion and prevention at the ZHAW based on the CanMEDs model and the CompHP framework.

As mentioned before, teaching, and learning HP as a complex professional profile is a great challenge to both lecturers and students. To ensure the interdisciplinary approach of HP, lecturers with various professional backgrounds are involved in the undergraduate program teaching different modules, e.g., social workers, psychologists, sociologists, and ethnologists. Most of the core team of about 15 persons involved in the undergraduate program, do have either practical experience in HP or a research-oriented background in HP.

### ***3.2 Students enrolled in the program***

To ensure a certain level of maturity and work experience in a health-related field of action, the undergraduate program in HP has a two-folded admission procedure. On the one hand, prospective students with a baccalaureate must pass a two-part aptitude assessment: a written cognitive test and an oral test for social and communication skills. Based on the results of the two tests, a ranking list is made, according to which the 66 study places are allocated. On the other hand, work experience within a so called 'extended health sector' of a minimum of two months duration is a prerequisite for those who want to enroll into the program. This may consist of positions within a care institution, a pedagogic institution, or within fitness or sport. It may contain work experience with patients, clients, pupils or customers in the widest sense. If there is a daily contact, exchange or counselling involved, the work experience counts as part of the application process. Before completing the

undergraduate program, students have to have twelve months of work experience in total, out of which eight months must be completed in this extended health sector. The remaining four months may be from any work experience.

The students are quite heterogenous regarding educational background and age. About 2/3 do have prior vocational training and work experience, mainly in the health sector (e.g. nursing, pharmaceutical assistants) or in the economic sector (e.g. business administration, retail). Other students directly enter the study program after graduating from High School. The students are quite homogeneous regarding gender (mainly female), place of residence (German speaking part of Switzerland, mainly close to Zurich) and nationality (mainly Swiss, some Italian and German). Further details on students of the undergraduate program in HP are described in table 1.

**Table 1:** Sociodemographic data, number of students and dropouts in the undergraduate program in health promotion and prevention at the ZHAW in Switzerland.

Year of study cohort	Number of students	Form of study program (full-time)	Number of dropouts	Gender (female)	Median age at program beginning (min-max)	Prior vocational training
2016	46	46	5	36	23 (19-38)	27
2017	36	33	5	31	23 (22-29)	23
2018	52	46	7	48	23 (20-45)	33
2019	57	45	3	51	24 (18-39)	46
2020	59	47	7	51	23 (19-39)	40

### ***3.3 Methodological approach in the teaching-learning setting of HP***

Being part of the ZHAW, the undergraduate program in HP is committed to train professionals who are both familiar with the practical aspects of the field and well trained in a research and evidence-based approach to HP. In addition, being embedded in the School of Health Professions, which means being part of a wider academization process which has taken place in health professions in Switzerland since 2006 (Oggier 2015; Ruckstuhl 2017). The School of Health Professions at ZHAW runs five undergraduate programs, all of which are based on a competency-based concept of education defined in seven professional roles (see figure 1 for HP) (Ledergerber et al. 2009; Spiegel-Steinmann et al. 2021). Thus, the content of the program is aligned with a focus on three clusters of methodological approaches: 1) practical training, 2) skills training (research methods, project management and communication), and 3) interprofessional training. This mixture of competencies

and methodological approaches shall ensure graduates being able to conduct programs based on the setting approach including behavior change programs and programs focusing on structural prevention elaborated with participation of the community.

In order to comply with constructive alignment, different modules focus on different formats of assessments to reach the learning outcomes/competencies of the undergraduate program. As collaboration is an important competence in HP, many assessments must be passed in group work. Depending on the subject, different assessments are applied in different terms of the program: e.g., oral presentations, written term papers, epidemiological factsheets and applying research methods e.g., interviews, focus groups and surveys. At the same time individual work is produced, e.g., reflection reports, written exams incl. multiple choice or open-ended questions and the bachelor thesis, which is usually written in relation to the work placements. Generally, the teaching-learning setting is supposed to follow the principles of HP. This means the lecturers are committed to creating a supportive environment for students and enabling participation and empowerment in the courses and the program where applicable. Moreover, it is a special interest to promote social equity and therefore promote students with greater challenges, e.g., mental health issues or reconciliation of family and studies.

The following sections focus on the main methodological approaches of the teaching-learning setting within the undergraduate program in HP.

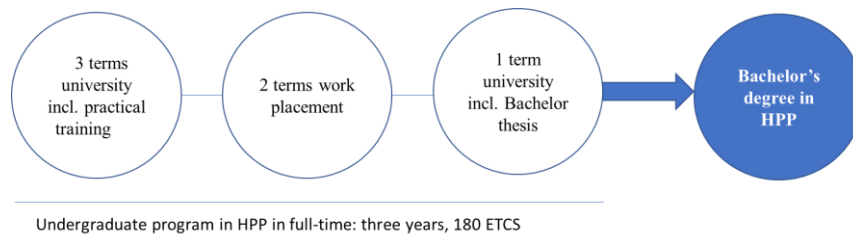
### **3.3.1 Practical training**

HP as the field of action within PH with the most practical relevance needs to be taught and learned in a setting enabling practical experiences. Practical training permeates the entire program. As outlined, most lecturers have extensive experience as practitioners in the field of HP (e.g., addictions prevention, workplace HP, community-based HP) or research-oriented experience in HP. This practical background of the core lecturers as well as of external lecturers from the practice ensure high practical relevance of the theoretical perspectives and skills training in the undergraduate program in HP. This enables networking and discussions between students and experts in HP from the beginning of the program. In the first term, there is a module which offers students the opportunity to visit three to four organizations in the HP sector. This is their first insight into HP practice and the starting point to network with experts in the HP field in Switzerland. In the second term of the undergraduate program various partner organizations are presented in order to give students insight into the variety of target groups, strategies, organizations, and employees of the HP field.

During the first years of the undergraduate program, a major effort has been made to build a network of partner practice organizations in the HP field, to be able to offer work placements to students. In 2021, we have more than 80 partner practice organizations in various fields of HP who offer work placement positions to students. The work placements take place in the second half of the undergraduate



program lasting between six and nine months depending on the workload of the job positions. Starting in the third term of the undergraduate program students are continuously prepared to choose their work placements and apply for them, which is seen as a great opportunity to practice future application procedures in the real job market. More than 800 h of work placement within the undergraduate program at one practice organization enables a deep insight into a specific field of HP and the tasks of the HP practitioners. Students are coached and supervised both by lecturers of the undergraduate program and mainly by their practical educator within the practice organization. Agreement on specific aims of the work placements and their evaluation relies on the competency framework of the undergraduate program based on the CompHP (Dempsey et al. 2011). To ensure theory-practice transfer students come back from the work placements to university for their last term before graduating. Figure 2 shows the approximate structure of the undergraduate program in HP.



**Fig. 2:** Graphical structure of the undergraduate program in health promotion and prevention at the ZHAW in Switzerland.

A special feature of the practical education is the recently started Center for Therapy, Training and Consultation (Thetriz) on the campus of the School of Health Professions at the ZHAW. The Thetriz was launched as a common center for all undergraduate and postgraduate programs at the School of Health Professions and offers the opportunity of practical training on campus. Thetriz is open to the public and offers treatments, consultations, and workshops to patients and clients. Students are involved as observers and are given the opportunity to learn and test professional and interprofessional situations under the guidance of experts. Moreover, the students in HP at the end of the program will for example elaborate community-based HP projects, conduct e.g. workshops on stress reduction or launch programs for various vulnerable groups depending on the demands of the community and practice organizations.

### 3.3.2 Skills training

Another methodological approach to teach and learn HP is the strong focus on skills training necessary for HP. Therefore, communication skills as well as research

methods are central competencies (Dempsey et al. 2011). Communication modules are rolled out throughout the whole undergraduate program including public communication, interpersonal communication, health communication and social marketing and communication management in projects. Furthermore, the interprofessional trainings also focus on interprofessional communication. For example, students participate in workshops, where they train interpersonal communication, such as motivational interviewing and negotiation skills. In some of the workshops, professional actors are engaged for the skills trainings. Moreover, they also practice written communication skills to specifically train target-group-oriented language. Communication skills are the basis of adequate acting in HP, either in behavior change programs or programs on structural prevention.

Extensive focus is upon students' capacities to develop and manage evidence-based projects. The undergraduate program thereby not only aims at enabling future HP professionals to make a sustainable impact, but also promotes the reputation of the professional field in general. Teaching in research methods is part of both interprofessional training and profession specific classes. Quantitative and qualitative research methods are taught not only theoretically but are also applied by students or students are active participants in research projects. Especially in the bachelor thesis, students have to prove good knowledge of a scientific approach to the HP themes. Most of the theses are based on empirical studies conducting interviews, focus groups or small surveys which directly contributes to quality assurance of HP practice in Switzerland as most bachelor theses are elaborated within the work placements.

To effectively work in an evidence-based way in HP following the Public Health Action Cycle students also gain knowledge in evidence-based project management and evaluation methods. Several modules that are connected to the research methods modules, focus on teaching and practicing procedures and tools for planning, carrying out and evaluating evidence-based projects.

Since the start of the undergraduate program in 2016 a project has investigated the professional identity formation of the undergraduate students of HP at the ZHAW. Therefore, students are asked to complete an online survey at three measurement points throughout their undergraduate program. In addition, focus groups are conducted with the students at the beginning and end of their undergraduate program discussing their professional identity formation in HP. This approach enriches the program in two perspectives. On the one hand, students are actively involved in a research project and experience different research methods relevant to the field of HP. On the other hand, the results of the continuing online survey and focus groups enable deep insight in students' promoting and inhibiting factors being involved in the undergraduate program of HP, which is part of a continuing evaluation process of the undergraduate program. The results will be published in the upcoming years.

### **3.3.3 Interprofessional training**

Communication and cooperation with various disciplines and professions in the sense of «learning with, from and about one another» is an integral part of all inter-professional trainings (Spiegel-Steinmann et al. 2021). Thus, in addition to subject-specific modules, students of all undergraduate programs at the School of Health Professions participate in interprofessional modules. These account for roughly 1/8 of the undergraduate program in HP. The reason for this high percentage of inter-professional modules is not only the promotion of mutual understanding among the different professions, but also a conviction that health professions in the course of academization need to be interlinked. For HP this interdisciplinary education supports future competencies of intersectoral and multidisciplinary collaboration, which is central in HP (Gagné et al. 2018; WHO 1986)

For this purpose, the School of Health Professions has developed its own concept for interprofessional training, WIPAKO®. It facilitates the acquisition of communicative and social competencies as a prerequisite for good collaboration between health and medical professions. Mutual understanding and insight into different perspectives is the core of interprofessional training, the benefits of which are seen both among students and staff. Organized through joined responsibilities between the different professional undergraduate programs at the School of Health Professions, WIPAKO® was developed with a focus on shared expertise within the different health professions (Spiegel-Steinmann et al. 2021). Some of the themes covered in the interprofessional training are managing demanding communication settings, interprofessional collaboration in various (care) contexts, exchange on ethical issues in the interprofessional discourse, collateral leadership, and research methods.

#### **4 Challenges during five years of program implementation**

Despite all challenges faced we can conclude from oral and written feedback within evaluations of modules and the focus groups conducted that the undergraduate program so far can be valued as a success for most students, lecturers and practice organizations. Students and lecturers are widely satisfied with the learning outcomes and results of the different assessments. Commonly great feedback is also derived from the practice organization regarding the work placements, which seems to be very adequate for both students and practical organizations. Moreover, we have anecdotal knowledge of many graduates who are successfully occupied in the HP field, e.g., addiction prevention, community-based or workplace HP. Some of them are already in leading positions in the HP field. After graduating many students also entered postgraduate courses in Switzerland or abroad which further promotes the professionalization of HP in Switzerland.

While the HP undergraduate program has attracted the interest of many students and professionals, we envision still greater impact for the education sector and the HP field. After five years, we have devoted ourselves to build on lessons learned so far and to take the program some steps further. For the current process of

consolidating and developing the program, we have identified three areas of attention: form of study, employability and the complexity of teaching and learning HP. The focus groups conducted with all study cohorts allow important insights in students' perspectives on the undergraduate program. At the end of each section, we outline the transferability of our challenges to international contexts.

#### ***4.1 Form of study***

Nowadays, many students find themselves in situations where they want or must combine studying with a part-time job. Therefore, the population of people who are interested in the undergraduate program in HP consists both of prospective full-time students and part-time students. So far, the demand for an opportunity to study and work at the same time, has been met by an offer of two types of study models, a full-time program with a total length of six terms and a part-time program with a total length of nine to ten terms. Recent registrations confirm the trend towards a continuously strong interest of the latter. Among the applicants for the fall 2021, 25% apply for the part-time program. For details of the number of students enrolled in the undergraduate program see table 1.

However, accommodating the two types of study models within one undergraduate program has proven to be costly regarding personal resources. While students from both study models have been mixed in the classroom, accommodating the part-time model in the schedule of the program is a complex matter. As a result, schedule and workload of the part-time model have varied over the terms, which has caused bottlenecks for students in their work life. Furthermore, the average drop out throughout the first five years has been at 9.5% for the full-time model and at 26.5% for the part-time model. The percentages must be taken with caution, since it is a small number of students (n=250), but they seem to indicate that the part-time model has not been as satisfactory or convenient for the enrolled students. Even if there is reason to believe that there might be different reasons for this, from our part we have committed ourselves to attempting to improve satisfaction regarding studying part-time.

In order to improve this situation both in terms of student flexibility and satisfaction, as well as saving on staff resources, the undergraduate program in HP as a whole will be revised in terms of a 'flex model', accommodating both full-time and part-time students in a more flexible program. In the envisioned flex model, the program will be divided into three segments or phases: Basic modules which form a starting phase, where basic modules offer an introduction to the field of HP, the completion phase, where work placement and bachelor thesis are at the core, and an intermediate phase between these two, where the main part of the professional and interprofessional knowledge and skills is acquired. In the latter, modules may be studied in a flexible order and at an individually adjustable pace. The vision is built on some pillars, yet to be defined in detail: No definite study duration is set. Thus, within a flexible span of time students are given the possibility to plan and distribute

their workload along their personal life situation. To a large extent, teaching will be done with flipped classroom didactics, where students engage in explorative and inquiry-based learning (Akçayır and Akçayır 2018). The program offers a variety of compulsory electives, where students can engage in topics of their choice.

Today, students can make only very few choices within the set of compulsory elective courses in the interprofessional part of the curriculum. In effect, students acquire a standard bachelor's degree with generalist competencies. The program thus demonstrates a clear school-based approach. While this ensures broad knowledge of HP and suits some students, others have a clear interest in specializing in more specific areas, settings or target groups. To encourage personal preferences within the HP field and to empower students to more self-directed learning, the vision for a flex-program has been developed. The challenge will be to offer a standard program, while at the same time opening up for more space and opportunities to form one's education in accordance with one's own preferences with regard to content and form of study. Students will be given choices with regard to content, study pace, learning methods, and examination. This way, they also choose whether to cover more topics and thus to obtain a broader education or to delve deeper into a specialization area of their choice. These adaptations are in line with the principles of HP as a basis for the undergraduate program. The university wants to ensure a healthy environment for their students and enable more participation and empowerment processes by planning their individual study schedules.

This shift toward more self-directed learning is transferable to universities offering undergraduate and postgraduate programs in HP in the global north, who deal with similar societal and institutional contexts. Therefore, the experience within our program contributes to the international discussion on the ideal teaching-learning setting for HP education.

## ***4.2 Employability***

The main challenge within the practical field of HP is to gain recognition for a still unknown profession. In our experience, there is a high awareness of future career possibilities among young people and their choice of education programs is clearly led by or accompanied by a concern for future employability. The focus groups conducted with all study cohorts at the beginning and end of their program reveal a certain amount of anxiety about their future job possibilities. Some students obtain job contracts at the work placement, which has a promoting effect on professional identity formation also for their fellow students. Others fear bad job opportunities after graduating. These insecurities have been revealed in similar studies in the field of HP (Karg et al. 2020; Walter 2015). Karg et al. (2020) suggest supporting and coaching the students during their program to build their specialist profile within the HP profession during the undergraduate program and thus to promote their job opportunities. The new and partially unexplored job market in HP in Switzerland demands flexibility, self-branding skills and profiling from new graduates.

During the undergraduate program in HP at the ZHAW students develop very generic skills in interpersonal and public communication or research methods, which can also be adapted to other work sectors. This is also appreciated by the students. During the preparation for the work placements students are given some coaching on application skills, which is also helpful for their future job applications. In addition, there is a specific module within the undergraduate program called ‘professional education’, where students specifically focus on the distinction of their competencies in HP comparing similar professions of the wider PH workforce. Within the module job advertisements in HP are examined regarding their specific competency profile preparing the students for their future job situation and supporting their professional identity formation in HP.

Surveys with graduates of undergraduate programs in HP in Germany reveal good employability (Sachs and Hochschule Neubrandenburg 2014). These graduate surveys are elementary for analyzing the job situation of the future HP workforce and are the basis for supporting students in the transfer from student to professional. In the near future these graduate surveys are also planned with our graduates in HP to better evaluate the employability of the graduates.

In this regard, the undergraduate program in HP forms a ‘special’ case among its fellow undergraduate programs at the School for Health Professions. While job opportunities and careers are quite set in health professions, HP graduates have to be proactively engaged in their career. While possibilities of specialization are many, they have to find and specialize in a profile of their choice. When students compare themselves with students in the nursing program for instance, their career prospects naturally appear less certain. Furthermore, for many job occasions, HP graduates have to compete with graduates from other professions (e.g., social work, teaching, psychology).

Literature indicates low publicity and low workforce capacity of the HP profession in many countries worldwide (B. Battel-Kirk et al. 2009; Barbara Battel-Kirk and Barry 2019b; Van den Broucke 2021). Raising awareness and publicity of the HP profession, promotes capacity building and contributes to better employability of graduates of HP programs. The undergraduate program is internationally connected, so is the School of Health Professions at the ZHAW. By addressing this pressing issue in Switzerland, we therefore contribute with raised publicity and capacity building of the HP profession also internationally.

### ***4.3 Complexity of teaching and learning HP***

The professional profile of HP is hard to capture for students of undergraduate programs (McKay and Dunn 2015; Zocher 2013). Core elements like the holistic perspective on health, focus on populations instead of individuals, intersectorality and strategies like advocating, mediating or enabling make it a very complex

professional profile as recognized in literature (Biehl et al. 2021; Keshavarz Mohammadi 2019; McQueen et al. 2007; Tremblay and Richard 2014). This complex nature of HP is underlined by the fields of action proposed by the Ottawa Charta (WHO 1986). Of course, this complexity is not easy to grasp for undergraduate students and explains their confusion about professional responsibility and the scope of their future profession. The results of the focus groups indicate that some students can handle this complexity, which becomes clearer in the course of the study program and is seen as an asset within the great variety of HP. Some students are overwhelmed by this complexity and therefore are dissatisfied with their professional choice.

Being part of the School of Health Professions means being in a context with expertise in different health care settings. The school is committed to an integrating and broad health sciences perspective, which is an extremely stimulating home base for the undergraduate program in HP. However, in one sense the HP perspective constitutes a different perspective with divergent foci, teaching and learning methods. From its start the program has strongly focused on a PH perspective with an emphasis on socioenvironmental determinants of health. Students are primarily trained in working on an organizational level, addressing stakeholders and policy makers since the primary focus of HP are communities instead of individuals. Often, we plan and educate for structural change, policymaking, focusing on environments, societal and financial structures. Clients may be individuals, groups or organizations within different target groups. Only partially do they deal with personal, face-to-face interaction. Skills on an interpersonal level, such as coaching or consultation, are only a very marginal aspect of the undergraduate program in HP. There is, however, a need to put more focus on these skills as part of the HP competences regarding behavior change interventions. Moreover, focus groups revealed that students often imagine a different professional profile within HP, referring to working more directly with the target groups.

There is a need to elaborate a clear vision and common understanding of the professional profile of HP among the lecturers at the whole university, and the students and within policy and practice of HP in Switzerland. It is challenging to implement a new undergraduate program in HP with team members with different professional backgrounds. Establishing a common vision of the undergraduate program in HP takes time and involves reflection process within the team. Therefore, the CompHP is assumed to be a very suitable tool to promote a common understanding of competencies of HP practitioners. As an educational institution we do have to contribute to this publicity of the professional profile of HP. These activities advocating for HP should be supported by the workforce and by institutions of HP like a specific professional association of HP, which does not yet exist in Switzerland.

This complexity of learning and teaching HP is surely comparable to similar educational institutions teaching HP worldwide. Therefore, the measures taken within the HP program at the ZHAW are comparable to other educational institutions. The CompHP can help to foster a common understanding of HP and specific

competencies of HP practitioners. Further investigations on teaching and learning settings in HP programs are necessary to find solutions to achieve best learning outcomes and a strongly identified HP workforce.

## 5 Conclusion

Five years after the implementation of the first undergraduate program in HP in Switzerland have revealed both success and challenge. Students and lecturers are widely satisfied with the learning outcomes and practice organization commonly give great feedback regarding the work placements. Nevertheless, major challenges were revealed during the implementation of the undergraduate program regarding form of study, employability of graduates and complexity of teaching and learning HP in an undergraduate program. These measures taken of the undergraduate program in HP at the ZHAW in Switzerland can surely be relevant and transferable to other cultural contexts conducting an undergraduate program in HP. HP

Special attention is currently drawn to the form of study program and an adequate didactic methodology to teach the complexity of HP, which will allow students to form their professional identity in HP. To ensure more self-directed learning opportunities in future we plan to adapt the program to a more flexible form as described in chapter 4.1. Restrictions following the Covid-19 pandemic opened up ways of flexible and more online-based learning. By extending the concept of flipped classrooms, where students individually gain knowledge prior to the in-class lecture either by reading texts, watching eCasts or the like, we promote students empowerment and self-directed learning. This implies an understanding of the teaching and learning setting, where the lecturer is seen as coach and moderator rather than as a mediator of knowledge. Enabling more options for specialization within the undergraduate program will ease students successful transfer to the labor market as suggested in literature.

Ensuring a supportive learning environment for HP we further advocate raising publicity and quality assurance in practice and policy of HP in Switzerland and internationally. We therefore promote the exchange and discussions between students, graduates and practice on social media platforms, meetings at conferences, engaging in professional associations related to HP and we promote the establishment of an Alumni-network. Within these networks we plan to ease the foundation of a professional association in HP in Switzerland. Furthermore, we want to strengthen the international profile of our undergraduate program by publishing on our experiences with the teaching-learning setting in HP, by extending the collaboration with international study programs in HP and therefore strengthening HP in Switzerland and internationally.



## References

- Akçayır, G., & Akçayır, M. (2018). The flipped classroom: A review of its advantages and challenges. *Computers & Education, 126*, 334–345. <https://doi.org/10.1016/j.compedu.2018.07.021>
- AWMP. (2008). Bundesgesetz über Prävention und Gesundheitsförderung (Präventionsgesetz) und Bundesgesetz über das Schweizerische Institut für Prävention und Gesundheitsförderung. Vernehmlassungsantwort. Allianz der Wirtschaft für eine massvolle Präventionspolitik.
- BAG, & GDK. (2016). *Nationale Strategie Prävention nichtübertragbarer Krankheiten (NCD-Strategie) 2017–2024*. Bern: Bundesamt für Gesundheit und Schweizerische Konferenz der kantonalen Gesundheitsdirektorinnen und -direktoren.
- Bals, T., & Wulforst, B. (2008). Gesundheitsförderung als Beruf. In *Gesundheitsförderung in pädagogischen Settings* (pp. 113–133). Weinheim, München: Juventa.
- Barry, M. M., Battel-Kirk, B., & Dempsey, C. (2012). The CompHP Core Competencies Framework for Health Promotion in Europe. *Health Education & Behavior, 39*(6), 648–662. <https://doi.org/10.1177/1090198112465620>
- Barry, M. M., de Leeuw, E., Potvin, L., & Van Den Broucke, S. (2020, October 13). *Health promotion: An integrative paradigm for sustainable health, wellbeing and development*. Presented at the World Congress on Public Health, Rome (online). [https://www.iuhpe.org/images/IUHPE/News/WCPH2020/WCPH\\_Barry\\_13\\_Oct\\_6.E.pdf](https://www.iuhpe.org/images/IUHPE/News/WCPH2020/WCPH_Barry_13_Oct_6.E.pdf). Accessed 12 March 2021
- Battel-Kirk, B., Barry, M. M., Taub, A., & Lysoby, L. (2009). A review of the international literature on health promotion competencies: identifying frameworks and core competencies. *Global Health Promotion, 16*(2), 12–20. <https://doi.org/10.1177/1757975909104100>
- Battel-Kirk, Barbara, & Barry, M. M. (2019a). Implementation of Health Promotion Competencies in Ireland and Italy—A Case Study. *International Journal of Environmental Research and Public Health, 16*(24), 4992. <https://doi.org/10.3390/ijerph16244992>
- Battel-Kirk, Barbara, & Barry, M. M. (2019b). Has the Development of Health Promotion Competencies Made a Difference? A Scoping Review of the Literature. *Health Education & Behavior, 46*(5), 824–842. <https://doi.org/10.1177/1090198119846935>
- Biehl, V., Gerlinger, T., & Wieber, F. (2021). Professional Characteristics of Health Promotion: A Scoping Review of the German and International Literature. *International Journal of Public Health, 66*, 16. <https://doi.org/10.3389/ijph.2021.1603993>
- Bucher, T., & Meyer, P. (2013). *BSc-Studiengang Gesundheitsförderung und Prävention - Stakeholderbefragung des Departements Gesundheit im Arbeitsfeld*. Winterthur: ZHAW.
- De Pietro, C., Camenzind, P., Sturny, I., Crivelli, L., Edwards-Garavoglia, S., Spranger, A., et al. (2015). *Switzerland: Health system review* (p. 323). Copenhagen: WHO Regional Office Europe. [https://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0010/293689/Switzerland-HiT.pdf](https://www.euro.who.int/__data/assets/pdf_file/0010/293689/Switzerland-HiT.pdf). Accessed 15 March 2020
- Dempsey, C., Battel-Kirk, B., Barry, M. M., & CompHP Project Partners. (2011). The CompHP Core Competencies Framework for Health Promotion (Short Version). IUHPE.
- Faltermaier, T., & Wihofszky, P. (2011). Gesundheitsförderung und Prävention im Kontext von Public Health. In T. Schott & C. Hornberg (Eds.), *Die Gesellschaft und ihre Gesundheit* (pp. 257–274). Wiesbaden: Springer.

- Frank, J. R. (2005). *The CanMEDS 2005 physician competency framework. Better standards. Better physicians. Better care.* Ottawa: The Royal College of Physicians and Surgeons of Canada. [http://www.ub.edu/medicina\\_unitatededucaciomedica/documentos/CanMeds.pdf](http://www.ub.edu/medicina_unitatededucaciomedica/documentos/CanMeds.pdf). Accessed 15 March 2020
- Frank, M. W., Weihofen, A., Duetz Schmucki, M., Nocera, S., & Paccaud, F. (2013). *Public Health Workforce in Switzerland: A National Census.* Zürich: Swiss School of Public Health+. <https://ssphplus.ch/assets/downloads/publications/public-health-february-2013b.pdf>. Accessed 15 March 2020
- Gagné, T., Lapalme, J., & McQueen, D. V. (2018). Multidisciplinarity in health promotion: a bibliometric analysis of current research. *Health Promotion International*, 33(4), 610–621. <https://doi.org/10.1093/heapro/dax002>
- Golden, S. D., & Earp, J. A. L. (2012). Social Ecological Approaches to Individuals and Their Contexts: Twenty Years of *Health Education & Behavior* Health Promotion Interventions. *Health Education & Behavior*, 39(3), 364–372. <https://doi.org/10.1177/1090198111418634>
- Göpel, E. (2006). Professionalisierung der Gesundheitsförderung und mögliche Konsequenzen für die Aus- und Weiterbildung der Gesundheitsberufe. In *Professionalisierung im Gesundheitswesen* (pp. 159–174). Bern: Hans Huber, Hogrefe AG.
- Heusser, R., & Weihofen, A. (2014). Mandate SSPH+ «Bologna Cycle Degree Programs in Public Health in Switzerland: An Explorative Study», 62.
- Hommel, F., Alpers, K., Reime, B., & Rexroth, U. (2020). Durch attraktive Karrierewege Public Health in Deutschland nachhaltig stärken – Kernforderungen an eine Public-Health-Strategie für Deutschland im Bereich Human Resources. *Das Gesundheitswesen*, 82(04), 303–305. <https://doi.org/10.1055/a-1082-0890>
- Hurrelmann, K., Richter, M., Klotz, T., & Stock, S. (Eds.). (2018). *Referenzwerk Prävention und Gesundheitsförderung* (5th ed.). Hogrefe. <https://doi.org/10.1024/85590-000>
- IUHPE. (2021). IUHPE Strategic Plan: 2021-2026. International Union for Health Promotion and Education. <https://drive.google.com/file/d/1pX-ls6PPIHU5WUv5z35-TSm-kHdHqRVPx/view>. Accessed 22 September 2021
- Karg, S., Blättner, B., Krüger, K., & Micheew, N. (2020). Kompetenzen für Tätigkeiten in der Gesundheitsförderung: Sichtweisen von Stakeholdern. *Prävention und Gesundheitsförderung*, (15), 236–241. <https://doi.org/10.1007/s11553-020-00760-6>
- Keshavarz Mohammadi, N. (2019). One step back toward the future of health promotion: complexity-informed health promotion. *Health Promotion International*, 34(4), 635–639. <https://doi.org/10.1093/heapro/daz084>
- Ledergerber, C., Mondoux, J., & Sottas, B. (2009). *Projekt Abschlusskompetenzen FH-Gesundheitsberufe.* Bern: Rektorenkonferenz der Fachhochschulen Schweiz KFH. [https://www.swissuniversities.ch/fileadmin/swissuniversities/Dokumente/Kammern/Kammer\\_FH/Best\\_practice/1\\_KFH\\_Projekt\\_Abschlusskompetenzen\\_FH\\_Gesundheitsberufe\\_Abschlussbericht.pdf](https://www.swissuniversities.ch/fileadmin/swissuniversities/Dokumente/Kammern/Kammer_FH/Best_practice/1_KFH_Projekt_Abschlusskompetenzen_FH_Gesundheitsberufe_Abschlussbericht.pdf). Accessed 15 March 2020
- McKay, F. H., & Dunn, M. (2015). Student reflections in a first year public health and health promotion unit. *Reflective Practice*, 16(2), 242–253. <https://doi.org/10.1080/14623943.2015.1005588>
- McQueen, D. V., Kickbusch, I., Potvin, L., Pelikan, J., Balbo, L., & Abel, T. (2007). *Health & Modernity. The role of theory in health promotion.* New York: Springer.

- Müller, D. (2020). *Die kantonalen Beauftragten für Gesundheitsförderung und die VBGF. Situationsanalyse und Entwicklungsperspektiven*. Bern: Vereinigung der kantonalen Beauftragten für Gesundheitsförderung in der Schweiz (VBGF).
- Nutbeam, D. (2019). Health education and health promotion revisited. *Health Education Journal*, 78(6), 705–709. <https://doi.org/10.1177/0017896918770215>
- Oggier, W. (2015). *Gesundheitswesen Schweiz 2015-2017: eine aktuelle Übersicht*. Bern: Hogrefe.
- Paccaud, F., Weihofen, A., & Frank, M. (2013). Public Health Workforce in Switzerland: are public health workers lacking? *International Journal of Public Health*, 58(6), 799–800. <https://doi.org/10.1007/s00038-013-0481-2>
- Public Health Schweiz. (2021). Gesundheitsförderung. [https://public-health.ch/de/aktivitaeten/fachgruppen/gesundheitsfoerderung\\_1/](https://public-health.ch/de/aktivitaeten/fachgruppen/gesundheitsfoerderung_1/). Accessed 12 March 2021
- Reisig, V., Kuhn, J., Loos, S., Nennstiel-Ratzel, U., Wildner, M., & Caselmann, W. (2016). Primärprävention und Gesundheitsförderung in Bayern – eine explorative Bestandsaufnahme. *Das Gesundheitswesen*, 79(04), 238–246. <https://doi.org/10.1055/s-0042-108585>
- Ruckstuhl, B. (2017, January 4). Gesundheitsförderung 7: Schweiz. BZgA. <https://www.leitbegriffe.bzga.de/alphabetisches-verzeichnis/gesundheitsfoerderung-7-schweiz/>. Accessed 25 October 2019
- Ruckstuhl, B., & Ryter, E. (2017). *Von der Seuchenpolizei zu Public Health: Öffentliche Gesundheit in der Schweiz seit 1750*. Zürich: Chronos.
- Sachs, I., & Hochschule Neubrandenburg (Eds.). (2014). *Studium, Studienverlauf und Berufsperspektiven von Absolventinnen und Absolventen Pflege- und Gesundheitswissenschaftlicher Studiengänge*. Neubrandenburg: Hochschule Neubrandenburg.
- Schuler, D., Tuch, A., Buscher, N., & Camenzind, P. (2016). *Psychische Gesundheit in der Schweiz: Monitoring 2016* (No. 72) (p. 80). Neuchâtel: Schweizerisches Gesundheitsobservatorium. [https://www.obsan.admin.ch/sites/default/files/publications/2016/obsan\\_72\\_bericht\\_2.pdf](https://www.obsan.admin.ch/sites/default/files/publications/2016/obsan_72_bericht_2.pdf). Accessed 28 October 2019
- Spiegel-Steinmann, B., Feusi, E., Wieber, F., & Huber, M. (2021). WIPAKO® Winterthur inter-professional training concept “communication and cooperation in health professions”: concept, development process and implementation. *GMS Journal for Medical Education*, 38(3). <https://doi.org/10.3205/zma001460>
- SSPH+. (2021). Swiss School of Public Health. <https://ssphplus.ch/>. Accessed 26 October 2019
- Streckeisen, U. (2013). Gesundheitsförderung als Beruf? Aspekte der Ausbildung, Beschäftigung und Berufspolitik hinsichtlich Public Health. In *Alte und neue Gesundheitsberufe*. Zürich: Lit Orlux.
- Tremblay, M.-C., & Richard, L. (2014). Complexity: a potential paradigm for a health promotion discipline. *Health Promotion International*, 29(2), 378–388. <https://doi.org/10.1093/heapro/dar054>
- Van Den Broucke, S. (2020, October 13). *Strengthening health promotion practice: Implementation systems and capacity development*. Workshop: Health promotion: An integrative paradigm for sustainable health, wellbeing and development presented at the World Congress on Public Health, Rome (online). [https://www.iuhpe.org/images/IUHPE/News/WCPH2020/WCPH\\_Van-den-Broucke\\_13\\_oct\\_6E.pdf](https://www.iuhpe.org/images/IUHPE/News/WCPH2020/WCPH_Van-den-Broucke_13_oct_6E.pdf). Accessed 19 November 2020
- Van den Broucke, S. (2021). *A critical reflection on health promotion practice*. <https://www.youtube.com/watch?v=yi717R7koFw&t=3s>. Accessed 12 March 2021

- Walter, S. (2015). *Gesundheitsförderung auf dem Weg zur Profession - eine Interviewstudie* (Masterarbeit). Pädagogische Hochschule Schwäbisch Gmünd, Schwäbisch Gmünd.
- WHO. (1986). *Ottawa Charta for Health Promotion*. Ottawa: World Health Organization.
- WHO. (2017). *Promoting health in the SDGs. Report on the 9th Global conference for health promotion, Shanghai, China, 21–24 November 2016: all for health, health for all*. Geneva: WHO. <https://www.who.int/publications-detail/shanghai-declaration-on-promoting-health-2030-agenda>. Accessed 23 May 2020
- Zocher, U. (2013). *Über die Herausforderung Gesundheitsförderung zu studieren und zu lehren – Ergebnisse partizipativer Begleitforschung*. Dossenheim. [http://www.gesundheitsfoerderung-studieren.de/images/pdf/synopse\\_2008-2012\\_UZ-1%20Kopie%20.pdf](http://www.gesundheitsfoerderung-studieren.de/images/pdf/synopse_2008-2012_UZ-1%20Kopie%20.pdf). Accessed 1 March 2020

## Abstract

In 2016 the only undergraduate program in health promotion and prevention (HP) in Switzerland to date was launched at the Zurich University of Applied Sciences. HP in Switzerland is well institutionalized and anchored in health politics, but the profession of HP practitioners is not well established yet. The conceptualization of HP as outlined in the Ottawa Charta makes it quite complex to teach and learn HP within an undergraduate program. The program (180 ECTS) is offered as a full-time (three years) and part-time (five years) program to a maximum of 66 students. The outlined learning outcomes are based on the CompHP to ensure international transferability of HP competencies. The focus is on a threefold methodological approach, consisting of: 1) practical training, 2) skills training (research, project management and communication) and interprofessional training. Experiences with five years of program implementation have revealed challenges, e.g., adapting the form of study to the current trend of flexible education to enable more self-directed learning opportunities, and promoting better employability of the graduates. By providing a supportive learning environment for HP the program contributes to publicity and quality assurance in practice and policy of HP in Switzerland and internationally.

**Questions. Please write a Short answer** (max. 150 words per question)

1-What is our vision about HP?

Referring to the Ottawa Charta, HP focusing on socioeconomic and socio-environmental determinants of health on a community level has the potential to support most vulnerable groups in society. Health is produced in the environment where people live and work, which leads to the fact that health can be promoted in these environments via multiple stakeholders, e.g., families, schools, workplaces or health professionals etc. HP practitioners are specialized in supporting these environments advocating for health, mediating between stakeholders and enabling health in the communities reflecting on participation and reducing health inequity in the community. HP is seen as field of action of PH with greatest practical relevance and therefore the need for special competencies in HP. HP focuses on promoting protective factors for health and creating supportive environments, whereas prevention focuses on reducing risk factors for health. Both concepts aim a maximum health gain and are understood as complementary fields of action within PH.

2-What is the institutional and political context of your experience (participants, professions and courses involved, duration and frequency of activities)?

The undergraduate program in HP started in 2016 and is the first undergraduate in HP in Switzerland yet. Up to then only 1/3 of professionals in HP were specifically trained in HP, instead are mostly lateral entrants to the field of action. Educational training was only possible via continuing educations programs usually containing 10-15 ECTS. HP in Switzerland is quite well institutionalized led by the National foundation "Health Promotion Switzerland" and the Federal Office for Public Health and therefore is also anchored in health politics. Overall, the implementation of the undergraduate program in HP at the ZHAW can be seen as a milestone in the professionalization of HP in Switzerland and in the long-term promotes quality assurance in practice, research and policy of HP. The program (180 ECTS) is provided as a full-time (three years) or part-time (five years) program to a maximum of 66 students. In 2021 the third cohort will graduate.

3-Which theories and methodologies are used in the teaching-learning process?

The outlined learning outcomes are based on the CompHP to ensure international transferability of HP competencies. The focus is on a threefold methodological approach, consisting of: 1) practical training, 2) skills training (research, project management and communication) and interprofessional training. Skills training (Research- methods, project management and communication), practical training, interprofessional training

4-What kind of forms of assessment are applied, results achieved, and challenges faced?

In order to comply with constructive alignment, different modules focus on different formats of assessments to reach the learning outcomes/competencies of the undergraduate program. As collaboration is an important competence in HP, many

assessments must be passed in group work. Depending on the subject, different assessments are applied in different terms of the program: e.g. oral presentations, written term papers, epidemiological factsheets and applying research methods. At the same time individual work is produced, e.g., reflection reports, written exams and the bachelor thesis, which is usually written in relation to the work placements.

Experiences with five years of program implementation have revealed challenges, e.g., adapting the form of study to the current trend of flexible education, enabling more self-directed learning opportunities, and promoting better employability of the graduates. By providing a supportive learning environment for HP the program contributes to publicity and quality assurance in practice and policy of HP in Switzerland and internationally.

For continuous evaluation a research project was set up at the beginning of the undergraduate program in 2016 which investigates the professional identity formation of the future HP practitioners. Online surveys and focus groups reveal great evaluation results to continuously adapt the undergraduate program.

5-Which principles, pillars, competencies or approaches to Health Promotion do you base your plan of teaching and learning?

The professional competencies and learning outcomes of the undergraduate program in HP is generally based on the CompHP to comply with international standards of HP. The professional roles referring to HP are described in seven roles are named: 1) experts, 2) communicators, 3) collaborators, 4) leaders, 5) health advocates, 6) scholars, 7) professionals. Generally, the teaching -learning setting is supposed to stick to the principles of HP. This means the lecturers are keen on creating a supportive environment for students and enable participation and empowerment in the courses and the program where applicable. Moreover, a special interest is to promote social equity and therefore promote students with greater challenges, e.g. mental health issues or reconciliation of family and studies.

6-What others could learn with your experience? What is localized and what is “generalizable”?

Five years after the implementation of the first undergraduate program in HP in Switzerland have revealed both success and challenge. The program was designed with two forms of study, enabling students to study full-time or part-time. Current trends towards flexible education are planned to be adapted, as well as enabling more self-directed learning and opportunities for individual specialization. Measures in this direction will further raise employability of program graduates and contribute to promoting and embedding the complexity of HP as a professional profile in policy and society. These measures taken can surely be relevant and transferable to other cultural contexts conducting an undergraduate program in HP.